

NORTHWEST TERRITORIES

School Health Program

GRADE SIX



Northwest
Territories

Education, Culture and Employment
Health and Social Services

NORTHWEST TERRITORIES

School Health Program

GRADE 6



Northwest
Territories Education, Culture and Employment
Health and Social Services

August, 1995

NORTHWEST TERRITORIES

School Health Program

INTRODUCTION

TABLE OF CONTENTS

Acknowledgements	i
Members of the Advisory Committees.....	ii
PHILOSOPHY AND RATIONALE	
The Rationale for Health Education	1
The Need for a Health Program in N.W.T. Schools.....	1
The History of the N.W.T. School Health Program.....	2
Assessing the Health Needs of N.W.T. School Children	3
A Vision of Health.....	4
The Role of Schools in Health Promotion	4
References.....	5
IMPLEMENTATION	
Major Goals of the Northwest Territories School Health Program.....	9
The Units of the Program.....	10
Scope and Sequence	12
Time Allocation.....	17
The Lesson Format.....	18
Approaches to the Teaching of Health	18
Building a Positive Classroom Atmosphere	19
The Teaching of Values	19
Appropriate Techniques for Teaching Health.....	20
The Language Development Approach and the N.W.T. School Health Program	21
Initial Assessment Activities.....	27
Evaluation	31

ACKNOWLEDGEMENTS

Health and Welfare Canada, Health Promotion Directorate, Prairie Region provided most of the funding for this project. The Northwest Territories Departments of Health and Education gratefully acknowledge this contribution.

Coordinators:

- Robert Imrie - Head, Health Information and Promotion, Department of Health
- Helen Balanoff - Program Specialist, Health, Department of Education

Curriculum Writing/Activity Ideas:

- Cathy Marsollier - Research/Writer, Department of Health
- Wade McLain - former Research/Writer, Department of Health
- Mary Jane Stewart - Contract Writer, Department of Health
- Laura McCormick - School of Dental Therapy, University of Manitoba
- Reiko Trudeau - Teacher, Rae-Edzo
- Catherine Mains - Teacher, Rae-Edzo
- Liv Nygaard - former Teacher, N.W.T.
- Susan Yazdanmehr - Health Information Officer, Department of Health
- Jim Reid - former Teacher, N.W.T.
- Heather Nolsoe - Program Specialist, Social Studies, Department of Education
- Margy Gilmour - Program Specialist, Department of Education

Illustrations:

- Francis Mercredi - Yellowknife
- Heather Imrie - Banff, Alberta
- Elizabeth Lorenz - Yellowknife
- Mary Ann de Wolf - Dallas, Texas

Editing:

- Cathy McGregor - Coordinator, Language Development, Department of Education
- Barbara Hall - Program Specialist, Alternative Programs, Department of Education

Reviewing/Evaluating:

- Dr. Dexter Harvey - Faculty of Education, University of Manitoba
- Dawn White - Health Consultant, Manitoba
- Mary Brown - Curriculum Consultant, Department of Education, Manitoba
- Members of the Northern Nutrition Association
- St. John Ambulance Association
- AIDS Sub-Committee, GNWT Department of Health/Health and Welfare Canada

Photography:

- Tessa McIntosh - Department of Culture and Communications
- Lorne Smith - Education Officer, Department of Education
- Fran Hurcomb - Photographer
- Rene Fumoleau - Photographer

General Assistance/Consultation:

- Don Kindt - Program Specialist, Math/Science, Department of Education
- LuAnn Lovlin - Public Information Officer, Department of Education
- Stella Van Rensburg - former Project Director, School Health Program, Department of Health
- Sarah Kelleher - Program Development, Department of Education
- Barbara Round - Coordinator, Family Life Education, Department of Health
- Jo-Anne Crate Thomas - Program Specialist, Alcohol and Drug Services, Department of Social Services
- Donna Nash-Alain - Proof-reader
- Derek Green - Coordinator, Program Evaluation, Department of Education

Members of the Advisory Committees:

- Judy O'Heir - Assistant Regional Nursing Officer, Health & Welfare Canada
- Mike Kelly - Regional Guidance Counsellor, Department of Education, Inuvik
- Patricia Nester - Classroom Assistant, Rankin Inlet
- Mabel Wong-Tam - Coordinator, Nutrition Services, Stanton Yellowknife Hospital
- Yvonne Green - Director of Dietetics, Stanton Yellowknife Hospital
- Gordon Trueblood - Coordinator, Health Education, Indian and Inuit Health Services, Health and Welfare Canada, Ottawa
- Dr. Dexter Harvey - Faculty of Education, University of Manitoba
- Dr. Peter Kallos - Medical Officer, Yellowknife
- Olasie Machmer, Jeela Moss-Davies - Inuit Women's Association, Ottawa
- Lorraine Doctor, Marjorie Kossatz - N.W.T. Native Women's Association, Yellowknife
- Sharon Kirwan - Assistant Regional Nursing Officer, Health & Welfare Canada
- Bob MacQuarrie - Member of the Legislative Assembly, Northwest Territories
- Beaton MacKenzie - Teacher, Yellowknife Education District #1
- David Bouchard - Religious/Health Coordinator, Yellowknife Separate School Board
- Veronica Curley, Elizabeth Lyall - Keewatin Inuit Association, Rankin Inlet
- Robbie Robinson - Chief, Safety Division, Department of Justice and Public Services
- Elsie Burger, Thomas Palakkamanil, Bertha Blondin - Dene Nation, Yellowknife
- Margaret Dukes - St. John Ambulance Association, Ottawa

The Department of Education and the Department of Health wish to acknowledge the support and cooperation of Regional and Area Superintendents of Education in facilitating the pilot-testing process in schools in all regions.

Special thanks are due to the many teachers in the Northwest Territories who tested the various units of the program. The time and effort which they gave and the resulting feedback were invaluable in the development of this program.

The Department of Education and Department of Health wish to thank the Department of Education, Manitoba for permission to reproduce sections of the Manitoba Health Education Curriculum, 1983, and "A Parent's Guide to Family Life Education: An Optional Health Unit 1986". Winnipeg: The Department of Education, 1986.

NORTHWEST TERRITORIES

School Health Program

PHILOSOPHY AND RATIONALE

THE RATIONALE FOR HEALTH EDUCATION

Traditionally, almost all human and financial resources related to health care in the Northwest Territories have been devoted to acute treatment of illnesses in nursing stations, doctors' offices, hospitals and drug treatment centres. The human and financial costs of this approach have been high.

This approach has led to dependence on medical institutions and professionals. As a result, there is a recognized need to promote a more comprehensive approach to health, especially as it relates to lifestyle. In addition to acute care services, this new approach would include education, environmental changes and greater individual responsibility for health.

THE NEED FOR A HEALTH EDUCATION PROGRAM IN N.W.T. SCHOOLS

Dr. Otto Schaefer, a well-known northern medical officer, has shown that abrupt changes in the diet of native populations have contributed to an increasing incidence of non-communicable diseases, such as cancer and obesity, as well as diseases of the respiratory and circulatory systems. Furthermore, according to Dr. Schaefer, the breakdown of the traditional social structure, specifically the family unit, is associated with wide-spread alcohol and drug abuse, increases in sexually transmitted diseases, family violence and suicide.

In November 1982, the survey "Tobacco Use Among Students in the Northwest Territories" reported that smoking rates in the school population of the N.W.T. were among the highest recorded for any school population in Canada. Smoking started in the early years of elementary school and by the late adolescent years (15 to 19). 49% of boys and 53% of girls were regular smokers. It also found that approximately 910 of Northwest Territories school children used chewing tobacco or snuff. It concluded that four variables were important in the decision to smoke - age, smoking behaviour of friends, smoking behaviour of brothers or sisters and parental smoking.

In 1984, according to the "Report on Health Conditions in the Northwest Territories", accidents, injury and violence accounted for more than 30% of all deaths. The rates for suicide, infant deaths, sexually transmitted diseases and teenage pregnancies were all above the national average.

In addition, there is evidence from treatment centres, that more and more young people are seeking help for drug problems at a younger age.

Also in 1984, the Social Program Evaluation Group from Queen's University, with a grant from Health and Welfare Canada, conducted the Canada Health Attitudes and Behaviours Survey in all provinces and territories. They conducted this survey in a number of selected communities in the Northwest Territories among Grade 4, Grade 7 and Grade 10 students. It concluded that with respect to:

Nutrition

- young people in the Northwest Territories were well below the national average for Grade 4 and Grade 7, and slightly below for Grade 10, in meeting the daily requirements of all four food groups (both in amount and variety);
- young people at all three grade levels consumed more foods with a high sugar content than their southern counterparts.

Alcohol & Drug Use

- higher than average percentage of Grade 7 and Grade 10 students in the Northwest Territories smoked cigarettes,
- of Grade 10 students, lower numbers used alcohol (some communities in which the surveys were conducted were "dry" communities);
- there was an extremely high incidence of cannabis use.

Self-esteem

- Northwest Territories young people felt slightly less positive about themselves and their relationships with their parents than other young Canadians.

Family Life Education

- a higher proportion of students in the N.W.T. than elsewhere in Canada learned about human sexuality in school.

Many of the problem health conditions identified in these and other studies are related to lifestyle behaviours and unhealthy environmental conditions which can be modified by the individual.

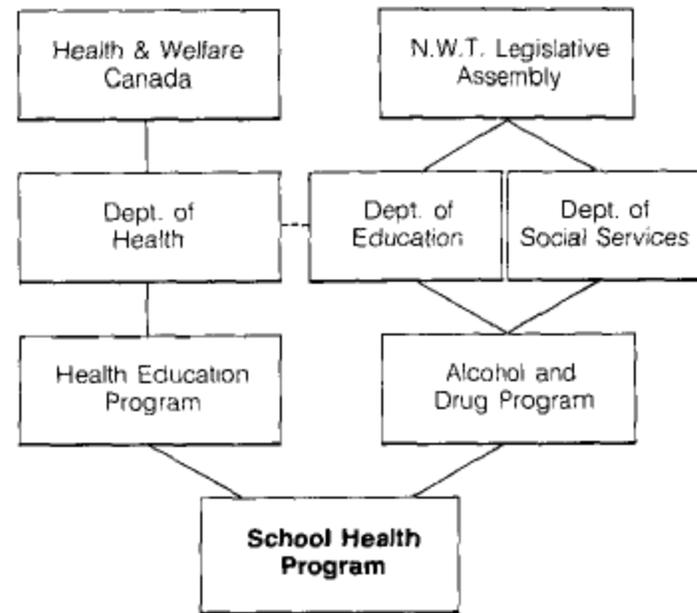
THE HISTORY OF THE N.W.T. SCHOOL HEALTH PROGRAM

Prior to 1979, teachers in the Northwest Territories had no formal health program to follow. In 1979, the Department of Education published "*The Northwest Territories Community School Health Program.*" It outlined the goals which students should achieve by the end of Grade 9. Although the list of goals provided teachers with a framework for unit and lesson planning, it was not a comprehensive health program.

In 1983, on the premise that many of the health problems which exist in the Northwest Territories could be prevented or reduced through an education program in the schools, the Northwest Territories Department of Health received funding from Health and Welfare Canada to develop a program for Kindergarten to Grade 12 students in consultation with the Department of Education.

At the same time, the Northwest Territories Legislative Assembly allocated separate funding to the Department of Social Services and the Department of Education to develop an Alcohol and Drug Program for schools.

These two programs together form the Northwest Territories School Health Program.



ASSESSING THE HEALTH NEEDS OF N.W.T. SCHOOL CHILDREN

The public, particularly parents and students, must accept a health education program in order for it to have an impact on their everyday lives. Such acceptance requires involvement. Local involvement also ensures the relevance of the program to the students for whom it is designed.

To ensure input by northerners, the Department of Health established two advisory committees with members representing professional, cultural and regional groups. These advisory committees provided general overall direction to the project.

The program staff conducted a comprehensive needs assessment to assess the perceived health needs of students in communities.

They distributed questionnaires to the following selected groups of people in every community in the Northwest Territories:

- pre-adolescent students and their parents
- adolescent students and their parents
- Local Education Authorities teachers
- administrators

The questionnaires asked:

- what aspects of health students were interested in; what parents thought it was important for their children to learn about health, and,
- what Local Education Authorities and teachers perceived the needs of the students in their local school were.

Well over 3000 people responded to the questionnaires. They made a significant contribution to this program by articulating the health needs of students.

At the same time, researchers examined statistical data about the delivery of health care in the Northwest Territories to determine why people in various age groups sought professional health care. They found, for example, that, in the 15-19 age group, the main reasons for health care were a result of injuries or poisoning. This was closely followed by diseases of the respiratory system.

Evidence from:

- the examination of problem health conditions in the N.W.T.
- the assessment of student health needs by themselves and others close to them, and
- the analysis of reasons why people seek medical help indicates that many young people are seeking treatment for problem conditions which could have been prevented. Young people must be encouraged to accept responsibility for their own health in order to maintain and enhance personal health.

A VISION OF HEALTH

Health is a state of complete physical, mental and social well-being. It is the result of a dynamic interdependence of these elements, as well as cultural and spiritual elements. Any change which occurs in one dimension will affect the others.

To reach a state of complete well-being, an individual must be able to realize aspirations, satisfy needs and change or cope with the environment.

This vision of health and the premise that health is a resource for everyday life serves as a basis for the Northwest Territories School Health Program.

The World Health Organization states "Health promotion is the process of enabling people to increase control over, and to improve, their health."

This is done in three ways:

- through self-care i.e., making decisions and adopting practices which specifically preserve their health; through mutual aid i.e., helping each other, supporting each other emotionally, sharing ideas, information and experiences;
- through creating healthy environments i.e., altering or adapting social, economic and physical surroundings to maintain and enhance health.

In order for individuals to make informed decisions with regard to their health, they must have support, information and skills to help them understand what promotes their health and what they themselves can do to enhance health.

This is the focus of the Northwest Territories School Health Program.

THE ROLE OF SCHOOLS IN HEALTH PROMOTION

Health promotion is specifically dedicated to enabling individuals to take the lead role in determining the status of their own health. The growing commitment to health education programs in schools can create a supportive environment for the development of healthy practices by providing information and encouraging change. Many jurisdictions now acknowledge the importance of health to quality of life by requiring health education as part of the school curriculum.

It is important to articulate the role of the school in health promotion. It is also important to recognize the limitations of the school's role. The public expects a program such as the Northwest Territories School Health Program to solve all the current social, emotional or physical conditions which contribute to a less than perfect state of well-being among students. That is not the role of health education in the school, The School Health Program does complement the efforts of other agencies in health promotion in the N.W.T. by specifically providing information and by developing skills and attitudes to enable individuals to take the lead role in attaining healthy life styles. The school cannot, however, make the student choose a healthy lifestyle.

By providing information and by developing skills, the school, however, does influence beliefs and attitudes, and it is these changing beliefs and attitudes that impact on behaviour.

Health behaviour is related to the general beliefs:

- that people are vulnerable to problem health conditions;
- that these conditions produce undesirable consequences; and,
- that the consequences are usually preventable.

By influencing these health beliefs positively, the school will increase the probability of positive health behaviours.

REFERENCES

Project Proposal, Health Information and Promotion, Department of Health, September 1981

Health Strategies for Canadians, Ad Hoc Committee Report, June 1981

A New Perspective on the Health of Canadians, M. Lalonde, Government of Canada, April 1974

Western Diseases, O. Schaefer, (Editors, Trowell and Burkett)

General and Nutritional Health in Two Eskimo Populations at Different Stages of Acculturation, O. Schaefer J. Timmermans, Canadian Journal of Public Health, November 1980

Eskimo Personality and Society - Yesterday and Today, O. Schaefer, Arctic, June 1975

Report on Health Conditions in the Northwest Territories 1984, Medical Services, N.W.T. Region, Health and Welfare Canada

Tobacco Use Among Students in the Northwest Territories, Health and Welfare Canada and N.W.T. Department of Health, 1982

Canada Health Attitudes and Behaviours Survey, Northwest Territories Report, Social Program Evaluation Group, Queen's University, 1984-85

Achieving Health for All: A Framework for Health Promotion, J. Epp, Government of Canada, November 1986

Ottawa Charter for Health Promotion, An International Conference on Health Promotion, November 1986

Northwest Territories School Health Program: A Report on the Needs Assessment, Department of Health, September 1984.

NORTHWEST TERRITORIES

School Health Program

IMPLEMENTATION

MAJOR GOALS

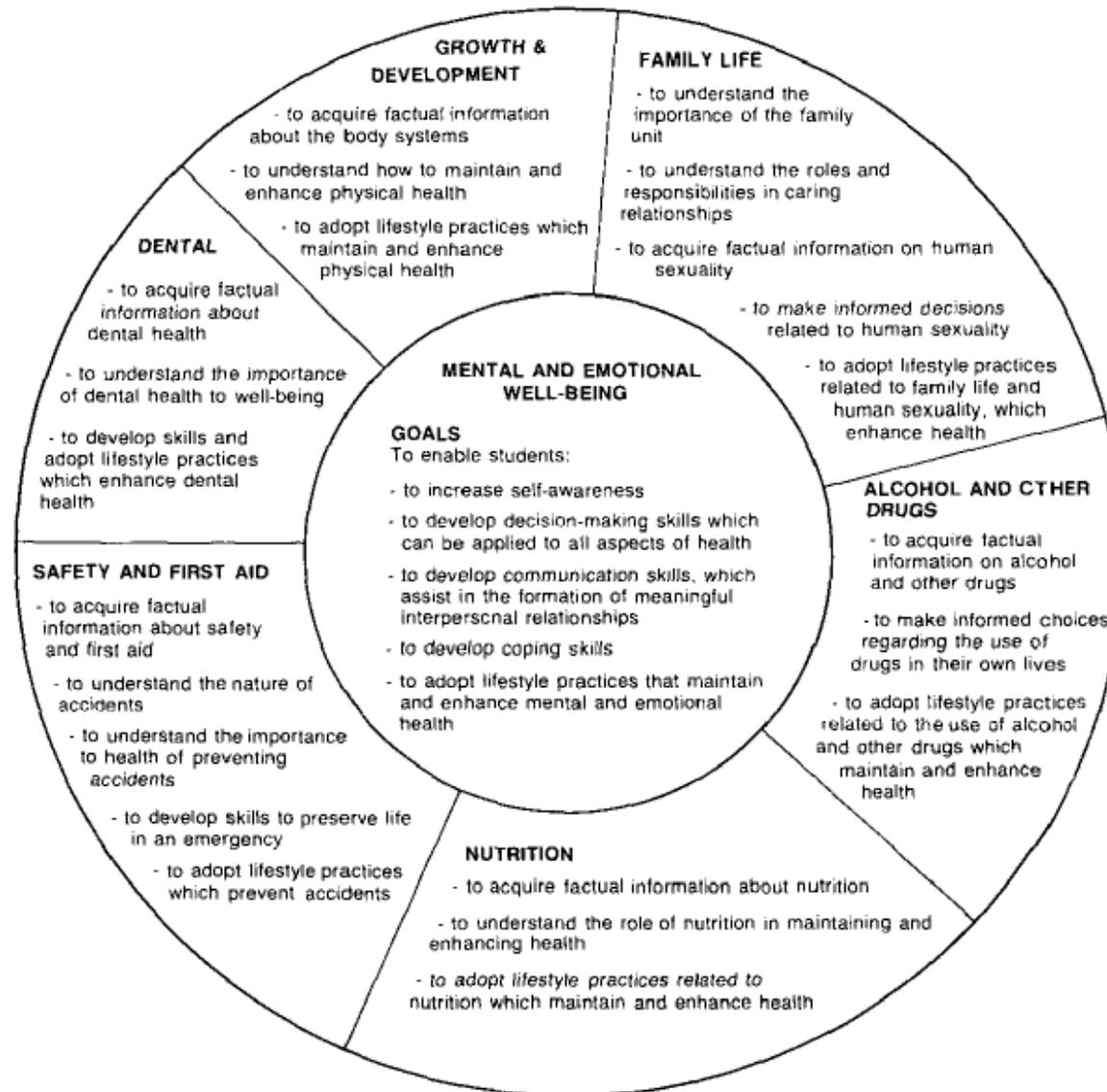
OF THE NORTHWEST TERRITORIES SCHOOL HEALTH PROGRAM

The major goals of the Northwest Territories School Health Program are:

- *to provide factual information on the human body;*
- *to enable students to develop skills that, along with the factual information, will allow them to make informed choices related to health;*
- *to enhance students' self-esteem through self-understanding;*
- *to enable students to develop attitudes which lead to positive lifestyle behaviours; and,*
- *to promote positive lifestyle practices which are conducive to lifelong health.*

THE UNITS OF THE PROGRAM

There are seven units in the program. The central unit is Mental and Emotional Well-Being. It is the major skill-building unit.



SCOPE AND SEQUENCE

The following charts provide an overview of the major topics, indicating at which grade they are taught.

UNIT	KINDERGARTEN	GRADE 1	GRADE 2	GRADE 3
Mental & Emotional Well-Being	<p>Self awareness</p> <ul style="list-style-type: none"> physical characteristics abilities feelings <p>Relationships</p> <ul style="list-style-type: none"> doing things with friends 	<p>Self awareness</p> <ul style="list-style-type: none"> physical characteristics abilities likes and dislikes <p>Relationships</p> <ul style="list-style-type: none"> working and playing together helping sharing 	<p>Self awareness</p> <ul style="list-style-type: none"> feelings expressing feelings appropriately <p>Relationships</p> <ul style="list-style-type: none"> friends making friends <p>Coping</p> <ul style="list-style-type: none"> stressful situations 	<p>Self awareness</p> <ul style="list-style-type: none"> people are alike and different everyone is unique <p>Relationships</p> <ul style="list-style-type: none"> responsibilities sharing responsibilities different ways of communicating <p>Decision-Making</p> <ul style="list-style-type: none"> choices situations which require decisions
Growth & Development	<p>Body Systems</p> <ul style="list-style-type: none"> external body parts five sensory organs <p>Lifestyle</p> <ul style="list-style-type: none"> positive daily and regular health habits 	<p>Body Systems</p> <ul style="list-style-type: none"> touch taste smell <p>Disease Prevention</p> <ul style="list-style-type: none"> signs of sickness germs spread diseases disease prevention 	<p>Body Systems</p> <ul style="list-style-type: none"> sight hearing <p>Lifestyle</p> <ul style="list-style-type: none"> positive health habits <p>Health Care</p> <ul style="list-style-type: none"> community health care workers <p>Environmental Health</p> <ul style="list-style-type: none"> clean water, air and good soil 	<p>Body Systems</p> <ul style="list-style-type: none"> internal organs <p>Growth Patterns</p> <ul style="list-style-type: none"> changes in height and weight <p>Disease Prevention</p> <ul style="list-style-type: none"> personal responsibility for health <p>Environmental Health</p> <ul style="list-style-type: none"> different kinds of pollution
Family Life		<p>Families</p> <ul style="list-style-type: none"> different members similarities/differences in family structures <p>Human Development & Reproduction</p> <ul style="list-style-type: none"> external body parts/boys/girls <p>Abuse Prevention</p> <ul style="list-style-type: none"> feelings associated with touch safety rules family/community support people 	<p>Families</p> <ul style="list-style-type: none"> families provide for the needs of their members the maintenance of the family unit <p>Human Development & Reproduction</p> <ul style="list-style-type: none"> living things reproduce and grow <p>Abuse Prevention</p> <ul style="list-style-type: none"> potentially abusive situations behaviours that maintain personal safety 	<p>Families</p> <ul style="list-style-type: none"> family structure changes with time new family members some family members require special care <p>Human Development & Reproduction</p> <ul style="list-style-type: none"> body organs related to reproduction human babies are created from the union of a sperm and egg

SCOPE AND SEQUENCE

UNIT	KINDERGARTEN	GRADE 1	GRADE 2	GRADE 3
Nutrition	Food Identification <ul style="list-style-type: none"> foods and non-foods Food Appreciation <ul style="list-style-type: none"> healthy snacks unfamiliar foods 	Food Identification <ul style="list-style-type: none"> foods from plants and animals Food Classification <ul style="list-style-type: none"> four food groups Food Selection <ul style="list-style-type: none"> food from each food group Food Appreciation <ul style="list-style-type: none"> nutritious food to start the day 	Food Identification <ul style="list-style-type: none"> different food farms Food Classification <ul style="list-style-type: none"> functions of each food group nutritious snacks Food Selection <ul style="list-style-type: none"> nutritious meals Food Appreciation <ul style="list-style-type: none"> different food forms 	Food Classification <ul style="list-style-type: none"> classifying into food groups function of each food group common foods which do not belong to a food group Food Selection <ul style="list-style-type: none"> nutritious eating for one day Food Appreciation <ul style="list-style-type: none"> nutritious food to start the day
Dental	Structure and Function <ul style="list-style-type: none"> primary and permanent teeth teeth functions Oral Hygiene <ul style="list-style-type: none"> toothbrushing skills Dental Health <ul style="list-style-type: none"> safe and unsafe food 	Structure and Function <ul style="list-style-type: none"> primary and permanent teeth teeth functions Oral Hygiene <ul style="list-style-type: none"> toothbrushing skills Dental Health <ul style="list-style-type: none"> safe and unsafe food safe and unsafe behaviours Dental Disease <ul style="list-style-type: none"> tooth decay Dental Services and Products <ul style="list-style-type: none"> local dental health workers 	Structure and Function <ul style="list-style-type: none"> primary and permanent teeth Oral Hygiene <ul style="list-style-type: none"> flossing skills Dental Health <ul style="list-style-type: none"> safe and unsafe snacks Dental Disease <ul style="list-style-type: none"> dental plaque Dental Services and Products <ul style="list-style-type: none"> common dental health products 	Structure and Function <ul style="list-style-type: none"> specific tooth groups and their functions Oral Hygiene <ul style="list-style-type: none"> toothbrushing and flossing skills Dental Disease <ul style="list-style-type: none"> dental plaque Dental Services and Products <ul style="list-style-type: none"> personal responsibility for dental health care community dental health workers
Safety & First Aid	Personal Safety <ul style="list-style-type: none"> personal safety rules personal identity facts community safety helpers safety rules for pedestrians Fire Safety <ul style="list-style-type: none"> fire drill procedures Safety <ul style="list-style-type: none"> poisons poison warning sign tasting unknown substances hazard warning signs 	Personal Safety <ul style="list-style-type: none"> personal safety rules personal identity facts community safety helpers emergency phone calls Accident Prevention <ul style="list-style-type: none"> burns and scalds falls First Aid <ul style="list-style-type: none"> first aid for minor cuts Safety <ul style="list-style-type: none"> poisons sniffing unsafe substances tasting unknown substances 	Bum Prevention <ul style="list-style-type: none"> safety rules around electricity Bicycle Safety <ul style="list-style-type: none"> bicycle rules and traffic laws Outdoor Safety <ul style="list-style-type: none"> frostbite Firearm Safety <ul style="list-style-type: none"> firearm safety rules First Aid <ul style="list-style-type: none"> nosebleeds Safety <ul style="list-style-type: none"> hazard warning signs common unsafe substances rules for unsafe substances 	Burn Prevention <ul style="list-style-type: none"> burns and scalds Fire Safety <ul style="list-style-type: none"> clothes on fire burning buildings Outdoor Safety <ul style="list-style-type: none"> Ice safety Personal Safety <ul style="list-style-type: none"> animal bites Safety <ul style="list-style-type: none"> hazard warning signs
Alcohol & Other Drugs		Drugs <ul style="list-style-type: none"> medicine safety 	Drugs <ul style="list-style-type: none"> medicines are drugs medicines may be helpful and harmful 	Drugs <ul style="list-style-type: none"> sources of medicines rules for medicines common substances which contain drugs Tobacco <ul style="list-style-type: none"> effects of tobacco Well-Being <ul style="list-style-type: none"> improving their well-being

SCOPE AND SEQUENCE

UNIT	GRADE 4	GRADE 5	GRADE 6
Mental & Emotional Well-Being	<p>Self awareness</p> <ul style="list-style-type: none"> • strengths and weaknesses • activities affect how people feel <p>Relationships</p> <ul style="list-style-type: none"> • caring behaviours <p>Decision-Making</p> <ul style="list-style-type: none"> • the effects of choices • peer influence • resisting peer pressure 	<p>Relationships</p> <ul style="list-style-type: none"> • communication/effective speaking/active listening • assertive communication skills • the refusal process <p>Decision-Making</p> <ul style="list-style-type: none"> • advertising influence <p>Coping</p> <ul style="list-style-type: none"> • stressful situations • signs of stress • ways of dealing with stress 	<p>Relationships</p> <ul style="list-style-type: none"> • responsibilities in maintaining a relationship • volunteerism <p>Decision-Making</p> <ul style="list-style-type: none"> • values • the decision-making process • group decisions <p>Coping</p> <ul style="list-style-type: none"> • time management <p>Lifestyle</p> <ul style="list-style-type: none"> • assessing/improving personal characteristics
Growth & Development	<p>Body Systems</p> <ul style="list-style-type: none"> • digestive system <p>Disease Prevention</p> <ul style="list-style-type: none"> • communicable/non-communicable diseases <p>Environmental Health</p> <ul style="list-style-type: none"> • safe drinking water <p>Health Care System</p> <ul style="list-style-type: none"> • health care supports 	<p>Body Systems</p> <ul style="list-style-type: none"> • respiratory system/circulatory system • lifestyle behaviours for a healthy cardiovascular system 	<p>Body Systems</p> <ul style="list-style-type: none"> • excretory system/nervous system <p>Disease Prevention</p> <ul style="list-style-type: none"> • germ entry into the body • the three lines of defence • AIDS prevention
Family Life	<p>Families</p> <ul style="list-style-type: none"> • families provide for the needs of their members • family traditions <p>Human Development and Reproduction</p> <ul style="list-style-type: none"> • characteristic changes of puberty • reproductive system • menstruation (optional lesson for girls only) <p>Abuse Prevention</p> <ul style="list-style-type: none"> • touches that produce negative or confused feelings • family/community support people 	<p>Families</p> <ul style="list-style-type: none"> • male/female roles • family activities <p>Human Development and Reproduction</p> <ul style="list-style-type: none"> • characteristic changes of puberty • reproductive system • menstruation • reproductive process/sex cell development/journey of sperm/intercourse/fertilization 	<p>Families</p> <ul style="list-style-type: none"> • responsibilities and relationships change with time • importance of elders <p>Human Development and Reproduction</p> <ul style="list-style-type: none"> • endocrine system • relationship between puberty and the endocrine system • relationship between reproduction and menstruation • reproductive process/stages of fetal development <p>Abuse Prevention</p> <ul style="list-style-type: none"> • sexual abuse/behaviours which prevent abuse • family1community, support people

SCOPE AND SEQUENCE

UNIT	GRADE 4	GRADE 5	GRADE 6
	<p>Food Classification</p> <ul style="list-style-type: none"> • six major nutrients • sources of major nutrients • nutritious and non-nutritious snacks <p>Food Selection</p> <ul style="list-style-type: none"> • factors that affect food choices <p>Food Appreciation</p> <ul style="list-style-type: none"> • nutritious snacks 	<p>Food Classification</p> <ul style="list-style-type: none"> • leader nutrients and their functions • sources of leader nutrients <p>Food Selection</p> <ul style="list-style-type: none"> • recommended daily servings • food availability, • food processing <p>Food Appreciation</p> <ul style="list-style-type: none"> • a nutritious northern meal 	<p>Food Classification</p> <ul style="list-style-type: none"> • leader nutrients and their functions • sources of leader nutrients <p>Food Selection</p> <ul style="list-style-type: none"> • serving sizes • balanced food intake • reading food labels <p>Lifestyle</p> <ul style="list-style-type: none"> • personal nutrition program
Dental	<p>Structure and Function</p> <ul style="list-style-type: none"> • structure and functions of teeth <p>Oral Hygiene</p> <ul style="list-style-type: none"> • oral hygiene skills • healthy dental behaviours <p>Dental Health</p> <ul style="list-style-type: none"> • dental hazards • preventing dental injuries <p>Dental Disease</p> <ul style="list-style-type: none"> • tooth decay • fluoride <p>Dental Services and Products</p> <ul style="list-style-type: none"> • dental health care 	<p>Oral Hygiene</p> <ul style="list-style-type: none"> • toothbrushing and flossing skills <p>Dental Health</p> <ul style="list-style-type: none"> • effects of tobacco products <p>Dental Services and Products</p> <ul style="list-style-type: none"> • benefits and disadvantages of dental health products • homemade toothpaste • role of dental health workers 	<p>Structure and Function</p> <ul style="list-style-type: none"> • structure and functions of teeth <p>Oral Hygiene</p> <ul style="list-style-type: none"> • oral hygiene skills • healthy dental behaviours <p>Dental Disease</p> <ul style="list-style-type: none"> • common dental health problems • signs of dental health problems • treatment for dental health problems • preventing dental health problems <p>Lifestyle</p> <ul style="list-style-type: none"> • personal dental health program
Safety & First Aid	<p>Burn Prevention</p> <ul style="list-style-type: none"> • scalds <p>Bicycle Safety</p> <ul style="list-style-type: none"> • bike maintenance • bike skills and safety rules <p>Fire Safety</p> <ul style="list-style-type: none"> • common causes of fire • fire exit plans • individual responsibility <p>First Aid</p> <ul style="list-style-type: none"> • frostbite and hypothermia <p>Motor Vehicle Safety</p> <ul style="list-style-type: none"> • all terrain vehicles • snowmobiles 	<p>Burn Prevention</p> <ul style="list-style-type: none"> • burns from flames • burns from electricity <p>Fire Safety</p> <ul style="list-style-type: none"> • home/campfire safety <p>Outdoor Safety</p> <ul style="list-style-type: none"> • safe camping • water and ice safety <p>First Aid</p> <ul style="list-style-type: none"> • burns • external bleeding 	<p>Motor Vehicle Safety</p> <ul style="list-style-type: none"> • all terrain vehicles • snowmobiles <p>Babysitting Safety</p> <ul style="list-style-type: none"> • responsibilities • common rules • safety rules • emergencies <p>Outdoor Safety</p> <ul style="list-style-type: none"> • survival <p>First Aid</p> <ul style="list-style-type: none"> • artificial respiration • choking • external bleeding • poisoning • unconsciousness <p>Lifestyle</p> <ul style="list-style-type: none"> • importance of first aid • safety organizations and professionals • personal safety and first aid program
Alcohol & Other Drugs	<p>Drugs</p> <ul style="list-style-type: none"> • specific drugs in commonly used substances • medical and non-medical drugs • effect of drugs on the brain • reasons for using/not using drugs • personal responsibility for decisions about use of drugs • use and misuse of drugs <p>Caffeine</p> <ul style="list-style-type: none"> • caffeine affects the body <p>Alcohol</p> <ul style="list-style-type: none"> • alcohol affects the body • factors which determine the effects of alcohol • reasons for using/not using alcohol • misuse of alcohol • community resources for alcohol problems <p>Well-Being</p> <ul style="list-style-type: none"> • feeling good without drugs 	<p>Drugs</p> <ul style="list-style-type: none"> • specific drugs in commonly used substances • tobacco affects the body • drug myths • community resources for drug information • peer pressure/advertising influence decisions about drug use <p>Alcohol</p> <ul style="list-style-type: none"> • short/long term effects of alcohol • use and misuse of alcohol • community resources for alcohol problems <p>Well-Being</p> <ul style="list-style-type: none"> • feeling good without drugs 	<p>Drugs</p> <ul style="list-style-type: none"> • personal responsibility for decisions about drug use • values related to drug use • drug myths • peer pressure/advertising influence decisions about drug use <p>Alcohol</p> <ul style="list-style-type: none"> • factors which determine the effects of alcohol • social effects of alcohol misuse • effects of alcohol on young people <p>Well-Being</p> <ul style="list-style-type: none"> • individual activities which promote well-being • leisure time activities in the community

SCOPE AND SEQUENCE

UNIT	GRADE 7	GRADE 8	GRADE 9
Mental & Emotional Well-Being	<ul style="list-style-type: none"> • self-esteem • conversations • criticism • personal plan to enhance self-esteem 	<ul style="list-style-type: none"> • characteristics of effective working groups • reasons for forming group • depression • suicide • stress <ul style="list-style-type: none"> - causes - methods of dealing with stress 	<ul style="list-style-type: none"> • future career choices • job seeking • assessment of personal lifestyles • personal plan to improve lifestyle
Growth & Development	<ul style="list-style-type: none"> • integumentary system/immune system • common health problems of adolescence • health behaviours which help prevent adult health problems • physical fitness <ul style="list-style-type: none"> - components - personal plan 	<ul style="list-style-type: none"> • skeletal system/muscular system • personal exercise plan for the muscular system 	<ul style="list-style-type: none"> • inter-relationship of the body system • NWT Health Care system function <ul style="list-style-type: none"> - responsible use • economics of health care • health careers
Family Life	<ul style="list-style-type: none"> • family decisions • family communication • reproductive system function • relationship between endocrine system and the menstrual cycle • stages of the reproductive process • abstinence • risks and consequences of early pregnancy • sexually transmitted diseases <ul style="list-style-type: none"> - AIDS - chlamydia - gonorrhoea - preventive behaviours • sexual assault <ul style="list-style-type: none"> - common myths - consequences for victim and offender • potentially dangerous situations • behaviours which help prevent sexual assault 	<ul style="list-style-type: none"> • family structures change • menstruation <ul style="list-style-type: none"> - the implications • stages of the reproductive process • abstinence and assertiveness • positive health behaviours related to pregnancy • sexually transmitted diseases <ul style="list-style-type: none"> - AIDS - syphilis - trichomonas - pubic lice - preventive behaviours • birth control <ul style="list-style-type: none"> - methods - attitudes • family violence <ul style="list-style-type: none"> - causal factors - coping 	<ul style="list-style-type: none"> • sex-role stereotyping • effective parenting • support systems for families • reproductive system <ul style="list-style-type: none"> - its role in the formation of new life • heredity • fetal development stages <ul style="list-style-type: none"> - risk factors • birth control risks and consequences • unplanned pregnancy <ul style="list-style-type: none"> - alternatives attitudes - prevention • positive lifestyle practices related to family life • constructive relationships

SCOPE AND SEQUENCE

UNIT	GRADE 7	GRADE 8	GRADE 9
Nutrition	<p>Food Classification</p> <ul style="list-style-type: none"> • NWT Food Guide <p>Food Selection</p> <ul style="list-style-type: none"> • menu planning for different age groups <p>Food Consumerism</p> <ul style="list-style-type: none"> • advertising affects food choices • food additives <p>Food Appreciation</p> <ul style="list-style-type: none"> • food items with few additives 	<p>Energy Balance</p> <ul style="list-style-type: none"> • energy needs • stored energy • energy intake and output <p>Food Consumerism</p> <ul style="list-style-type: none"> • analyzing diets <p>Lifestyle</p> <ul style="list-style-type: none"> • weight control 	<p>Food Selection</p> <ul style="list-style-type: none"> • factors that influence food choices • food customs in the NWT • community feast menu <p>Lifestyle</p> <ul style="list-style-type: none"> • nutrition concerns in the NWT • preventive behaviours • Canadian nutrition and dietary recommendations • personal nutrition program
Dental	<p>Dental Health</p> <ul style="list-style-type: none"> • dental emergencies <p>Dental Disease</p> <ul style="list-style-type: none"> • common dental health problems of children and youth • nursing bottle mouth 	<p>Dental Health</p> <ul style="list-style-type: none"> • safe, unsafe foods <p>Dental Services and Products</p> <ul style="list-style-type: none"> • professional preventive procedures • fluoride • common dental health products <p>Lifestyle</p> <ul style="list-style-type: none"> • personal action plan for dental health 	<p>Dental Health</p> <ul style="list-style-type: none"> • behaviours/factors that promote dental health <p>Dental Careers</p> <ul style="list-style-type: none"> • requirements for dental careers <p>Lifestyle</p> <ul style="list-style-type: none"> • positive lifestyle practices related to dental health
Safety & First Aid	<p>Babysitting Safety</p> <ul style="list-style-type: none"> • responsibilities • common injuries • childcare routines and play • safety rules <p>Outdoor Safety</p> <ul style="list-style-type: none"> • firearm safety <p>First Aid</p> <ul style="list-style-type: none"> • burns • poisoning <p>Lifestyle</p> <ul style="list-style-type: none"> • safety organizations and professionals • personal safety and first aid program 	<p>Outdoor Safety</p> <ul style="list-style-type: none"> • survival safety boating safety • sports safety <p>First Aid</p> <ul style="list-style-type: none"> • frostbite/hypothermia • head/eye injuries diabetic emergencies • epileptic seizures/convulsions • fainting <p>Lifestyle</p> <ul style="list-style-type: none"> • importance of first aid • personal safety and first aid program 	<p>First Aid</p> <ul style="list-style-type: none"> • artificial respiration • choking • external/internal bleeding • shock • unconsciousness • fractures, sprains, dislocations • heart attacks, strokes • poisoning <p>Lifestyle</p> <ul style="list-style-type: none"> • leading causes of injuries/accidental death • personal safety and first aid program
Alcohol & Other Drugs	<p>Drugs</p> <ul style="list-style-type: none"> • methods of taking drugs • different categories of drugs • traditional medicine <p>Alcohol</p> <ul style="list-style-type: none"> • different types of alcohol • metabolism of alcohol • effects of alcohol • reasons for using/not using alcohol <p>Cannabis</p> <ul style="list-style-type: none"> • cannabis and the body <p>Well-Being</p> <ul style="list-style-type: none"> • peer pressure and drug use • positive role models 	<p>Drugs</p> <ul style="list-style-type: none"> • dangers of combining drugs • advertising influences decisions about drug use <p>Alcohol</p> <ul style="list-style-type: none"> • historical use of alcohol • use, misuse, abuse of alcohol community resources for alcohol problems • teenage alcohol problems • fetal alcohol syndrome • advertising influences decisions about alcohol use <p>Cannabis</p> <ul style="list-style-type: none"> • physical and psychological effects of cannabis • cannabis and the reproductive system 	<p>Drugs</p> <ul style="list-style-type: none"> • drug groups • side effects of drugs • drugs and the law <p>Alcohol</p> <ul style="list-style-type: none"> • alcohol and the law • The Young Offenders' Act • local control of alcohol <p>Well-Being</p> <ul style="list-style-type: none"> • personal attitudes towards drug use

TIME ALLOCATION

Effective September 1987, Health Education will become a required part of the school curriculum.

During the first year of implementation, teachers will implement 40 hours of the program. Thereafter, the recommended minimum time allocation for health education will be 60 hours per year for Grade 1 to Grade 9 students. (Since many Kindergarten students attend school for only half a day, it is not possible to recommend 60 hours for that Grade. However, health education should be taught in Kindergarten.)

This means approximately 90 minutes per week for a school with a 190 day school year,

- or 3 x 30 minute lessons per week at the elementary level
- and 2 x 45 minute lessons per week at the junior high level.

The following recommended hourly time allocations apply to each unit: Teachers should note that time requirements for Nutrition, Dental Health and Safety and First Aid have been calculated; however, these units will not be available until September 1988.

Differences in age, experience, language proficiency and developmental level will influence each student's learning. Some students may require enrichment activities or additional assistance. Some lessons will take more than one class period, but allowance has been made in the time allocations for this to happen.

Since Mental and Emotional Well-Being is the basic skill-building unit, and since Growth and Development contains much of the information about the body systems, the Department of Education recommends teaching these two units prior to introducing any other unit.

UNIT	GRADE								
	1	2	3	4	5	6	7	8	9
Mental & Emotional	10	10	10	10	10	10	10	10	10
Growth & Development	10	10	10	10	10	10	8	8	8
Family Life	10	10	10	10	10	10	12	12	12
Alcohol & Other Drugs	6	6	6	8	8	10	10	10	10
Nutrition	8	8	8	8	8	6	6	6	6
Dental	8	8	8	6	6	6	4	4	4
Safety & First Aid	8	8	8	8	8	8	10	10	10

THE LESSON FORMAT

The program is laid out in an easy-to-follow, easy-to-use format. Each lesson indicates the **unit name, the grade level, lesson number and theme**:

e.g., Growth and Development
Grade 1 Lesson: 3 Theme: Body Systems

The **concept** for each lesson is clearly articulated at the start of the lesson. Concepts may be repeated within a single grade or between grades. The different objectives, however, ensure that students move from a basic understanding to a more advanced understanding of the same concept.

The **preparation** outlines all the tasks which a teacher will have to complete prior to teaching the lesson and all the materials or resources which are required for that particular lesson.

The **vocabulary** is not an all-inclusive list of words with which students should be familiar. Rather, it is a basic list of the terms which students will have to understand and be able to use in order to learn about the concept. Individual teachers are in the best position to determine the language needs of their students for each lesson.

The lessons, themselves, are divided into three columns:

- the **objectives**, which are behavioural objectives students should achieve, once they have participated in the lesson;
- **student activities**, which are suggested activities that teachers may use with their students to help them achieve the objectives. Teachers should select those activities which are most suitable for their class. They may have to adapt some for the particular students in their class. For younger grades, activities have been made as "hands on" and concrete as possible;
- the **teacher notes**, which provide some basic information, as well as more detail for teachers on how to carry out activities.

At the end of each unit, on coloured pages, **teacher background information** provides more detail on specific topics.

The pages are numbered so that teachers who are looking for a particular lesson will be able to locate it easily.

Each unit has reference letters:

- ME - Mental and Emotional Well-Being
- GD - Growth and Development
- FL - Family Life

Following the reference letter is a number which indicates the lesson number in a particular unit e.g., ME 3 means the third lesson of the Mental and Emotional Well-Being Unit for that particular grade.

The next number indicates the overall page of that unit, e.g., ME 3.12 means the third lesson of the Mental and Emotional Well-Being Unit, the twelfth page of the whole unit. So in other words, teachers can look up the regular page number of each unit, or the lesson number.

Teachers should note that one lesson in the program may take more than one class period, depending on student's previous knowledge, experience and language proficiency. Allowance has been made in the time allocation for this.

APPROACHES TO THE TEACHING OF HEALTH

The methods which an individual teacher uses with this program are as important as the content. Since the program is designed to influence beliefs and attitudes, it is important for students to examine their own and other people's beliefs and attitudes. It is also important for students to practise, in simulated situations, the skills which they are developing, so that using these skills will become second nature to them in the real world. This involves students sharing opinions, feelings, beliefs and information. Both classroom atmosphere and methods will contribute to the success of the program.

BUILDING A POSITIVE CLASSROOM ATMOSPHERE

The success of this program will depend on the establishment of a positive classroom atmosphere, where students and teachers feel comfortable with each other when discussing personal or sensitive issues.

A number of factors will contribute to this positive classroom atmosphere:

- an attitude of mutual respect, where "put-downs" are not acceptable;
- a non-judgemental atmosphere, where each person's opinion is valued;
- openness, honesty and trust by teacher and students;
- confidentiality, where students are not afraid that opinions or information are discussed openly outside the class.

Prior to starting the lessons, teachers should discuss with students the importance of each of these factors. Teachers should remind students of them regularly throughout the lessons.

In the Family Life Unit, students may demonstrate initial embarrassment with the topic by giggling or laughing. This is often because they feel uncomfortable with discussing the topic of sexuality. These feelings will diminish.

- as they become more familiar with the subject;
- if other factors outlined above are contributing to a positive classroom atmosphere;
- if the teacher is comfortable with the subject.

THE TEACHING OF VALUES

Health Education, and especially the Family Life component, cannot be taught without discussing values. The School Health Program uses universal values as the basis for decision-making on any health-related matter, including sexuality.

The program focuses on these values:

- a sense of caring
- respect for self, family and others
- kindness
- honesty and justice
- compassion
- non-exploitation

All units of the program encourage respect for family and cultural values, religious beliefs and the law.

Teachers are encouraged to ask groups of resource people with different points of view to present their views on controversial issues to older students. For example, a discussion on birth control may take the form of a panel discussion, where the members include people with differing opinions. This provides students with the opportunity to listen to other people's opinions, to question them and to think about the expressed opinions in a respectful atmosphere.

Teachers must be alert to the dangers of imposing their values on students. Being non-judgemental will encourage students to be more open.

APPROPRIATE TECHNIQUES FOR TEACHING HEALTH

A number of teaching techniques are particularly appropriate for this program.

1. *Small Group Discussion*

Dividing students up into small groups encourages free discussion. It encourages students who are reluctant to speak out in a large group to feel more comfortable, and also gives students an opportunity to learn from each other.

Successful small group discussion depends upon:

- encouraging students to take a risk in sharing information
- establishing rules at the beginning of the sessions e.g.,
 - no insults or put downs
 - only one person talks at a time
 - show respect for each other's opinion
 - everyone gets a turn, but may choose to pass
- thinking about the composition of the groups e.g.,
 - is there a competent leader?
 - is there an even mix of the sexes?
 - is there a mix of extroverted and introverted children?
- starting to use small group discussions at a young age, so that students become used to this method of sharing
- always concluding the activity by asking one person from each group to report its discussion to the rest of the class.

2. *Brainstorming*

Use brainstorming to solicit ideas or opinions from the students. Gather as many opinions as possible, without making any value judgements on them. This allows for the free flow of ideas. Write the suggestions on the chalkboard or flip chart paper. After brainstorming, categorize and discuss the ideas. This is often effective in small groups.

Five rules of brainstorming to remember are:

- do not evaluate the ideas until after the brainstorming session;
- quantity is more important than quality
- list as many ideas as possible in a given length of time;
- expand on the ideas of others
- if someone else's idea prompts another idea, share it;
- encourage creativity; and,
- record all ideas.

3. *Roleplaying*

Roleplaying is an essential element of any program which influences attitudes and behaviours. Not all teachers, or all students, feel comfortable using roleplay. However, there are some steps to follow which will increase the success of this method: - decide on the topic of the roleplay; - start by using volunteers; - discuss the scenario to be acted out. Help the students to understand what to look for; - discuss each person's part, using a hypothetical situation. Ask students how the person would feel, and what the person would say or do in that situation; - have the students act out the scene; - always finish the roleplay with a discussion about the different people in the scenario, their feelings and possible alternatives; - the more frequently you use roleplay as a teaching method, the more proficient the students will become and the more successful it will be; and, - if role play is not successful the first time, do not give up. Try again!

4. *The Question Box*

When dealing with topics of a sensitive nature, such as those in the Family Life Unit or the Alcohol and Other Drugs Unit, students may be reluctant to ask questions publicly. Use of a question box allows students to ask questions anonymously, and facilitates discussion of a difficult topic which students wish to bring up.

At the end of each class, or at the end of a particular session, let students know that they will be able to write down any question which they wish to ask and to put it into the question box anonymously. At the beginning of the next class, the teacher will respond to the questions in the box.

Another effective use of the question box is to ask students at the beginning of the sessions to write down questions which they wish to have answered during the classes. This allows the teacher to structure the program around the needs of the students.

THE LANGUAGE DEVELOPMENT APPROACH AND THE N.W.T. SCHOOL HEALTH PROGRAM

Who Should Use the Language Development Approach

Students in the Northwest Territories come to school understanding and speaking a number of different languages. Where appropriate, where possible and where mandated by parents and/or L.E.A.'s, teachers should instruct students in Health Education classes in the language in which they are most proficient.

In some communities, students are not proficient in their first language, parents do not want instruction in the first language, or staff, programs and materials are not available to teach in the first language. In those situations, schools instruct Health Education classes in English. Because students in these communities may not be proficient in the English used to teach the curriculum, teachers of Health must take the time and make the effort to teach students the language required to talk, read and write about Health concepts. Success in the Health Education program is not otherwise possible.

The Department of Education directs the use of the Language Development Approach for students who are not proficient in English when it is the language of instruction and for students who are learning English as a Second Language. It is the responsibility of teachers at all levels to use the Language Development framework when preparing their own lessons or presenting lessons provided in the Health units.

What is the Purpose of the Language Development Approach?

The primary purpose of the Language Development Approach is to provide students with the vocabulary and sentence patterns necessary to succeed in school and, in this program, to learn about health concepts. A related aim is to help students develop thinking skills and to use the language of instruction for a variety of purposes: to imagine, to investigate, to explain, to describe, to question, etc.

A second purpose of the approach is to help students learn the vocabulary and sentence patterns required to communicate in various social situations. It provides them with opportunities to learn to use additional language to satisfy needs, to regulate personal behaviour, and to establish and define social behaviour. This purpose is secondary because many students have a first language to use to fulfill these purposes.

The Principles of the Language Development Approach

The Language Development Approach draws on elements of many traditional and contemporary practices in first and second language teaching to form the following set of principles on which to build classroom practice:

1. ***Students need to have their experiences, skills, knowledge, and, particularly, the language they bring to school identified and used as the basis for the school language program.***

This means the Health Education Program should identify and relate new concepts to the students' past experiences, previous knowledge, and immediate environment. Studies indicate that when teaching does not relate to students' everyday lives or existing ideas, little learning takes place.

In the cross cultural classroom of the N.W.T. and with sensitive issues such as family life, it is particularly important to determine students' ideas, family values and relevant experiences, before teaching the lessons.

2. ***Students need to learn to articulate for themselves and to communicate their thoughts, feelings, needs, opinions, and intentions for a variety of purposes in many different communication contexts. They need to be able to understand, learn from and respond to the communication of others.***

This involves being able to: - express/inquire about personal needs, desires, feelings, attitudes etc. - socialize - direct the actions of the self and the actions of others - impart and seek factual information on past and present experiences - reason logically - make and express predictions - project into the experiences, feelings, and reaction of others - determine and express intellectual attitudes - evaluate

The Health program should involve students in a variety of activities which require them to use language in all these ways. Traditional paper and pencil exercises must be extended to include graphing, interviewing, reporting, researching, investigating, problem solving, etc,

3. ***Students need to learn language to communicate, but they also use language to learn. Therefore, language should be taught across the curriculum.***

The Health Education program should teach second language students the language they require to learn about new concepts. Success in Health is not possible otherwise. This may mean teachers cannot cover all concepts for all topics. It is preferable to cover some concepts for all topics rather than omitting some topics altogether.

4. ***Second language students need to spend more time learning to communicate in the language of instruction than they do learning about the language of instruction.***

The time spent in Health Education teaching students language should be devoted to introducing, practising, and applying the vocabulary and sentence patterns students require to talk, read, and write about a concept.

5. ***Students need to learn language that is meaningful. It is easiest to accomplish this when teaching language in a context. Without adequate concept development, the language students learn is either vague or devoid of meaning.***

The Health Education program should take the time to ensure that students learning new concepts have enough first hand or indirect experiences with the concepts to understand them clearly. There is no point in students studying material they don't understand. If teachers do not make the material understandable, students will supply their own meanings. These may or may not be appropriate!

6. ***Students need to learn to develop their thinking skills and to engage in more abstract levels of thoughts as they mature. They must learn the language that allows them to express their thinking about concepts. Initially, they need to learn the concrete vocabulary and functional sentence patterns which enable them to recall, match, sequence, classify, etc. Eventually they need to learn more complex sentence patterns so that they can generalize, analyze, hypothesize, imagine, predict and evaluate.***

The Health Education program for primary students should concentrate on teaching and using concrete thinking skills. The Health Education program for older students should introduce more abstract thinking skills as students can handle them.

7. ***Students need to participate in language activities that integrate the language strands of listening, speaking, reading and writing. Specific skills taught will vary with the proficiency level of the students. Reading and writing activities should use language which students have internalized aurally/orally.***

The language activities in the Health Education program should include all four language strands. Students who cannot talk about a concept will have difficulty reading and writing about it.

8. ***Students need to learn "real" language and how to use it in the natural situations in which it is required.***

The language included in the Health Education program should be as close as possible to the everyday vocabulary and sentence patterns people actually use to talk or write about a concept. Students need to get into the community to use the language they are learning with people outside the classroom.

Program content, classroom organization and teaching techniques used to develop concepts and skills should:

- a) reflect all the above principles
- b) vary according to
 - the language proficiency of the students in the first and second language
 - cultural background (experiences, interests)
 - age/grade levels
 - type of topic
 - learning style of students
 - materials and equipment available
 - teaching style of teacher

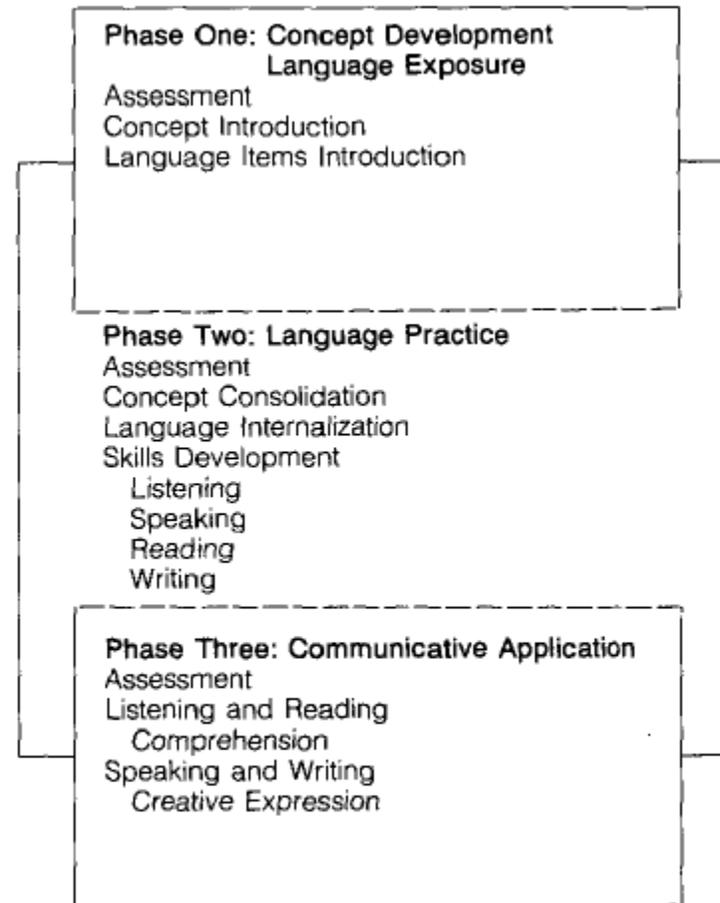
These principles are also valid for students who speak English as a first language. The difference lies in the methods and techniques used. Although designed for second language students, the Language Development Approach allows flexibility in choosing specific classroom practices and techniques to meet the varied language needs of students.

LANGUAGE DEVELOPMENT FRAMEWORK

The Language Development Approach uses the following framework to structure lessons involving conceptual development and language learning for any subject area or for topics of personal interest or cultural relevance.

Intellectual Skills

- Perceiving
- Retrieving
- Recalling
- Matching
- Sequencing
- Classifying
- Comparing/Contrasting
- Generalizing
- Inferring
- Predicting
- Interpreting
- Hypothesizing
- Imagining
- Applying
- Analyzing
- Synthesizing
- Evaluating



*Based on the work of Jim MacDiarmid
Adapted by B. Pugh and C. McGregor*

How to Develop a Language Development Unit

1. Identify the topic of study from the Health Education program.
2. Determine the key concepts and sub-concepts for the topic. Use brainstorming, semantic mapping, or content diagramming to outline these concepts for your own reference.
3. Assess and predict what experiences, knowledge, interests and attitudes students already possess which you can relate to the concept and subconcepts of the topic through:
 - observing the activities in the community in which students engage;
 - determining previous school experiences students have had with respect to the topic;
 - talking with classroom assistants, parents, L.E.A. members, older students, etc.;
 - observing students in the classroom.
4. Determine what materials and resources are available in the school and community to teach the key concepts and sub-concepts.
5. Brainstorm techniques and activities that you can use to teach the concepts and sub-concepts of the unit. Keep in mind the cognitive maturity, proficiency level, and background experiences of the students in the class.
6. Brainstorm the language items (vocabulary and sentence patterns) that students need to know in order to understand and discuss the concepts and subconcepts of the topic.
7. Determine other language items students may need to know in order to carry out the activities.
8. Predict which language items students already know. Predict language items students have in their linguistic storehouses that you can use to introduce the concept specific language.
9. Plan an initial assessment activity that identifies which experiences, concepts and language items students already have for the topic.
10. Plan specific lessons to teach key concepts, subconcepts and associated language.

11. Plan culminating activities which provide students with opportunities to consolidate and use knowledge and language learned throughout the unit. These can be sharing sessions with other classes, parents or community members.
12. Plan activities that evaluate student progress; these should determine what they have learned from the unit in terms of concepts, attitudes, skills and language items.

How to Plan Language Development Lessons

Plan specific lessons to teach key concepts and subconcepts using the Language Development Framework.

Concept Development/Language Exposure Activities

Choose concept development activities that help students relate previous knowledge to the topic of study or fill gaps in that knowledge. These activities should involve direct, first-hand, active learning with concrete materials as much as possible. Where necessary, use indirect experiences (films, filmstrips, pictures, etc.) to allow students to move beyond the confines of the immediate classroom to explore concepts associated with other times and places. Plan several activities which introduce and reinforce the concepts in different ways.

While students learn about the concepts, activities should also introduce them to new language items which express the concepts. The activities should help students to associate new vocabulary with relevant objects or actions and to express the relationships among concepts with appropriate sentence patterns.

Language Practice Activities

In this part of the lesson, students use the new language items introduced in concept development activities in a variety of activities that develop listening, speaking, reading, and writing skills. Through intensive practice of items in a variety of ways, students come to "own" the new language, i.e., commit it to memory so that it becomes part of their permanent storehouse of language items. These activities should also strengthen the bond developed between the new concepts and the language items that represent those concepts. While the whole class may participate in most of the concept development activities, it is important to group students for language practice according to their language needs and skills. During these group activities you can assess how well students are mastering new language items.

Communicative Application

The final phase of the lesson sequence includes opportunities for students to use their acquired knowledge and language to communicate in a variety of situations. Students will demonstrate that they have understood the new concepts and can use the new language items by interacting with others. Activities should involve students in listening, speaking, reading, and writing to solve problems, bridge an information gap, share information, complete a task, develop an arts and crafts project, or share a finished product. These activities will provide students with an opportunity to explore related concepts and language, eventually coming full circle to new concept development and language exposure. While students complete these activities, the teacher can meet individually with students to assess the extent to which they have mastered the concepts and language from the lesson.

Intellectual Skills

An essential component of the framework is the development of intellectual skills. Learning new concepts and language involves thinking skills. On the other hand, the ability to think abstractly involves conceptual and linguistic knowledge.

In the Concept Development/Language Exposure phase, plan assessment activities that establish whether or not students have basic building block concepts and language to engage in more abstract thinking about a topic. Subsequent activities can fill gaps and/or extend the students' background. The structured nature of Language Practice activities demands less high level intellectual activity. Answers are more convergent in nature; the information readily provided or available. However, Communicative Application activities should involve more divergent thinking. Students can draw on what they already have learned during the previous two phases to bridge an information gap or solve a problem.

INITIAL ASSESSMENT ACTIVITIES

In order to help teachers assess where to start with the program, the following activities should be done before teaching each lesson. They will assist in determining:

- what students already know about the concepts and therefore where instruction should begin;
- what interests students have in the topic and therefore the direction the unit should take; and,
- what language students already have to discuss the topic and what language they require.

One of the basic principles of all good teaching is that teachers should start with the student when planning and carrying out a unit. Before beginning the unit, it is important to assess students' knowledge of and interest in the topic. Teachers should determine what students already know about the topic/concepts they intend to cover. What ideas do students already have? What misconceptions do they have which must be addressed? What gaps are there in their knowledge which require teaching certain lessons? What concepts do students know well enough so that teachers can skip the lessons which teach those concepts? What questions do they have? What relationships do they see between different aspects of the topic?

It is also important to identify what experiences students have which relate to the topic/concepts. By identifying these and building upon them in the lessons, teachers can help students relate the new ideas and information to their own lives. It is important for them to do this because it assists students to internalize new concepts.

It helps students make the concepts part of the conceptual framework which they use to understand and describe their world. If they do not have concrete, firsthand experiences to relate to each concept they will have to be provided with them wherever possible.

Another use for these activities is to help teachers identify particular interests of individuals, groups of students, or the whole class. They can then include activities in the lessons which involve student interests, thereby increasing motivation for them to participate and learn. Teachers may decide to add, substitute or omit some lessons because of students' interests.

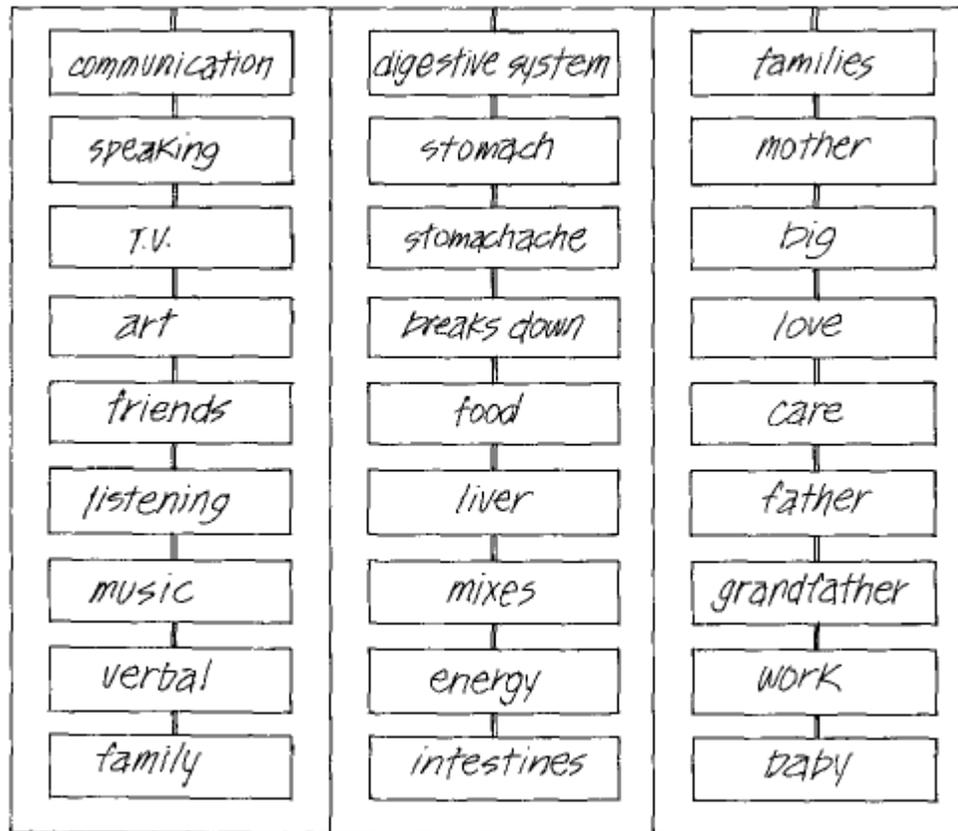
These activities will also help determine what language students have to discuss the topic, i.e., what vocabulary items students already know and what associations they have for each word. It is important to ascertain the meanings students attach to words; sometimes their interpretations may be surprising! If they do not clearly understand terms or if they use them incorrectly, it will prevent them from understanding and incorporating the concept into their mental framework.

Each unit in the School Health Program has a number of different themes. Teachers should select assessment activities suitable for that particular theme. The examples are for themes from each unit: Mental and Emotional Well-Being, Growth and Development and Family Life.

1. Brainstorming

Mental and Emotional Well-Being	Growth and Development	Family Life
Communication	The Digestive System	Families
Ask students: "What do you know about communication?"	Ask students: "What do you know about the digestive system?"	Ask students: "What do you know about families?"

Answers can be recorded on cards and hung on masking tape strips (sticky surface up) which can then be fastened to the wall or the chalkboard.



If students have difficulty with this activity you may wish to direct their thinking or prompt ideas by asking more specific questions:

Why do we communicate?	What body parts are part of the digestive system?	What kinds of families are there?
How do we communicate?	What do they do?	How are families alike?
With whom do we communicate?	Where are they found?	How are families different?
	How do we take care of them?	Who are in families?
		What do families do?

Encourage students to predict answers to these questions even if they are not sure of the exact responses. It might be interesting to record their predictions separately and compare them to the actual answers as they study the unit. Students may think of their own questions as well. Teachers can keep a list of all the questions the class cannot answer to focus the lessons they teach during the unit.

After recording their responses on the cards, *teachers should* have students chant the words with them and talk about the words:

- Which word is the most interesting?
- the least interesting?
- the most puzzling?
- What other word can you think of that means almost the same thing?
- What comes to your mind when I say _____?
- What do you think this word means? Etc.

2. Categorizing

Teachers can distribute the word cards from the brainstorming sessions ensuring that they tell students the words they give them. Younger students should receive only one card at a time so they will not get confused. One student places his/her word card at the top of one of the masking tape strips and tells the word to the class. Teachers ask if there is anyone else who has a word that belongs with the first word and have another student place his/her word card under the first, read the word and explain why it belongs with the first word. The class can give a title to these two cards which now form a category. Teachers can then ask if anyone can start a new category. When students have placed all of the brainstormed words in categories, the class can discuss the titles and change them if necessary. Students can then chant the words in each category. Teachers can transfer the words to a flowchart to provide a permanent reference.

As teachers progress through the unit they may wish to add new information to the chart. They may also identify new questions and hopefully, the answers. At the end of the unit they can review the chart with students and keep it as a reference for future use.

Communication	The Digestive System	Families
Different ways of communicating	Body parts	Who is in them?
verbal non-verbal speaking listening music art	stomach intestines liver mouth esophagus	mother father baby grandmother
With whom	What they do	What do they do?
friends family teacher people at work	squeeze mix break down move	play work love care
Kinds of communication	Problems	What size are they?
aggressive assertive passive	stomach ache nausea diarrhea	big small

SAMPLE QUESTIONS:

Teachers can use these questions during the initial assessment activity to determine what experiences, interests, language, and knowledge students have about the topic. They can also use the questions during discussions in the lessons for evaluation.

Questions for Assessing Experience:

1. Have you been in a situation where _____?
2. What do you know about _____?
3. Have you ever seen _____?
4. Have you ever experienced _____?
5. Have you ever been _____?
6. Have you ever done _____?
7. Has something like this ever happened to you _____?
8. When was the last time you _____?

Questions for Assessing Language:

1. What do you think these words mean _____?
2. Can you give me another word that means _____?
3. What comes to your mind when I say _____?
4. Have you heard of the word(s) _____?
5. What words can you think of when I say the word _____?

Questions for Assessing Thinking Processes:

Cognitive Memory (details, information)

1. Who _____?
2. What are the facts _____?
3. What are the most important details _____?
4. What is the _____?
5. What do you mean by _____?
6. What is your interpretation of what happened? (What do you think happened?)
7. When?
8. Where?

ConvergenUGeneralization (getting the main idea)

1. What are the chief points?
2. Given that information, what is the main idea?
3. What is the single most important idea?
4. State the idea in one sentence.
5. Explain _____

Structuring/Relating (arranging relationships)

1. Categories:
Which group does that belong to?
How would you classify _____?
What type would you _____?
2. Comparisons: How are they alike? same? similar? identical?
3. Contrasts: How is it different? in opposition to? unlike?
4. Cause and Effect: What will happen if? Why?
What will happen as a result of?

Divergent/Using/Applying

1. What might happen if _____?
2. If you use that idea, what would it mean for _____?
3. Apply that idea to our (this) situation.
4. What would result if _____?
5. If you were given these facts, what would you do to _____?
6. How would it be different if we used this idea?
7. What could the advantages/benefits be if we applied this idea/process?

EvaluationIdudgingNaluing

1. How do you feel about this idea?
2. What is your opinion?
3. What is the best _____?
4. Are you satisfied with that answer/plan?
5. Can this statement be made? Why?
6. Out of all the information, what can be used to prove your point?
7. How would you judge?
8. What is your opinion or conclusion about the product/plan/idea?
9. Why did you think it worked/didn't work?
10. What is fact? What is opinion?

EVALUATION

Educators often use the word "evaluation" to mean "testing". Evaluation, however, is an integral part of all educational programs or processes. It includes any form of obtaining information about what students are learning and how effective the program is in achieving its goals.

We learn a great deal from effective evaluation, including:

- what concepts, skills and attitudes a student has learned;
- if a student has achieved the objectives;
- in which areas of the program a student is proficient,
- a student's grade level;
- if the program needs to be reviewed, revised or modified;
- if teaching methods are effective;
- if a student needs additional assistance;
- if a student considers the lessons relevant i.e., do the lessons relate to the world of the student outside the classroom?

EFFECTIVE EVALUATION

For effective evaluation, it is important:

- to link the evaluation to the stated objectives of the program;
- to include as many forms of evaluation as possible;
- to assess students in the cognitive, affective and psycho-motor domains; (in the Health Program, the affective domain is particularly important);
- to ensure that the forms of evaluation are appropriate to the student's developmental level and language proficiency and that they are culturally suitable;
- to ensure that the method of evaluation supports and reinforces goals of the program i.e., if one of the goals of the program is to enhance self-esteem, then the evaluation must include successful experiences which will contribute to that;
- to encourage students to take some responsibility for evaluation.

DIFFERENT APPROACHES TO EVALUATION

It is not possible in this document to include all the possible approaches to evaluation or the detailed information necessary for teachers to use each approach effectively, A more comprehensive effort will be made to address evaluation for this program at a later date.

The approaches included will give teachers some general guidelines on evaluation.

1. *Pre-tests and Post-tests*

In order for teachers to assess what students already know about a topic, and to determine the starting point for the lessons, it may be necessary to administer a pre-test. This pre-test should include items which assess skills, attitudes and behaviours, as well as specific knowledge.

By using the same test or a parallel test after teaching the lessons, teachers will be able to assess what knowledge students have acquired and any possible changes in individual attitudes and behaviours, e.g.,

- | | True | False |
|--|------|-------|
| i) Knowledge
Tobacco contains a drug. | () | () |
| ii) Skills
John's friends want him to skip school. Use the decision-making process to show how he decides what he will do. | | |
| iii) Attitude/Beliefs
Daily exercise is important to me. | | |
| Agree | () | |
| Not Sure | () | |
| Disagree | | () |
| iv) Behaviours
I would eat candy or chips for a snack. | | |
| Most of the time | () | |
| Some of the time | () | |
| Never | | () |

2. *Projects*

Projects are assignments given to individual students or to a small group of students. Usually they involve research on a specific topic within the program.

Projects allow students some freedom to express individuality and to demonstrate particular strengths.

A variety of activities can be incorporated into a project, e.g.,

- written report
- diagrams
- audio-visual material
- photographs
- models
- drama
- drawings
- graphs

It is important to structure the project carefully, and define the requirements clearly to ensure that it is manageable. Requirements should indicate:

- the objectives of the project; completion date;
- how the teacher will evaluate it;
- where to find information.

For example, a project on the "Health Care Worker in the Community" may include:

- a description of what the health care worker does;
- a photograph of the health care worker;
- a recorded interview with the health care worker and/or with community people who have regular contact with the health care worker;
- a video of the health care worker at work;
- a graph to show how much time the health care worker allocates to different tasks;
- telephone numbers;
- a map to show how to go to the health care worker's place of work; and,
- drawings of any special tools/instruments which the health care worker uses.

3. *Simulations*

The Health Education program provides for the acquisition of specific skills and knowledge, and gives the students opportunities to practise appropriate attitudes and behaviours. As a result, simulations are an appropriate way to determine student progress. Discussions of alternative solutions after roleplaying also provides an indication of student attitudes.

If students have learned different ways to resist peer pressure, they can demonstrate how to resist peer pressure in a given situation, e.g.,

Bill wants Mary to go to a party with him on Saturday. Mary's mother says she is too young to go to parties. Bill has told Mary he won't be her friend if she doesn't come.

Demonstrate how Mary resists the pressure from Bill.

4. *Observation*

We expect students' behaviour to reflect what they have learned so direct observation of students is an important method of evaluation. Students may not demonstrate some of the practices in the classroom, however, and so this observation must also occur in the community. Where and when appropriate, observation should include aspects of mental, physical, social activity, as well as intellectual practices of the student, e.g.,

If students have been discussing practices which promote safety in the playground, the teacher can observe students at play at recess to determine if they demonstrate use of safe practices outside the classroom.

5. Checklist

These are a simple method of recording observations usually made in the classroom. Checklists will not necessarily give a teacher information on a student's behaviour. Teachers can develop checklists for evaluating simulations, observations, discussions, etc.

E.g.,

Checklist for Group Discussions

	All of the time	Some of the time	Never
- listens without interrupting	()	()	()
- shows respect for other people's opinions	()	()	()
- participates readily	()	()	()
- responds positively when questioned	()	()	()
- questions others	()	()	()
- etc.			

6. Anecdotal Record

Anecdotal records are brief comments on the teacher's observations. The information recorded is factual and non-judgemental - the evaluation of what was seen is noted after the observation is complete. The comments should be specific and related to the objectives of the program. Record both positive and negative examples, e.g.,

At recess, Sarah helped Margaret to come down from the climbing bars. She pushed James when he tried to help too.

7. Self-Evaluation

Students should also participate in the evaluation process by identifying what they learned from the lessons, what they are interested in, what they think is important for them to know more about, etc. One way of doing this is through a rating scale, e.g., I learned:

a lot	some things	nothing
-------	-------------	---------

I was most interested in: _____

I would like to learn more about _____

8. Student Notebooks

By asking students to keep a health notebook, teachers can assess how well students understand concepts. It is important, however, to treat the notebooks with confidentiality. Students should be aware before they write in the notebook that the teacher will look at them. In particularly sensitive areas, such as Family Life, students may be reluctant to share notebooks with teachers, if not advised in advance.

NORTHWEST TERRITORIES

School Health Program

GRADE 6



Northwest
Territories Education, Culture and Employment
Health and Social Services

August, 1995

MENTAL AND EMOTIONAL WELL BEING

GRADE 6

LESSON NO.	THEME	CONCEPT	OBJECTIVES
			Students will be able to:
1	RELATIONSHIPS	Friends share a responsibility for maintaining the relationship	i) describe mutual responsibilities involved in maintaining a friendship
2	RELATIONSHIPS	People share a responsibility for helping each other	i) identify roles of volunteers in the community ii) identify the importance of volunteers iii) investigate ways they can become involved as volunteers
3	RELATIONSHIPS	Discrimination may affect relationships	i) describe discrimination ii) describe how discrimination affects people iii) describe how people learn to discriminate
4	DECISION-MAKING	Responsible decisions come from a developed value system	i) identify what is important to them
5	DECISION-MAKING	Effective decision-making uses a systematic process	i) describe the steps in the decision-making process ii) demonstrate the steps in the decision-making process
6	DECISION-MAKING	Effective decision-making can be both an individual and a group process	i) describe how group decisions are made ii) identify situations in which groups might be involved in decision-making iii) demonstrate making a group decision
7	COPING	Time management helps control stress	i) identify situations which require time management ii) demonstrate time management
8	LIFE STYLE	Self-knowledge is the first step to self improvement	i) assess personal characteristics related to mental and emotional well-being ii) design a plan for self improvement iii) evaluate the plan for self improvement

GROWTH AND DEVELOPMENT

GRADE 6

LESSON NO.	THEME	CONCEPT	OBJECTIVES
			Students will be able to:
1	BODY SYSTEMS	The excretory system removes harmful materials from the body	i) name and locate the main parts of the excretory system
2	BODY SYSTEMS	The excretory system removes harmful materials from the body	i) describe the functions of the excretory system ii) state the importance of the excretory system
3	BODY SYSTEMS	The excretory system removes harmful materials from the body	i) name problem conditions related to the excretory system ii) describe ways to care for the excretory system
4	BODY SYSTEMS	The nervous system connects all body systems	i) name and locate the main parts of the nervous system
5	BODY SYSTEMS	The nervous system connects all body systems	i) identify the main parts of the brain ii) describe the functions of the nervous system iii) state the importance of the nervous system
6	BODY SYSTEMS	The nervous system connects all body systems	i) name common problem conditions related to the nervous system describe ways to care for the nervous system
7	DISEASE PREVENTION	There are many ways the body protects itself from disease	i) identify ways in which diseases are transmitted ii) name the routes of germ entry into the body iii) identify the body's three lines of defence that protect against disease
8	DISEASE PREVENTION	The serious communicable disease AIDS can be prevented	i) identify the cause, nature and seriousness of AIDS ii) describe how the disease AIDS is transmitted iii) identify ways to prevent the spread of AIDS

FAMILY LIFE

GRADE 6

LESSON NO.	THEME	CONCEPT	OBJECTIVES
			Students will be able to:
1	FAMILIES	As children grow, their responsibilities and relationships within the family change	i) identify their responsibilities within the family ii) describe how responsibilities change with age iii) describe how relationships with other family members change with age
2	FAMILIES	Elders have an important role in families	i) identify the importance of elders in the family
3	HUMAN DEVELOPMENT AND REPRODUCTION	The endocrine system regulates and controls a variety of body activities	i) name and locate the main parts of the endocrine system
4	HUMAN DEVELOPMENT AND REPRODUCTION	The endocrine system regulates and controls a variety of body activities	i) identify the functions of the major endocrine glands
5	HUMAN DEVELOPMENT AND REPRODUCTION	The endocrine system regulates and controls a variety of body activities	i) describe the changes in males and females at puberty as they relate to the endocrine system
6	HUMAN DEVELOPMENT AND REPRODUCTION	Menstruation is a natural occurrence in females	i) describe the process of menstruation as it relates to reproduction ii) identify some menstrual discomforts and ways to relieve them
7	HUMAN DEVELOPMENT AND REPRODUCTION	Human life is formed by the union of an egg and sperm	i) describe the processes involved in the development of new life ii) describe the stages of fetal development
8	ABUSE PREVENTION	No one has the right to sexually abuse a child	i) describe sexual abuse ii) identify responsible behaviours which help prevent abuse
9	ABUSE PREVENTION	No one has the right to sexually abuse a child	i) recognize supportive people ii) identify family and community members who will provide support

NUTRITION

GRADE 6

LESSON NO.	THEME	CONCEPT	OBJECTIVES
			Students will be able to:
1	FOOD CLASSIFICATION	Foods are classified into four food groups on the basis of nutrient content	i) identify the leader nutrients in each of the four food groups and their functions ii) list foods that are rich in the leader nutrients in each food group
2	FOOD SELECTION	Eating the recommended daily servings from each food group will ensure a balanced diet	i) describe what is meant by a balanced food intake in one day ii) identify the recommended daily number of servings from the four food groups
3	FOOD SELECTION	Eating the recommended daily servings from each food group will ensure a balanced diet	i) identify and give examples of serving sizes of food within each of the food groups ii) explain the importance of the recommended daily servings for the four food groups
4	FOOD SELECTION	Eating the recommended daily servings from each food group will ensure a balanced diet	i) plan a balanced food intake for one day ii) analyze daily food intake for the recommended number of servings from the food groups
5	FOOD SELECTION	Labels on food products provide information to customers	i) identify information about foods from their labels ii) compare the nutrition information of similar foods from food labels iii) explain why it is important to read the information on food labels
6	LIFESTYLE	Positive nutrition lifestyle practices promote health	i) assess if their food intake for one day meets the recommended daily servings ii) design a personal nutrition program to promote health iii) evaluate the effectiveness of the program

DENTAL HEALTH

GRADE 6

LESSON NO.	THEME	CONCEPT	OBJECTIVES
			Students will be able to:
1	STRUCTURE AND FUNCTION	The structure of a tooth is related to its function	i) identify the structure and functions of a tooth ii) identify the four tooth groups and their functions
2	ORAL HYGIENE	Regular practice of effective oral hygiene skills promotes dental health	i) identify behaviours that promote healthy teeth for a lifetime ii) demonstrate effective oral hygiene skills that promote dental health
3	DENTAL DISEASE	Dental health problems among children and youth are treatable and preventable	i) name some common dental health problems of children and youth ii) define tooth decay, tooth decay process, gum disease and orthodontic problems iii) list some signals of dental health problems
4	DENTAL DISEASE	Dental health problems among children and youth are treatable and preventable	i) list some treatments for dental health problems of children and youth ii) list ways to prevent dental health problems
5	LIFESTYLE	The prevention of dental health problems is a personal responsibility	i) explain the importance of dental health to total well-being ii) assess personal dental health habits iii) design and follow a personal dental health program to promote health iv) evaluate the effectiveness of the program

SAFETY AND FIRST AID

GRADE 6

LESSON NO.	THEME	CONCEPT	OBJECTIVES
			Students will be able to:
1.	BABYSITTING	Babysitting is a serious responsibility that requires preparation	i) identify the responsibilities of a babysitter ii) identify some child care routines and play activities for different ages
2.	BABYSITTING	Babysitting is a serious responsibility that requires preparation	i) give examples of common childhood injuries ii) identify safety rules to prevent common childhood injuries iii) outline how to handle an emergency fire in the home while babysitting
3.	FIRST AID	Rescue breathing can save lives	i) list common causes of breathing difficulties ii) demonstrate how to assess breathing iii) demonstrate how to give assistance in a breathing emergency
4.	FIRST AID	Choking is a breathing emergency that can be prevented	i) list common causes of choking ii) outline safety rules to follow that prevent choking iii) demonstrate first aid for choking
5.	FIRST AID	Poisoning requires immediate first aid to minimize the injuries	i) describe common causes of poisoning ii) list the four questions to ask to determine the history of a poisoning emergency iii) demonstrate first aid for poisoning
6.	FIRST AID	Unconsciousness requires immediate first aid to restore the blood supply to the brain	i) list common causes of unconsciousness ii) describe the signs that may result in fainting iii) demonstrate first aid for fainting iv) demonstrate first aid for unconsciousness
7.	LIFESTYLE	Positive safety and first aid lifestyle practices save lives and minimize the effects of injuries	i) assess first aid for life-threatening situations ii) explain the importance of first aid iii) identify organizations and professionals who train and deliver safety and first aid programs iv) design a personal safety and first aid program v) evaluate the effectiveness of the program

ALCOHOL AND OTHER DRUGS

GRADE 6

LESSON NO.	THEME	CONCEPT	OBJECTIVES
1	DRUGS	EVERYONE IS RESPONSIBLE FOR THE DECISIONS HE/SHE MAKES REGARDING DRUG/ALCOHOL/TOBACCO/SOLVENT USE	i) explain that each person is responsible for his/her own decisions ii) examine their values in relation to drug, alcohol, tobacco and solvent usage
2	DRUGS	THERE ARE MANY MYTHS SURROUNDING DRUGS AND ALCOHOL	i) identify some of the myths related to drugs and alcohol use
3	ALCOHOL	THERE ARE DIFFERENT FACTORS WHICH DETERMINE THE EFFECT ALCOHOL HAS ON A PERSON	i) identify the different factors which determine the effect alcohol has on a person
4	ALCOHOL	YOUNG PEOPLE ARE AFFECTED BY ALCOHOL IN DIFFERENT WAYS FROM ADULTS	i) identify the effects of alcohol on young people
5	DRUGS	THERE ARE MANY FACTORS WHICH INFLUENCE OUR DECISIONS ABOUT THE USE OF DRUGS (INCLUDING ALCOHOL, TOBACCO AND SOLVENTS)	i) identify factors which influence our decisions about the use of drugs
6	DRUGS	PEER PRESSURE IS ONE FACTOR WHICH CAN INFLUENCE OUR DECISIONS ABOUT THE USE OF DRUGS (INCLUDING ALCOHOL, TOBACCO AND SOLVENTS)	i) explain how peer pressure influences decisions ii) apply the decision-making process to peer pressure situations
7	DRUGS	ADVERTISING IS ONE FACTOR WHICH CAN INFLUENCE OUR DECISIONS ABOUT THE USE OF DRUGS (INCLUDING ALCOHOL AND TOBACCO)	i) identify the main reasons for advertising ii) look critically at advertisements
8	SOLVENTS	THERE ARE FOUR MAIN FACTORS WHICH CAN INFLUENCE OUR DECISIONS ABOUT THE USE OF SOLVENTS	i) identify factors which influence decisions on the use of solvents

ALCOHOL AND OTHER DRUGS

GRADE 6

LESSON NO.	THEME	CONCEPT	OBJECTIVES
9	WELL-BEING	THERE ARE MANY WAYS TO FEEL GOOD WITHOUT USING,DRUGS	i) identify individual activities which make them feel good ii) identify leisure time activities in the community
10	WELL-BEING	CERTAIN BEHAVIOURS IMPROVE OUR WELL-BEING	i) identify ways in which they can change their behaviour to improve their own well-being

GRADE 6

MENTAL AND EMOTIONAL WELL-BEING

MENTAL AND EMOTIONAL WELL BEING

GRADE: 6

LESSON: 1

THEME: RELATIONSHIPS

CONCEPT: FRIENDS SHARE A RESPONSIBILITY FOR MAINTAINING THE RELATIONSHIP

- PREPARATION:
1. A popular song about friendship on tape, record
 2. A number of classified ads
 3. Prepare a class set of "I Have Friends" poem (Activity Sheet ME52)
 4. Strips of paper for the ring of friendship
-

VOCABULARY: friendship, qualities, responsibility, shared

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) describe mutual responsibilities involved in maintaining a friendship	Students: 1. Listen to a current song about friendship. Discuss. 2. Identify qualities which are important for a friend to have.	Background Information Page ME54 If possible, find a record such as "That's What Friends Are For" by Stevie Wonder and others. Have students listen to the words. Discuss. Ask students what qualities are important for friends to have. Have students respond using the sentence pattern: A friend should _____ (be kind) - care - share - be loyal - respect his/her friends - communicate effectively - be trustworthy - be understanding

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>3. Learn the poem "I have Friends".</p> <p>4. From the qualities which have been listed in Student Activity 2, rank the qualities in order of importance.</p> <p>5. Make a chain of friendship.</p> <p>6. Discuss who must have these qualities.</p>	<p>Refer to Activity Sheet ME52.</p> <p>Have students fill in the blanks.</p> <p>If then qualities have been listed, ask students to rank them from 1 to 10 according to what qualities they think are important for a friend to have. Number one is the most important number, number ten is the least important. Emphasize that what is important to one person may not be to someone else. It is worthwhile to find out what friends consider important.</p> <p>On strips of paper have each student write one quality which a friend should have. Make the strips into a paper chain. Make a bulletin board display.</p> <div data-bbox="1066 816 1822 1052" data-label="Diagram"> <p>The diagram illustrates a paper chain activity. Two hands are shown holding a chain of paper links. Above the chain, the word "Qualities" is written. Below the left hand, the text "own name" is written, and below the right hand, the text "name of friend" is written. This represents how each person in a friendship contributes their own qualities to the relationship.</p> </div> <p>Emphasize that both people must bring these qualities to a friendship. The responsibility is shared.</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>7. Identify the consequences of friends not sharing the responsibility.</p> <p>8. Write and answer newspaper advertisements looking for a friend.</p>	<p>This can be demonstrated by breaking the chair. Ask the students what would happen if for example, their friend was not kind, etc. Answers might include:</p> <ul style="list-style-type: none"> - the end of the friendship - they would find another friend <p>Have a number of classified ads. Have students react and discuss them.</p> <p>Have each student write a newspaper advertisement outlining qualities they are looking for in a friend.</p> <p>Have each student choose an advertisement to respond to describing qualities they have to bring to a friendship and how they would maintain the friendship.</p>

I HAVE FRIENDS

I have friends!

_____ friends,
_____ friends,
_____ friends,
_____ friends,

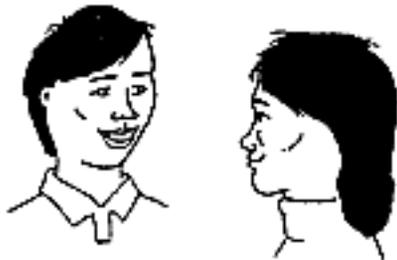
I have friends!

I have friends!

Friends who _____ ;
Friends who _____ ;
Friends who _____ ;
Friends who _____ ;

I have friends!

(Source Unknown)



MENTAL AND EMOTIONAL WELL BEING

GRADE: 6

LESSON: 2

THEME: RELATIONSHIPS

CONCEPT: PEOPLE SHARE A RESPONSIBILITY FOR HELPING EACH OTHER

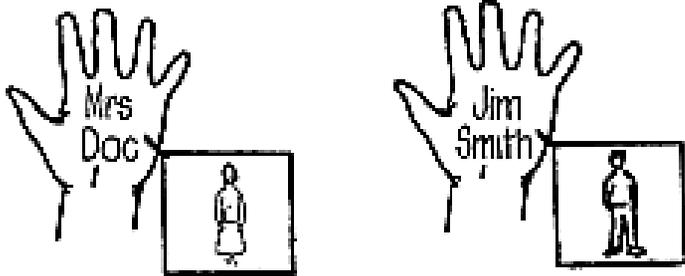
PREPARATION:

1. Dictionaries
2. Strips of blank paper large enough for one sentence and a name
3. Tape recorders, cameras, etc ,for interviews and class mural

VOCABULARY: volunteer, organization

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify roles of volunteers in the community	Students: 1. Volunteer to assist with the activity. 2. Define the term volunteer and identify what a volunteer does.	Background Information Page ME54 Ask for a volunteer to assist with something, e.g., a task, singing a song, etc. Use the term volunteer. Use a dictionary and discussion to define the term Ask students what they think a volunteer is List student responses on the board using the sentence pattern A volunteer _____ (offers to help others) - is interested in helping others - works for no pay - gives up spare time - is valuable to society

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES														
ii) identify the importance of volunteers	3. Identify volunteers.	Use different examples: <ul style="list-style-type: none"> - I'm a teacher. Am I a volunteer? - I'm a Girl Guide leader. Am I a volunteer 														
	4. Identify volunteer organizations in the community.	Add student responses to the first column of an experience chart as illustrated. <table border="1" data-bbox="940 553 2016 1000"> <thead> <tr> <th data-bbox="940 553 1297 626">Volunteers</th> <th data-bbox="1297 553 1661 626">Whom do they help?</th> <th data-bbox="1661 553 2016 626">Why</th> </tr> </thead> <tbody> <tr> <td data-bbox="940 626 1297 724">- Girl Guides</td> <td data-bbox="1297 626 1661 724">- girls (11-14)</td> <td data-bbox="1661 626 2016 724">- interested in working with girls of that age</td> </tr> <tr> <td data-bbox="940 724 1297 862">- St. John Ambulance</td> <td data-bbox="1297 724 1661 862">- different ages and groups, e.g., offer babysitting courses</td> <td data-bbox="1661 724 2016 862">- important for survival and life skills</td> </tr> <tr> <td data-bbox="940 862 1297 1000">- Cadets</td> <td data-bbox="1297 862 1661 1000">- boys/girls</td> <td data-bbox="1661 862 2016 1000">- life skills - interested in adolescents</td> </tr> </tbody> </table>			Volunteers	Whom do they help?	Why	- Girl Guides	- girls (11-14)	- interested in working with girls of that age	- St. John Ambulance	- different ages and groups, e.g., offer babysitting courses	- important for survival and life skills	- Cadets	- boys/girls	- life skills - interested in adolescents
	Volunteers	Whom do they help?	Why													
	- Girl Guides	- girls (11-14)	- interested in working with girls of that age													
	- St. John Ambulance	- different ages and groups, e.g., offer babysitting courses	- important for survival and life skills													
	- Cadets	- boys/girls	- life skills - interested in adolescents													
5. Identify people these organizations help and why.	Add student responses to the experience chart started in Student Activity 4															
6. Identify people they know in the community who are volunteers.	Make a list of the people who do volunteer activities. (Students may have to do some interviews to find out if people really are volunteers - see Student Activity 10.)															
7. Discuss the importance of volunteers.	Have students discuss what would happen if people didn't volunteer. Consequences might include <ul style="list-style-type: none"> - no volunteer organizations such as Cadets - would have to pay people so would cost more 															

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>iii) investigate ways they can become involved as volunteers</p>	<p>8. Identify which tasks they would be prepared to volunteer for in the class/school.</p> <p>9. Identify things which they could volunteer to help with in the community.</p> <p>10. Interview community volunteers.</p> <p>11. Make a class mural Give a Hand for Volunteers.</p>	<p>Present a list of tasks for which students could be responsible. Have a number of strips of paper. Have each student fill out a strip volunteering for a task(s) using the sentence pattern:</p> <p style="padding-left: 40px;">I volunteer to _____.</p> <p>Organize classroom helpers on the basis of volunteers.</p> <p>Use the sentence pattern:</p> <p style="padding-left: 40px;">I could <u>(help at Brownies)</u>.</p> <p style="padding-left: 40px;">- read a story to Kindergarten</p> <p>Have students identify a number of volunteers in the community. Have students in groups interview community volunteers. Take photographs. Identify which, if any, organizations they work for, what they do, how many hours of work, etc. They can also find out if any groups need help from young people.</p> <p>Using the information and photographs from the interviews, make a class display of community volunteers.</p> <div style="text-align: center; margin-top: 20px;">  </div>

MENTAL AND EMOTIONAL WELL BEING

GRADE: 6

LESSON: 3

THEME: RELATIONSHIPS

CONCEPT: DISCRIMINATION MAY AFFECT RELATIONSHIPS

PREPARATION: 1. Overhead transparency or class set of Is This Fair (Activity Sheet ME53)
2. Resource books for Student Activity 6

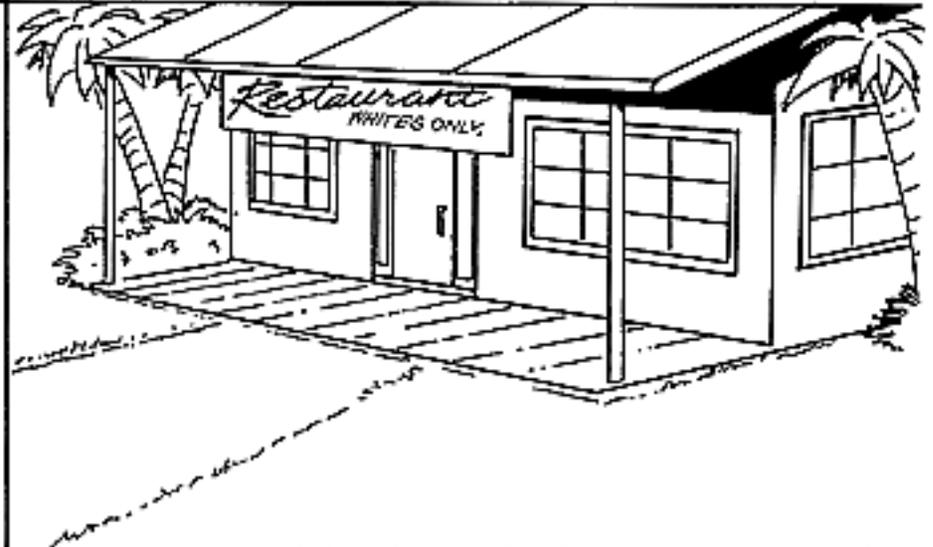
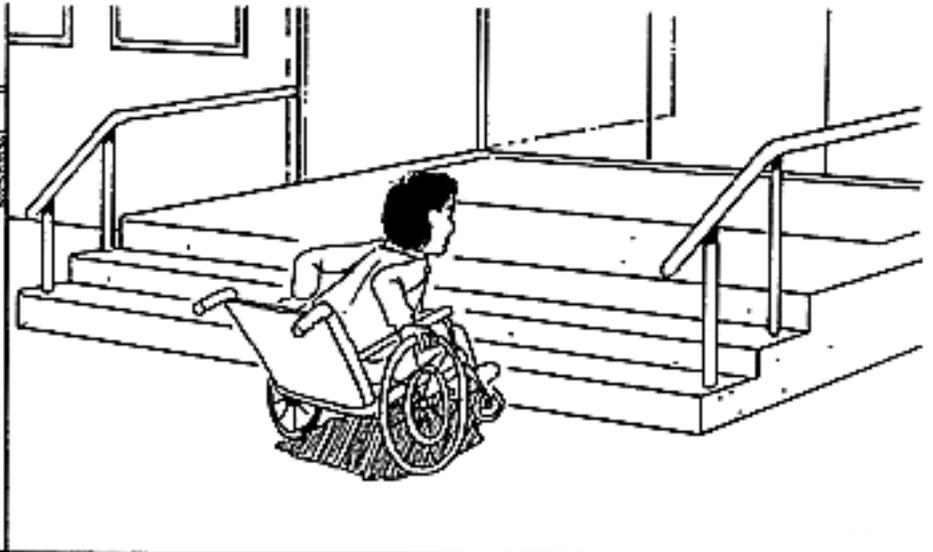
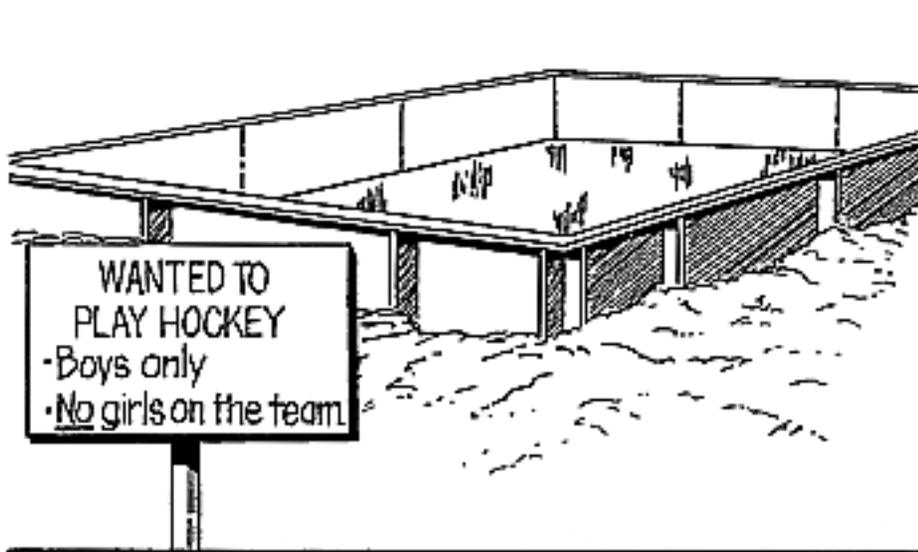
VOCABULARY: discrimination, race, religion

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) describe discrimination	Students: 1. Describe what they see in the drawing Is This Fair? 2. Define the term discrimination.	Background Information Page ME55 This may be a very sensitive lesson. Refer to Activity Sheet ME53. Using an overhead transparency or student copies discuss the various examples of discrimination. Using a dictionary and general discussion define the term. Ask students what they think discrimination is. Have students respond using the sentence pattern: Discrimination is making a difference between people because of _____.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES						
ii) describe how discrimination affects people	3. Brainstorm examples of discrimination. 4. Identify how they would feel if they were discriminated against.	<div data-bbox="1234 300 1927 446" style="display: flex; justify-content: space-around;"> <ul style="list-style-type: none"> - colour - race - sex - age <ul style="list-style-type: none"> - religion - job - physical appearance - handicaps </div> <p data-bbox="955 483 1890 548">Record student responses using the first column of an experience chart as illustrated:</p> <table border="1" data-bbox="945 589 1980 703"> <thead> <tr> <th data-bbox="955 597 1297 662">Reason for Discrimination</th> <th data-bbox="1297 597 1659 662">Example</th> <th data-bbox="1659 597 1969 662">Feelings</th> </tr> </thead> <tbody> <tr> <td data-bbox="955 662 1297 703">- colour</td> <td data-bbox="1297 662 1659 703">- blacks in South Africa</td> <td data-bbox="1659 662 1969 703"></td> </tr> </tbody> </table> <p data-bbox="955 743 1984 812">Record student responses in the second column of the experience chart started in Student Activity 2.</p> <p data-bbox="955 852 1984 954">Ask students to put themselves in the place of one of the people in the examples on the experience chart. Ask them how they think they would feel. Feelings should include:</p> <ul style="list-style-type: none"> - sad - angry - inferior, etc <p data-bbox="955 1144 1921 1214">Add student responses to the third column of the experience chart started in Student Activity 2.</p>	Reason for Discrimination	Example	Feelings	- colour	- blacks in South Africa	
		Reason for Discrimination	Example	Feelings				
- colour	- blacks in South Africa							

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>iii) describe how people learn to discriminate</p>	<p>5. Brainstorm where people learn to discriminate.</p> <p>6. Select one situation to research and write about in a newspaper article.</p>	<p>Let students identify where they think people learn to discriminate. These might include:</p> <ul style="list-style-type: none"> - home - friends - television - school - people in the community - society <p>Include a number of well known examples of discrimination. Ensure that resource books are available in school. Topics might include:</p> <ul style="list-style-type: none"> - apartheid in South Africa - the Holocaust - Japanese internment (a museum kit is available from the Northern Life Museum in Fort Smith) - refugees - women - handicapped people <p>This project can be done individually or in groups. Share with the rest of the class.</p> <p>Discuss with students the idea that the effects of discrimination can be reversed by positive actions. e.g., affirmative action, public education.</p>

IS THIS FAIR?



MENTAL AND EMOTIONAL WELL BEING

GRADE: 6

LESSON: 4

THEME: DECISION-MAKING

CONCEPT: RESPONSIBLE DECISIONS COME FROM A DEVELOPED VALUE SYSTEM

PREPARATION:

1. Prepare a class set of What Is Important To You? (Activity Sheet ME54)
2. Materials for collage

VOCABULARY: important, values

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify what is important to them	Students: 1. Review decision-making and daily decisions. 2. Identify how they choose between alternatives.	Background Information Page ME55 Briefly discuss. This is a review from Grade 3, Lessons 7 and 8. Pose students the following problem. Their friend wants them to skip school. Ask students what they could do and how they would choose. Record student responses using an experience chart as illustrated.

OBJECTIVES

STUDENT ACTIVITIES

TEACHER NOTES

		TEACHER NOTES				
		Alternatives	Friend Wants	Parents Want		Decision
		1. Skip school	✓			<ul style="list-style-type: none"> - want to do well - don't want to miss anything - parents will be angry - want to please parents - want to please teacher
		2. Go to school.		✓	- to go to school	
		<p>Emphasize that in this situation it is important to the person who is making the decision to do what his/her parents want him/her to do.</p>				

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>3. Identify people who are important to them and reasons why they value these people.</p> <p>4. Identify qualities valued in other people and reasons why these qualities are valued.</p> <p>5. Identify qualities in themselves which they value and the reasons why.</p> <p>6. Compare what they value in other people and in themselves.</p>	<p>Have the students identify three people who are important to there.</p> <p>Have students respond using the sentence pattern:</p> <p>_____ is important to me because _____.</p> <p>Have the students identify three qualities which they value in people.</p> <p>Have students respond using the sentence pattern:</p> <p>Kindness is important to me because_____.</p> <p>Have students respond using the sentence pattern:</p> <p>_____ is important to me because _____.</p> <p>Have a volunteer identify the qualities s/he selected in Student Activity 4 and 5. See if other students have given identical responses.</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES									
	<p>7. Brainstorm where people learn values.</p> <p>8. Complete the worksheet What Is Important To You?</p> <p>9. Make a collage that represents their values.</p>	<p>Make a list of possible sources. Values are learned from:</p> <ul style="list-style-type: none"> - family - friends - church - community - important people in our lives - society - elders <p>Emphasize that everyone has different values. They are largely dependent on our upbringing.</p> <p>Refer to Activity Sheet ME54.</p> <p>Have students complete the Activity Sheet.</p> <p>On the board, record students' responses. Count how many students rated each item not important or very important. Discuss.</p> <table border="1" data-bbox="940 1031 2018 1161"> <thead> <tr> <th>Value</th> <th>Not Important</th> <th>Very Important</th> </tr> </thead> <tbody> <tr> <td>Liked by friends</td> <td>5</td> <td>20</td> </tr> <tr> <td>Lots of money</td> <td>10</td> <td>10</td> </tr> </tbody> </table> <p>Have students paste magazine cut-outs, words, drawings, etc, representing things that are very important to them on a silhouette.</p> 	Value	Not Important	Very Important	Liked by friends	5	20	Lots of money	10	10
Value	Not Important	Very Important									
Liked by friends	5	20									
Lots of money	10	10									

WHAT IS IMPORTANT TO YOU?

For each value listed below, rate how important it is in your life.
(1 is not very important, 5 is very important.)

	Not Important				Very Important
1. Well-liked by friends	1	2	3	4	5
2. Having a lot of money	1	2	3	4	5
3. Having a happy family	1	2	3	4	5
4. Looking nice	1	2	3	4	5
5. Learning about your culture	1	2	3	4	5
6. Being honest	1	2	3	4	5
7. Having the newest toys or latest fashions	1	2	3	4	5
8. Caring for and helping other people	1	2	3	4	5
9. Doing well in sports	1	2	3	4	5
10. Being healthy	1	2	3	4	5
11. Doing well in some subjects	1	2	3	4	5
12. Fairness	1	2	3	4	5
13. Loyalty	1	2	3	4	5
14. Trusted by others	1	2	3	4	5

MENTAL AND EMOTIONAL WELL BEING

GRADE: 6

LESSON: 5

THEME: DECISION-MAKING

CONCEPT: EFFECTIVE DECISION-MAKING USES A SYSTEMATIC PROCESS

- PREPARATION:
1. Coins and cards
 2. Overhead transparency of Skipping School (Activity Sheet ME55)
 3. Overhead transparency of Deciding (Activity Sheet ME56)
 4. Prepare a class set of Deciding (Activity Sheet ME56)
-

VOCABULARY: decide, choice, consequences, evaluate

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>Students will be able to:</p> <ol style="list-style-type: none">i) describe the steps in the decision-making process	<p>Students:</p> <ol style="list-style-type: none">1. Demonstrate different ways of making a decision.	<p>Background Information Page ME55</p> <p>In pairs, have the students make a number of simple decisions e.g., whether to do a math activity sheet or a language activity sheet using some of the following methods.</p> <ul style="list-style-type: none">- toss a coin- cut cards (highest card does one, lowest the other)- a child s rhyme (1 potato, 2 potato)- picking straws <p>Discuss whether they would use these methods to make an important decision. If not, what would they do?</p> <p>Emphasize that there are many ways of making a decision.</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>2. Review the steps in the decision making process.</p>	<p>Refer to Activity Sheet ME55</p> <p>Using the overhead transparency, review what students have been taught in previous grades</p> <p>The sentence patterns from these grades have been included</p> <p>Patterns</p> <p>1) to identify the problem The problem is _____.</p> <p>2) to identify the alternatives I could _____ or I could _____.</p> <p>3) to identify possible consequences Fortunately _____. Unfortunately _____.</p> <p>4) to identify what is important to them _____ is important to me.</p> <p>5) the decision I decided to _____.</p> <p>(keep #6 covered up)</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) demonstrate the steps in the decision-making process	<ol style="list-style-type: none"> 3. Tell if they would make the same decision again. 4. Demonstrate the steps in the decision-making process. 5. Practise using the steps of the decision-making process. 	<ol style="list-style-type: none"> 6) Brainstorm questions students can ask themselves to evaluate their decision <ul style="list-style-type: none"> Did I <u>(keep my friend)</u>. - upset my parents - stay out of trouble - have fun - feel good about myself - stay healthy and safe <p>Using the overhead transparency, uncover step #6.</p> <p>Refer to Activity Sheet ME56.</p> <p>Using the blank overhead transparency, go through each step with the students. Have students suggest a problem. It could be.</p> <ul style="list-style-type: none"> - stealing something - playing where they shouldn't - sniffing gas/glue - telling a lie - using drugs <p>Give each student Activity Sheet ME56.</p> <p>Ask them to select a problem to work through the steps of the decision-making process. Volunteers can share their Activity Sheets with the rest of the class by reading aloud.</p>

SKIPPING SCHOOL

<p>1</p>  <p>What is the problem?</p>	<p>Identify the problem Your friend wants you to skip school</p>
<p>2</p>  <p>I could _____ or I could _____</p>	<p>Identify the choices - skip school, go to school</p>
<p>3</p>  <p>Fortunately _____ Unfortunately _____</p>	<p>Identify the consequences Positive: learn something, won't feel guilty Negative: parents/teacher will be angry</p>
<p>4</p>  <p>_____ is important to me</p>	<p>Identify what is important - to please my parents</p>
<p>5</p>  <p>I decided to _____</p>	<p>Decide - go to school</p>
<p>6</p>  <p>Would I do it again? Why/Why not?</p>	<p>Evaluate - parents were not upset, stayed out of trouble good decision</p>

DECIDING

<p>1.</p>  <p>What is the problem?</p>	<p>Identify the problem</p>
<p>2.</p>  <p>I could _____ or I could _____</p>	<p>Identify the choices</p>
<p>3.</p>  <p>Fortunately _____ Unfortunately _____</p>	<p>Identify the consequences</p>
<p>4.</p>  <p>_____ is important to me</p>	<p>Identify what is important</p>
<p>5.</p>  <p>I decided to _____</p>	<p>Decide</p>
<p>6.</p>  <p>Would I do it again? Why/Why not?</p>	<p>Evaluate</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES						
	<p>2. Identify the consequences of taking/not taking each item.</p> <p>3. Decide individually what are the ten most important items to take.</p> <p>4. Decide as a group what ten items to take.</p> <p>5. Discuss whether all members of the group are satisfied with the decision, and how to deal with any dissatisfaction.</p>	<p>If we take _____</p> <p>If we don't take _____</p> <p>Remind students that the consequences affect the whole group.</p> <p>Explain that they can take only ten items. Each person has to choose which ten they would take.</p> <p>Since everyone will probably have identified different items, ask the students how they will decide what the group will take. Choose a method of deciding by conducting a vote. One way is to count how many people listed each item, e.g.</p> <table border="1" data-bbox="940 776 1738 889"> <thead> <tr> <th data-bbox="940 776 1333 813">Item</th> <th data-bbox="1333 776 1738 813">No. of people</th> </tr> </thead> <tbody> <tr> <td data-bbox="940 813 1333 850">- water</td> <td data-bbox="1333 813 1738 850">10 people</td> </tr> <tr> <td data-bbox="940 850 1333 889">- lamp</td> <td data-bbox="1333 850 1738 889">3 people</td> </tr> </tbody> </table> <p>The ten items which will be selected are those which the most people identified.</p> <p>Students may suggest other possible ways to select the ten items.</p> <p>Write the ten items on the board.</p> <p>Ask students if anyone is upset about any of the items e.g. someone may be allergic to mosquito bites but bug spray is not one of the items selected. What can that person do?</p>	Item	No. of people	- water	10 people	- lamp	3 people
Item	No. of people							
- water	10 people							
- lamp	3 people							

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>ii) identify situations in which groups might be involved in decision-making</p> <p>iii) demonstrate making a group decision</p>	<p>6. List the process which was used to make the group decision.</p> <p>7. Attend a local meeting where decisions are made e.g., Council meeting Discuss the process.</p> <p>8. Identify other situations in which people have to make decisions together.</p> <p>9. Make a class decision.</p>	<p>The process should include:</p> <ul style="list-style-type: none"> - identifying the problem - identifying the choices - considering the consequences - each person stating his/her opinion - everyone listening to other opinions - voting to make a decision - evaluating the decision (this last step happens at a later date) <p>Arrange for students to attend such a meeting. They may have to go in small groups. Following the meeting discuss the process used. Compare with the process which the students used.</p> <p>Situations might include:</p> <ul style="list-style-type: none"> - class - work (teaching staff) - families - municipal government parish council - Local Education Authority recreation groups - Legislative Assembly <p>Have students make a decision which affects the whole class. Situations might include:</p> <ul style="list-style-type: none"> - where to go for a picnic - what to take on a picnic - what to do for a concert item - a fund raising event - a class party, etc - what to do for an Art activity

MENTAL AND EMOTIONAL WELL BEING

GRADE: 6

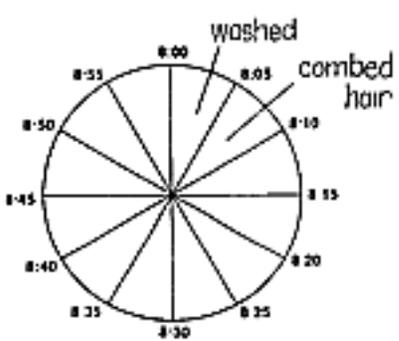
LESSON: 7

THEME: DECISION-MAKING

CONCEPT: TIME MANAGEMENT HELPS CONTROL STRESS

- PREPARATION:
1. Prepare a class set of Where Has The Time Gone? (Activity Sheet ME57)
 2. Prepare a class set of The Hare and the Tortoise (Activity Sheet ME58)
 3. Prepare a class set of Getting The Most Out Of Time (Activity Sheet ME59)
 4. Materials for a mural
-

VOCABULARY: time management

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>Students will be able to:</p> <p>i) identify situations which require time management</p>	<p>Students:</p> <ol style="list-style-type: none">1. Identify how they have spent their time for one hour before coming to school.	<p>Background Information Page ME56 to ME57</p> <p>Refer to Activity Sheet ME57. Have students complete the Activity Sheet. Discuss.</p> 

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES							
	<p>2. Compare the consequences of giving themselves lots of time to get ready and of getting up late.</p> <p>3. Identify situations where they have problems managing time.</p>	<p>Ask students what happens if they get up late compared to if they get up on time. Have students respond using the sentence pattern:</p> <p>If I got up on time, I would _____.</p> <p>If I got up on time, I would not _____.</p> <p>If I got up late, I would _____.</p> <p>If I got up late, I would not _____.</p> <p>Record student responses using an experience chart as illustrated.</p> <table border="1" data-bbox="940 662 2016 954"> <thead> <tr> <th data-bbox="940 662 1323 732">Consequences</th> <th data-bbox="1323 662 1661 732">Feelings</th> <th data-bbox="1661 662 2016 732">How to avoid stress</th> </tr> </thead> <tbody> <tr> <td data-bbox="940 732 1323 954"> <ul style="list-style-type: none"> - rushed - not having enough time - dirty - teeth/hair not brushed - late for school - out of breath </td> <td data-bbox="1323 732 1661 954"></td> <td data-bbox="1661 732 2016 954"></td> </tr> </tbody> </table> <p>Brainstorm situations where they have to manage time.</p> <ul style="list-style-type: none"> - finishing work at school - playing/studying/babysitting - doing household chores - having fun 		Consequences	Feelings	How to avoid stress	<ul style="list-style-type: none"> - rushed - not having enough time - dirty - teeth/hair not brushed - late for school - out of breath 		
Consequences	Feelings	How to avoid stress							
<ul style="list-style-type: none"> - rushed - not having enough time - dirty - teeth/hair not brushed - late for school - out of breath 									

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>4. Identify how they would feel if they were short of time</p> <p>5. Identify ways of preventing stress related to poor time management.</p> <p>6. Make a class mural Juggling Time.</p>	<p>Feelings should include:</p> <ul style="list-style-type: none"> - anger - frustration - worry - nervousness <p>Emphasize that these feelings contribute to stress. Record student responses in the second column of the experience chart started in Student Activity 2.</p> <p>It should be noted that some people respond positively to a certain amount of stress.</p> <p>Preventive ways should include:</p> <ul style="list-style-type: none"> - planning - identifying what has to be done - deciding how long each will take - leaving enough time to do things - getting up earlier <p>Record student responses in the third column of the experience chart started in Student Activity 2.</p> <p>Have one student draw a juggler. Have other students make balls. On each ball write a sentence describing a situation where they have to juggle time.</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>ii) demonstrate time management</p>	<p>7. Participate in an activity that requires time management.</p> <p>8. Read the story "The Hare and the Tortoise."</p>	<p>Refer to Activity Sheet ME58.</p> <p>Have students complete Activity Sheet ME58.</p> <p>Each activity is worth a specific number of points. Students have to be given 15 minutes to complete as much of the worksheet as they can. The aim is to get as many points as they can.</p> <p>Discuss with students how they managed.</p> <p>Refer to Activity Sheet ME59.</p> <p>Distribute copies of Activity Sheet ME59 to each student. Have them read it. Discuss the hare's poor time management.</p>

WHERE HAS THE TIME GONE?

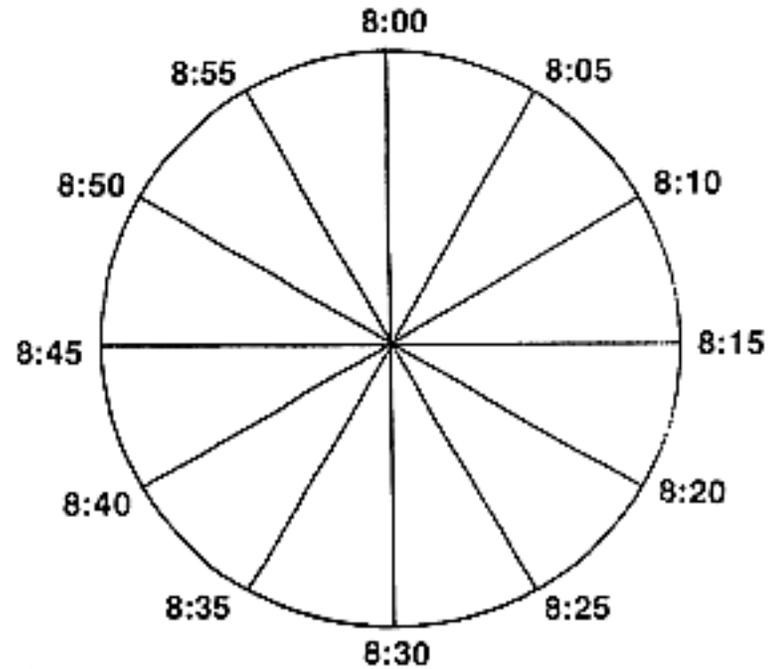
Identify how much time you have spent doing different things from 8 o'clock until the time you went to school. Write in each segment of the circle what you did at that time.

1. What time did you get up? _____

2. What time did school start? _____

3. How much time did you have after you got up, before school started? _____

4. What did you do with this time? _____



GETTING THE MOST OUT OF TIME

1. $75 + 63 + 84 + 197$ (2 points)
2. Write 10 sentences about the community you live in. (10 points)
3. Use a dictionary to define discrimination. (4 points)
4. List 10 positive health habits that help keep you healthy. (10 points)
5. Write another word that means the same as scared. (1 point)
6. Finish the sentence "Friends _____" (3 points)
7. Write 2 sentences about someone in your family. (3 points)
8. Ask your teacher to sign his/her name on this page. (1 point)
9. Find someone who has been to the nursing station/doctor in the last month. (1 point)
10. Write about a decision you have had to make recently. (5 points)

THE HARE AND THE TORTOISE

One day the Hare was boasting, as usual, about his amazing speed.

"No one can run faster than I can," he said to the other animals. "I'm faster than the wind I challenge anyone here to run a race with me."

None of the animals seemed ready to accept the challenge. "What?" said the Hare. "Does no one want to race with me?"

"I will," said a quiet voice. It was the Tortoise.

"You!" the Hare exclaimed. "Surely you must be joking. How can you hope to win?"

"We shall see," said the Tortoise calmly. "Let us race."

It was agreed that they would race through the woods and back. The signal was given, and the Hare hopped out of sight at once, while the Tortoise plodded slowly along.

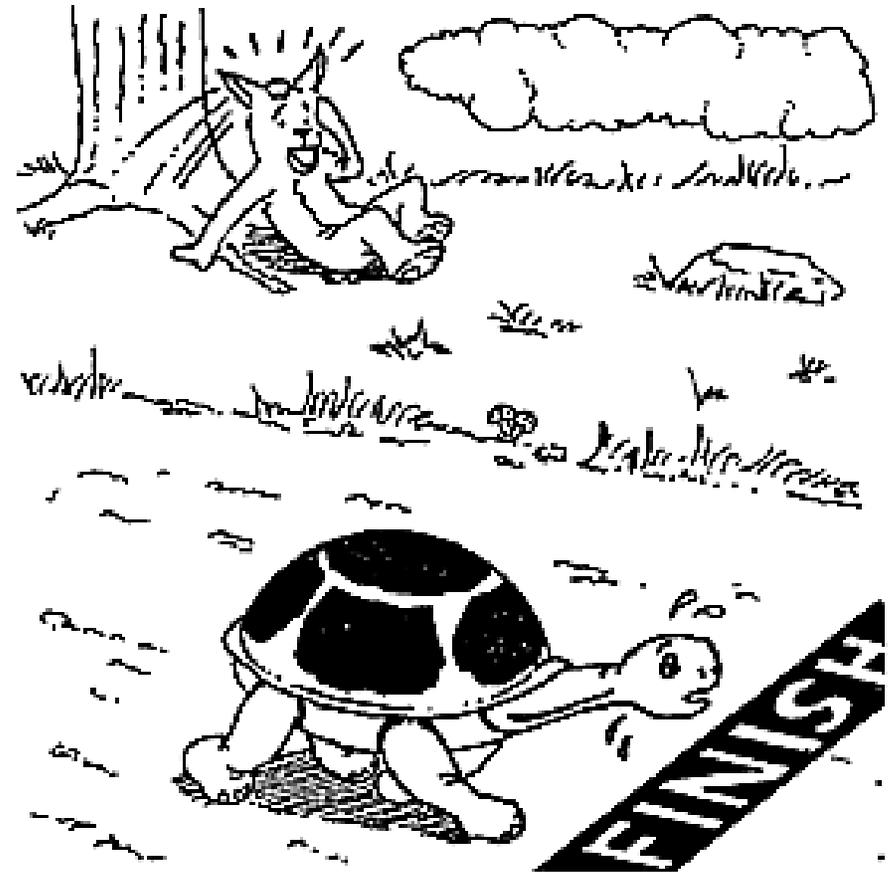
Soon the Hare was so far ahead of the Tortoise that he stopped to rest on the soft grass. "To think that a Tortoise would want to race with me!" thought the Hare, laughing to himself. "Why I even have time for a nap." And he curled up on the soft grass and went to sleep.

Meanwhile the Tortoise plodded steadily on and on and on. After a while he passed the Hare, who was still asleep. Just as the Tortoise came to the finish line, the Hare woke up and saw where the Tortoise was. The Hare made a great leap forward, but it was too late. The Tortoise had won the race.

As the Hare crept away, ashamed, he heard the animals exclaim, "You won! You won! How did you ever beat the Hare?"

Modestly, the Tortoise told them, "***Slow and steady wins the race.***"

Source Aesop's Fables



MENTAL AND EMOTIONAL WELL BEING

GRADE: 6

LESSON: 8

THEME: LIFE STYLE

CONCEPT: SELF KNOWLEDGE IS THE FIRST STEP TO SELF IMPROVEMENT

PREPARATION: 1. Prepare a class set of What Do I Know About Myself? (Activity Sheet ME60)

VOCABULARY: assess, improve, goal, realistic

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>Students will be able to:</p> <p>i) assess personal characteristics related to mental and emotional well being</p> <p>ii) design a plan for self improvement</p>	<p>Students:</p> <p>1. Complete activity sheet What Do I Know About Myself?</p> <p>2. Select one characteristic which they would like to improve</p>	<p>Background Information Page ME51 to ME53</p> <p>Teachers may need to be particularly sensitive in this lesson</p> <p>Students and teacher should complete the Activity Sheet.</p> <p>From column 2 or 3 or Activity Sheet ME60, have each student select one characteristic to improve.</p> <p>The teacher should be the first person to do this. This will open the discussion. Only volunteers should be asked to talk about what they have selected.</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES																							
iii) evaluate the plan for self improvement	3. Identify ways of improving the characteristic they have selected.	<p>For example if students select helping other people they should identify who they can help and ways in which they can help.</p> <p style="text-align: center;">E.g.. mother babysitting shopping cooking</p> <p>I can help (<u>mother</u>) by (_____.)</p>																							
	4. Select a realistic date(s) for achieving these improvements.	<p>It is a good idea to set short-term goals initially.</p> <p>This week I can _____</p> <p>Next week I can _____</p> <p>In one month I can _____</p>																							
	5. Chart their progress.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Task</th> <th style="width: 15%;">Mon.</th> <th style="width: 15%;">Tues.</th> <th style="width: 15%;">Wed.</th> <th style="width: 15%;">Thurs.</th> <th style="width: 15%;">Fri.</th> </tr> </thead> <tbody> <tr> <td>babysitting</td> <td style="text-align: center;">✓</td> <td></td> <td></td> <td style="text-align: center;">✓</td> <td></td> </tr> <tr> <td>shopping</td> <td></td> <td style="text-align: center;">✓</td> <td></td> <td></td> <td></td> </tr> <tr> <td>cooking</td> <td></td> <td></td> <td style="text-align: center;">✓</td> <td></td> <td style="text-align: center;">✓</td> </tr> </tbody> </table>	Task	Mon.	Tues.	Wed.	Thurs.	Fri.	babysitting	✓			✓		shopping		✓				cooking			✓	
Task	Mon.	Tues.	Wed.	Thurs.	Fri.																				
babysitting	✓			✓																					
shopping		✓																							
cooking			✓		✓																				
6. Assess their progress.	<p>Have students discuss their progress, how easy or difficult it was, etc.</p>																								

WHAT DO I KNOW ABOUT MYSELF?

Decide if the following statements are true for you most of the time, some of the time or never.

Put a cross in the appropriate box.

	Most of the time	Some of the time	Never
1. I feel good about myself			
2. I make friends easily			
3. I like to be with other people			
4. I enjoy helping other people			
5. I get along well with my parents			
6. I can share my feelings easily			
7. I worry a lot about things			
8. I feel comfortable talking to other people			
9. I know what to do if I need help			
10. I make decisions easily			

GRADE 6

TEACHER BACKGROUND INFORMATION

MENTAL AND EMOTIONAL WELL-BEING

MENTAL AND EMOTIONAL WELL BEING

Mental and emotional well-being refers to how a person feels, thinks and acts. If s/he feels "good", this translates into positive feelings, positive relationships with other people, decisiveness and an ability to cope with the stresses of every day life. A person who does

not feel "good" has difficulty forming worthwhile relationships and has difficulty functioning in every day life. People derive those feelings about themselves, in large part, from the attitudes towards them of significant people in their lives.

Poor Mental and Emotional Well-Being

Healthy Mental and Emotional Well-Being

Low Self-Esteem



Significant People

- family
- friends
- peers
- teachers
- elders
- church leaders
- community members
- other people

Attitudes

- anger
- rejection
- distrust
- discouragement
- "put downs"

Behaviours

- failure
- fear
- guilt
- aggression
- withdrawal
- mistrust

High Self-Esteem



Significant People

- family
- friends
- peers
- community members
- teachers
- elders
- church leaders
- other people

Attitudes

- love
- care
- acceptance
- encouragement
- trust

Behaviours

- success
- enthusiasm
- responsibility
- creativity
- co-operation
- ability to cope

The Mental and Emotional Well-Being Unit of the Health program aims to enable students to function effectively in a social context. An increase in self-understanding will lead to an enhancement of self-esteem. Together with the acquisition of decision-making, communication and coping skills, they will lead to an improvement in students' mental and emotional well-being, and in their ability to function effectively socially.

The school can contribute greatly in the development of a healthy mental and emotional well-being, through the attitudes of staff, and the atmosphere in both the classroom and the school. Positive attitudes and a positive atmosphere will enhance students' self-esteem.

For that reason, the creation of a positive classroom atmosphere is essential for teaching this unit. (Refer to "Introduction: Building A Positive Classroom Atmosphere".) Since the unit deals with very personal topics (students are, after all, learning about themselves, and nothing can be more personal than that!), teachers should be aware of the need for

sensitivity and respect. Students should all be given the opportunity to participate in discussions, but should also be given the opportunity to pass, if they feel uncomfortable in sharing information with others. Students, and teachers, will gradually become more accustomed to the teaching methods used in this unit, and will soon begin to feel quite comfortable with the unit. Pilot testing of this unit indicated that students were hesitant for the first two or three lessons, but then really enjoyed learning about themselves!

Because of the personal nature of the unit, teachers must become familiar with their cultural appropriateness. Different cultural groups have different values regarding the self, as opposed to the group. They have different ways of appropriately expressing (or not expressing) feelings. Teachers should adapt the materials as necessary to fit the local situation. Wherever possible, members of the local culture should teach culturally sensitive topics to enhance and reinforce students' understanding of these topics within the appropriate cultural context.

As opportunities present themselves in class, school or community, teachers should encourage students to demonstrate the skills and to apply the concepts. In this way, students will continue to develop positive attitudes, and will also see the relevance of what they learn to their everyday lives.

The teacher can work with individual students to help them improve in areas where they are particularly weak. Each student can be helped to set a personal goal, such as “I will try to be friendlier to other students.” The teacher can help each student identify concrete ways to work towards the goal and can, together with the student, monitor progress

Eg , CLIMBING THE LADDER

NAME: _____

be friendlier to other people

help people who need some help

take turns

share my toys, crayons

RESPONSIBILITIES

These Grade six lessons concentrate on responsibilities in friendship and to society in the form of volunteerism.

The responsibilities of a caring relationship (friendship) include:

- accepting personal responsibility for the maintenance of the relationship
- keeping communication honest, open and ongoing
- a constant attempt to maintain the following attributes
 - caring
 - loyalty
 - respect
 - trust
 - understanding
 - patience
 - dependability
 - tolerance
 - co-operation, including sharing
 - support
 - interest in other's ideas, interests, conversation
 - the provision of encouragement necessary to individual development
 - sincerity
 - acceptance of change

ADVANTAGES OF A CARING RELATIONSHIP

- shared confidences
- advice
- support of self-esteem and emotions
- opportunities to develop skills necessary for other caring relationships
- the establishment of self-worth
- the opportunity to establish a permanent caring relationship
- entertainment

There are many types of relationships that demand responsibility:

- close friendships with peers of the same sex
- group friendships with peers
- close friendships with peers of the opposite sex
- relationships with teachers, guidance counsellors, religious members, ministers, club leaders, nurses, doctors
- neighbourhood friendships
- family friendships

The process of establishing a caring relationship includes:

- initiation (a smile, using people's names)
- verbal communication (asking questions about the other person, listening attentively, humour, widening your interests, making others feel important)
- taking the time to feel comfortable and secure
- developing an understanding of the other person
- allowing and ensuring that the other person has an understanding of you
- evaluation of the other person, yourself in the relationship and the relationship itself
- acting responsibly throughout the relationship

DECISION-MAKING

There are many ways to make a decision including:

- letting others do it for you
- happenstance (tossing a coin, etc.)
- the formal method

The formal method can be used by individuals or groups (class, work, family, government, parish council, recreational, etc.). The following are the steps of the formal decision-making process used in this program.

1. Identify the problem
2. Identify the choices
3. Identify the consequences
4. Identify what is important to the decision maker(s)
5. Decide (groups can use a formal or informal voting procedure)
6. Evaluate

Step 4 is influenced by many factors including the views of family members, the school, religions and other societal groups. An individual's private reflections and the possible consequences of a decision will also affect the decision.

ADVERTISING

A study of advertising enhances the individual's ability to evaluate advertising information and make sound decisions. This awareness can be developed by studying advertising techniques and the sentiments they appeal to. Some of these are:

- appeals to basic needs such as fear, love, security etc.
- lifestyle (good times, country environments, adventures etc.)
- romance
- guilt
- bright/fun/humour/jingles - mystery
- famous people
- normalcy (everyone has one)

Companies have large budgets for analyzing marketing techniques and their effects. The public must be able to counteract these messages with good judgement. Is the material objective or are they using a technique that is not related to the product? Are the research techniques valid? Are they supported by reputable non-affiliated professionals?

DISCRIMINATION

Factors for discrimination vary and are usually based on stereotypes. Stereotypes are statements which generalize (i.e., Old people are forgetful. Poor people are lazy.) A stereotype ignores individual differences and is usually due to laziness, ignorance or lack of understanding. Stereotypes lead to prejudice - an unfair feeling of dislike or judgement against an individual or group.

The following is a list of examples of discrimination.

Discrimination	Reason
South Africa	colour
World War II	race
Restricted male clubs	sex
mandatory retirement	age
state decreed day of rest	religion
passport guarantor	profession
buildings without ramp access	handicap

An examination of stereotypes and the resulting discrimination will help eliminate the factors that allow these situations to occur.

STRESS

Stress is "the body's response to any demands made on it by the environment and the people in it." (Hans Selye) Medically, stress is the rate of wear and tear on the body. Stress occurs in various forms - mental, emotional and physical. It can be positive or negative.

Stressors are those things that produce stress.

Positive stressors

- school dance
- birth in the family
- winning a prize
- special holidays
- first day of school

Negative stressors

- death in the family
- failing a grade
- fighting with friends
- divorce of parents
- change of schools
- confusion about future
- social isolation
- low self-esteem

Positive stress helps us do things well i.e. perform.

Negative stress can harm someone who has not developed ways to cope with it. Awareness of stress, the acceptance of self and limits and the responsibility of developing coping mechanisms are important to the individual wanting to avoid the consequences of negative stress.

AWARENESS OF STRESS

The most common signals of negative stress include:

- abnormal eating practices
- pupils of the eyes dilate
- breathing speeds up
- heart beats faster
- blood pressure rises
- hearing increases
- muscles tense
- blood sugar increases (more energy)
- adrenalin is secreted
- palms become sweaty
- butterflies in stomach
- headache
- digestion slows down

- disturbed sleep pattern
- skin rashes may occur
- dizziness
- behavioural idiosyncracies (twirling hair, scratching, jiggling leg etc)
- extreme changes in eating, smoking, drinking/drug habits
- nervous laughter
- trembling
- weight gain/loss
- headaches/migraines
- boredom, apathy
- loss of memory
- loss of rational/logical thinking
- lack of concentration
- preoccupation/obsession
- confusion
- blowing things out of proportion
- hypersensitivity to criticism
- self-centeredness
- suspicion and mistrust
- insomnia -hypochondria
- day dreams and fantasy
- poor emotional control (irritability, moodiness)
- helplessness and dependency
- absenteeism
- easily distracted and interrupted
- breakdown of communication
- procrastination
- job dissatisfaction
- decrease in creativity, spontaneity
- withdrawal (fear of the situation causes the individual to use excessive escape: continuous television, excessive drinking, etc.)

Not even young children are immune from pressure. Teachers should be aware and take steps to help relieve factors at school that may cause too much stress on a particular student.

If the individual does not learn to deal with stress, serious physical and/or mental problem conditions could result. The following is a table listing mental disorders. They may be completely physical (physiological) in cause; they may be due entirely to stress and an individual's inability to cope with it (psychosomatic); or a combination of both.

Some problem conditions related to stress

Problem	Brief Description
<i>addiction</i>	- dependence on mood-altering substances eg. alcohol, codeine, coffee etc.
<i>anxiety</i>	- a feeling of extreme apprehension - symptoms may include: heart pounding, sweating palms, loss of appetite, insomnia
<i>anorexia nervosa</i>	- extreme anxiety may lead to loss of appetite or to seeing oneself as too fat - malnutrition results - mainly seen in teenage girls
<i>bulimia</i>	- extreme binge eating, followed by self induced vomiting
<i>depression</i>	- a feeling of chronic tiredness, hopelessness, apathy - often with physical symptoms - may lead to suicidal tendencies
<i>hypertension</i>	- associated with high blood pressure - a factor in both coronary heart disease and stroke
<i>mental illness</i>	- escape from reality as in neuroses and psychosis
<i>psychosomatic illness</i> illnesses	- emotional factors that contribute to such as ulcers, asthma, colitis

INAPPROPRIATE METHODS OF STRESS MANAGEMENT

- denial, suppression
- displacement (kick the dog)
- humour (gallows type, self-deprecating)
- projection
- fantasy
- selective memory

APPROPRIATE METHODS OF STRESS MANAGEMENT

There are physical, psychological, spiritual and organizational methods of stress management including:

- talking problems over with family members or friends
- organizing one's time
- prioritizing work
- accepting things one cannot change
- being realistic (realistic goals)
- getting enough rest and sleep
- eating balanced meals
- exercising (mild, strenuous, muscle tension reducing)
- developing an emotional support system (family and friends)
- diet
- reordering of values
- medical examination
- meditation
- resolution of interpersonal conflicts
- prayer
- time management
- arranging for enjoyable (relaxing) activities - at least daily
- developing and using assertiveness skills
- making use of humour
- being an encouraging person
- arranging for variety in your life
- job preparedness
- control of finances (budget plan)

GRADE 6

GROWTH AND DEVELOPMENT

GROWTH AND DEVELOPMENT

GRADE: 6

LESSON: 1

THEME: BODY SYSTEMS

CONCEPT: THE EXCRETORY SYSTEM REMOVES HARMFUL MATERIALS FROM THE BODY

- PREPARATION:
1. A bag of garbage
 2. Prepare a child size body outline and detachable parts (Activity Sheets GD47A B C D)
 3. Prepare a class set of Excretory Maze (Activity Sheet GD48)
 4. Kidney beans
 5. An animal kidney a bladder float (if possible)
 6. Prepare a class set of My Excretory System worksheets (Activity Sheet GD49)
-

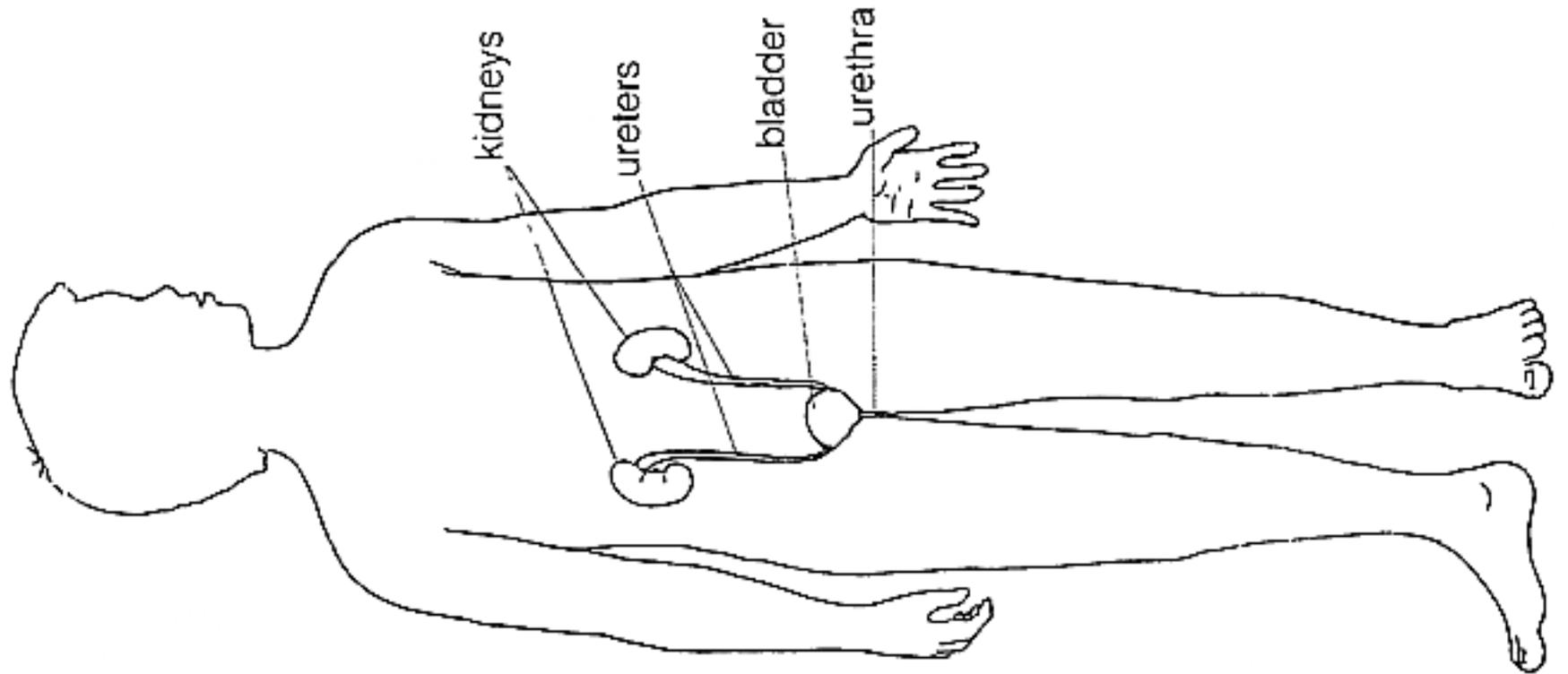
VOCABULARY: excretory kidneys bladder ureters urethra

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) name and locate the main parts of the excretory system	Students: 1. Describe briefly what happens to the garbage in a community. 2. Review which parts of the digestive system get rid of waste. 3. Review which parts of the respiratory system get rid of waste air.	Background Information Page GD69 to GD71 Have a bag full of garbage available. Ask students to identify how the community gets rid of it. Explain that the body has waste to get rid of too. The intestines get rid of solid waste. The lungs breathe out waste air.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES										
	<p>4. Define the term excretory system.</p> <p>5. Name and locate the main parts of the excretory system.</p>	<p>Use a dictionary and general discussion to define the term. Students should understand that the excretory system is the system which cleans the blood of wastes.</p> <p>Refer to Activity Sheets GD47A, B, C, D.</p> <p>Use a child size body outline and the detachable excretory system parts from the activity sheets. Put the child size body outline on the board. Have the students take turns naming and placing the main parts of the excretory system on the outline. The main excretory parts are:</p> <table border="1" data-bbox="1188 737 2018 1256"> <thead> <tr> <th data-bbox="1188 737 1598 776">Part</th> <th data-bbox="1598 737 2018 776">Location</th> </tr> </thead> <tbody> <tr> <td data-bbox="1188 776 1598 886">- kidneys</td> <td data-bbox="1598 776 2018 886">- ether side of the spine, behind intestines and above waist</td> </tr> <tr> <td data-bbox="1188 886 1598 997">- ureters</td> <td data-bbox="1598 886 2018 997">- tubes attach mid-kidney to bladder (raid-back to lower abdomen)</td> </tr> <tr> <td data-bbox="1188 997 1598 1073">- bladder</td> <td data-bbox="1598 997 2018 1073">- lower part of abdomen</td> </tr> <tr> <td data-bbox="1188 1073 1598 1256">- urethra</td> <td data-bbox="1598 1073 2018 1256">- males: tube from bladder through penis - females: tube from bladder to vulva</td> </tr> </tbody> </table> <p>Have students discuss the chart using the sentence pattern</p> <p><u>The (kidneys)</u> <u>is/are part of the excretory system.</u></p>	Part	Location	- kidneys	- ether side of the spine, behind intestines and above waist	- ureters	- tubes attach mid-kidney to bladder (raid-back to lower abdomen)	- bladder	- lower part of abdomen	- urethra	- males: tube from bladder through penis - females: tube from bladder to vulva
Part	Location											
- kidneys	- ether side of the spine, behind intestines and above waist											
- ureters	- tubes attach mid-kidney to bladder (raid-back to lower abdomen)											
- bladder	- lower part of abdomen											
- urethra	- males: tube from bladder through penis - females: tube from bladder to vulva											

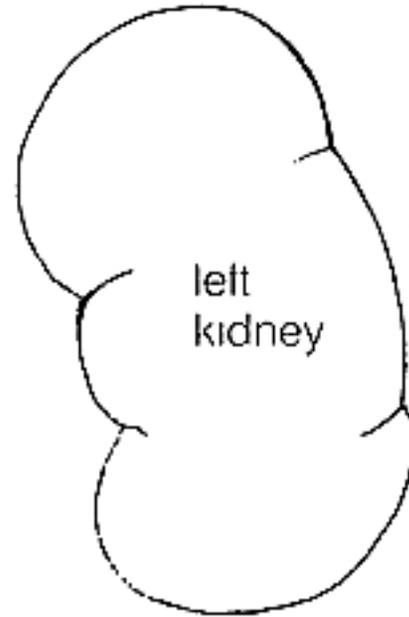
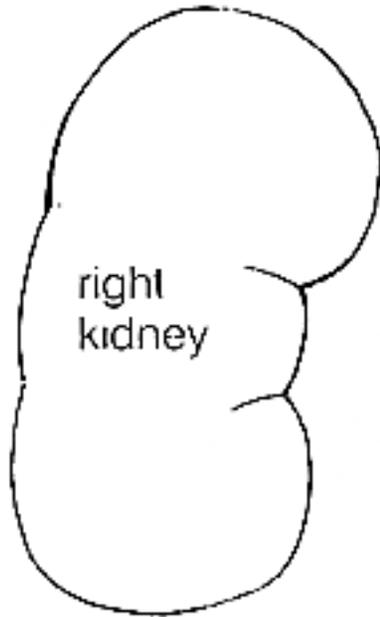
OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>6. Complete the Excretory Male.</p> <p>7. Observe kidney beans to determine the shape of the kidneys.</p> <p>8. Examine parts of the excretory system from animals.</p> <p>9. Complete the My Excretory System worksheet.</p>	<p>Refer to Activity Sheet GD48</p> <p>Have students complete the maze. They have to follow the line from the excretory part to the letter to spell out a word.</p> <p>Answer Guide: waste</p> <p>Ask a hunter to provide the class with the kidney of an animal. Dissect it. (Kidneys often smell!)</p> <p>Try to get a bladder float. The bladders of some animals were used as floats. Students may have seen these used this way.</p> <p>Refer to Activity Sheet GD49.</p> <p>Have students complete the sheet by writing the names of the parts of the excretory system.</p>

THE EXCRETORY SYSTEM



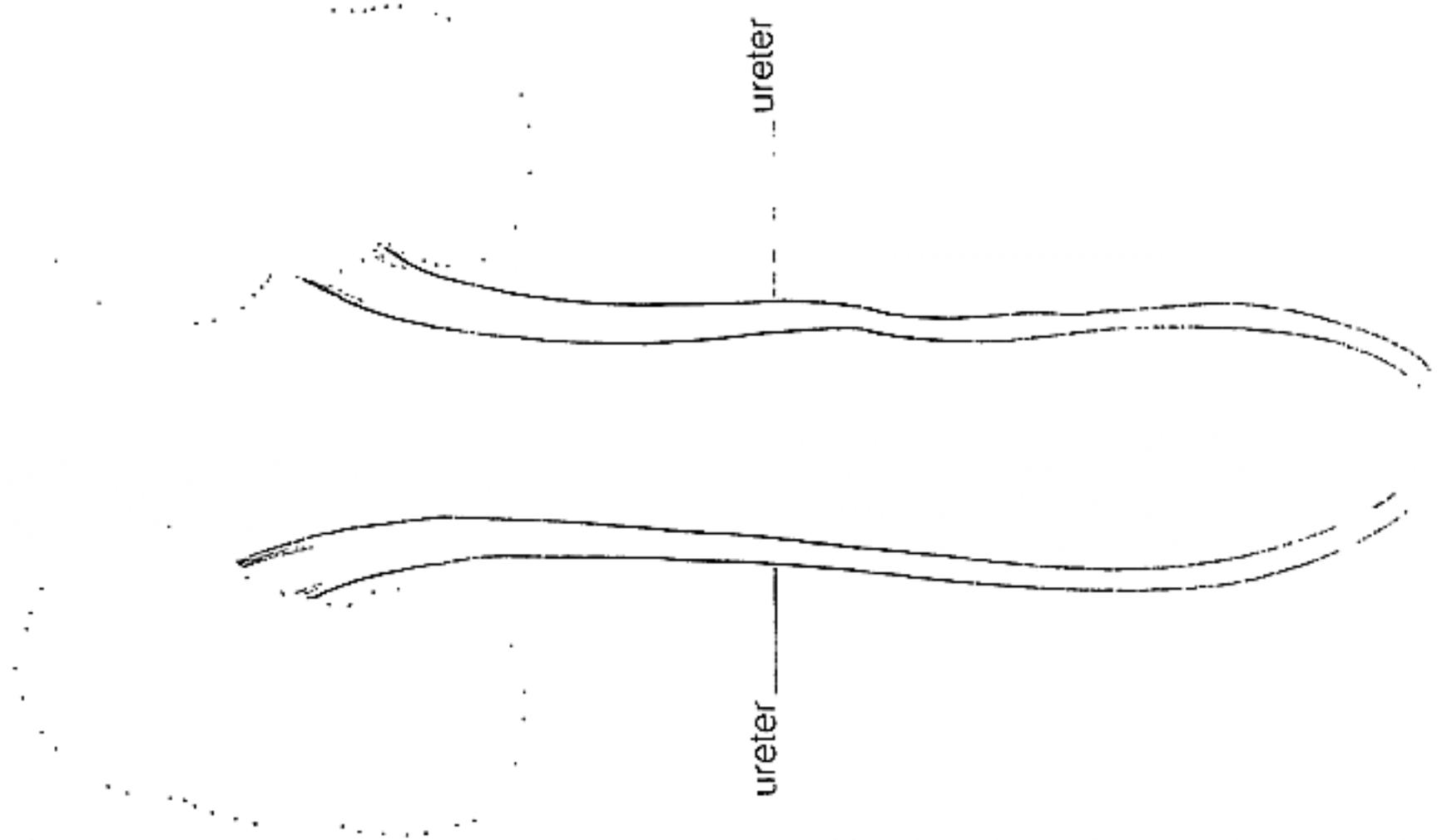
KIDNEYS

Colour the kidneys dark red.



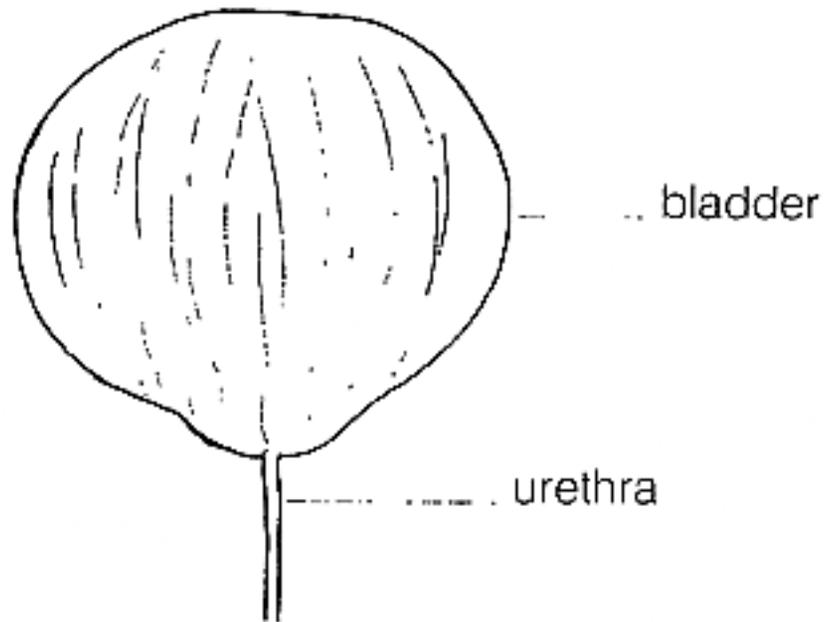
URETERS

Colour the ureters reel.



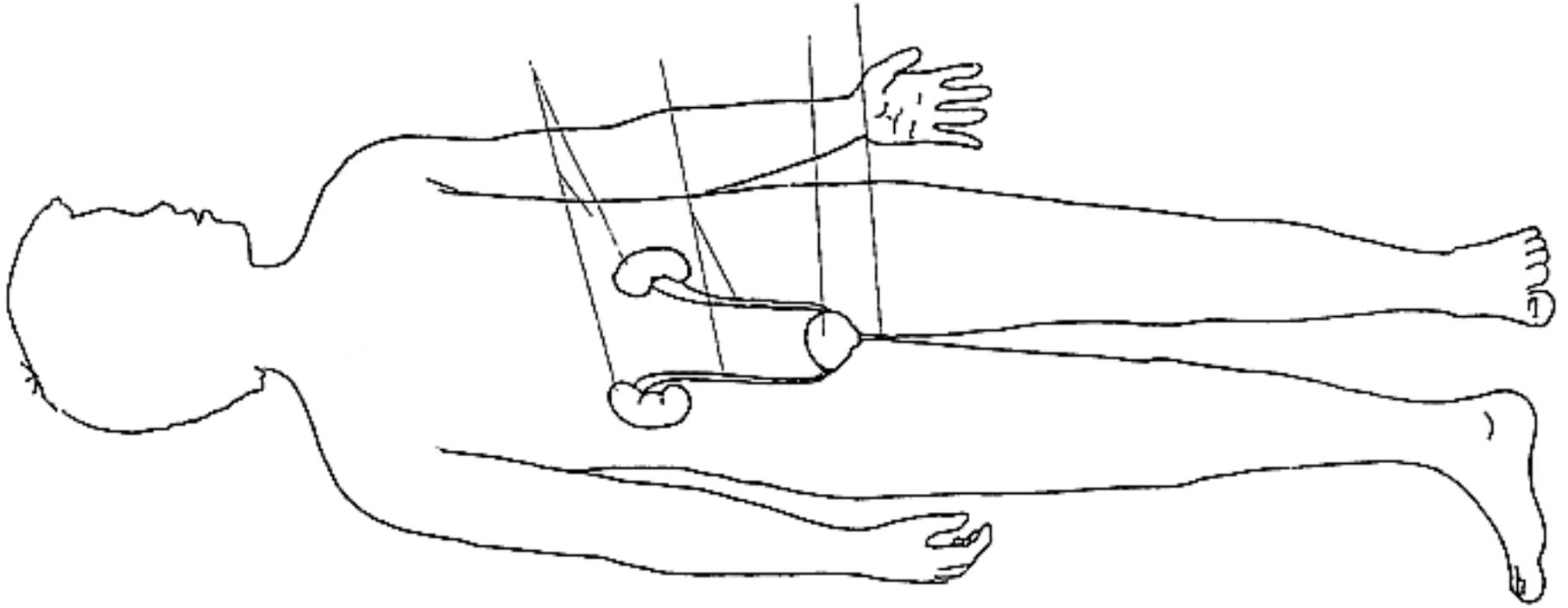
BLADDER AND URETHRA

Colour the bladder a yellow-brown colour



MY EXCRETORY SYSTEM

Label the parts of the excretory system.



GROWTH AND DEVELOPMENT

GRADE: 6

LESSON: 2

THEME: BODY SYSTEMS

CONCEPT: THE EXCRETORY SYSTEM REMOVES HARMFUL MATERIALS FROM THE BODY

PREPARATION: 1. Dirty water and a filter
2. Balloon and water
3. Make a set of cards with the function on one side and the excretory part on the other (Activity Sheet GD50)

VOCABULARY: urine, drain, filters, cleans

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES	
Students will be able to: i) describe the functions of the excretory system	Students: 1. Demonstrate the filtering process of the kidneys. Discuss briefly. 2. Demonstrate the storage function of the bladder.	Background Information Page GD69 to GD71	
		Throughout this lesson, teachers should continue reinforcing the term excretory.	
		Have students pour some dirty water through a filter. Examine the filter. Fill a balloon with water. Compare with a human bladder. Discuss.	
		Same - both stretch - both can hold only a certain amount	Different - bladder tells you when it is full

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) state the importance of the excretory system	<ol style="list-style-type: none"> 3. Describe the functions of the different parts of the excretory system. 4. Match named function cards to the appropriate excretory parts on the child size body outline. 5. Brainstorm familiar expressions which describe the functions of the excretory system. 6. Discuss the importance of the excretory system. 	<p>Ask students what the function of each part of the excretory system is Have students respond using the sentence patterns</p> <p>The <u>(kidneys)</u> <u>(clean wastes out of the blood)</u></p> <p>The <u>(ureters)</u> <u>(drain urine from the kidneys to the bladder)</u></p> <p>The <u>(bladder)</u> <u>(collects and stores urine)</u></p> <p>The <u>(urethra)</u> <u>(drains urine to the outside of the body)</u></p> <p>Refer to Activity Sheet GD50.</p> <p>Prepare cards with the name of each excretory part on one side and its function on the reverse side.</p> <p>Include only those which reflect the function of the excretory system, e.g.,</p> <ul style="list-style-type: none"> - passing water - emptying your bladder - relieving yourself <p>Ask students why they think the excretory system is important. They should understand that the kidneys are vital organs. In the same way as a community has to deal with its waste, i.e., sewage treatment, so the body has to deal with its waste. Functions include:</p> <ul style="list-style-type: none"> - to filter and clean the blood - to get rid of body wastes - to regulate the amount of water in the body

EXCRETORY FUNCTION CARDS

Kidneys	clean the blood of wastes
Ureters	drain urine from kidneys to bladder
Bladder	collects and stores urine
Urethra	drains urine to outside of body

GROWTH AND DEVELOPMENT

GRADE: 6

LESSON: 3

THEME: BODY SYSTEMS

CONCEPT: THE EXCRETORY SYSTEM REMOVES HARMFUL MATERIALS FROM THE BODY

PREPARATION: 1. Prepare a class set of True or False worksheets (Activity Sheet GD51A)

VOCABULARY: transplant, kidney stones

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) name problem conditions related to the excretory system	Students: 1. Name common problem conditions related to the excretory system.	Background Information Page GD69 to GD71 Throughout this lesson, teachers should continue reinforcing the term excretory. Ask students if they have ever had a problem with the excretory system. Discuss. Some symptoms they may have experienced are: <ul style="list-style-type: none">- burning sensation when urinating- having to urinate frequently- having no control over urinating Common problem conditions include <ul style="list-style-type: none">- bed wetting (enuresis)- infections (in both bladder and kidneys)- no control over urinating (incontinence)- kidney stones- kidney failure

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES	
ii) describe ways to care for the excretory system	<p>2. Tell why some people get kidney transplants.</p> <p>3. List ways to care for the excretory system. Discuss.</p>	<p>Ask students why people sometimes have to get new kidneys. Students should understand that kidneys do not function properly, so doctors may replace a kidney with one that works properly.</p> <p>Ask students how they take care of the excretory system. Have students respond using the sentence pattern:</p> <p style="padding-left: 40px;">I take care of my excretory system by (not)_____.</p> <p>Record student responses using an experience chart as illustrated:</p>	
	<p style="text-align: center;">✓</p> <ul style="list-style-type: none"> - cleaning carefully after urinating (from front to back for females) - taking frequent showers - emptying bladder completely - developing regular bladder habits - drinking lots of liquids - exercising to improve blood circulation - using protective pads for contact sports - prompt treatment of infections - maintaining normal blood pressure - using cotton underwear rather than nylon 	<p style="text-align: center;">X</p> <ul style="list-style-type: none"> - wearing tight pants - eating too many spiced foods - letting the body get chilled - self-treating kidney problems - getting blows on the back 	
	<p>4. Complete True or False work sheets.</p>	<p>Refer to Activity Sheet GD51 A, B.</p> <p>Have students decide whether the statements are true or false. Discuss their answers.</p>	

TRUE OR FALSE?

Put a cross (X) in the TRUE column, if you think the statement is true. If not, put a cross (X) in the FALSE column.

	TRUE	FALSE
1. People who play sports like hockey should wear pads to protect their kidneys.		
2. The excretory system gets rid of waste air (oxygen poor)		
3. Wearing tight pants is good for the excretory system.		
4. If I have a kidney problem, I can treat it myself.		
5. Regular bladder habits help keep the excretory system healthy.		
6. I should protect my body from getting chilled.		
7. I should shower frequently.		
8. It's O. K. to hit people on the back		
9. Bed-wetting is a problem that affects only young children.		
10. Changing a baby's diaper frequently helps protect his/her excretory system.		

TRUE OR FALSE?

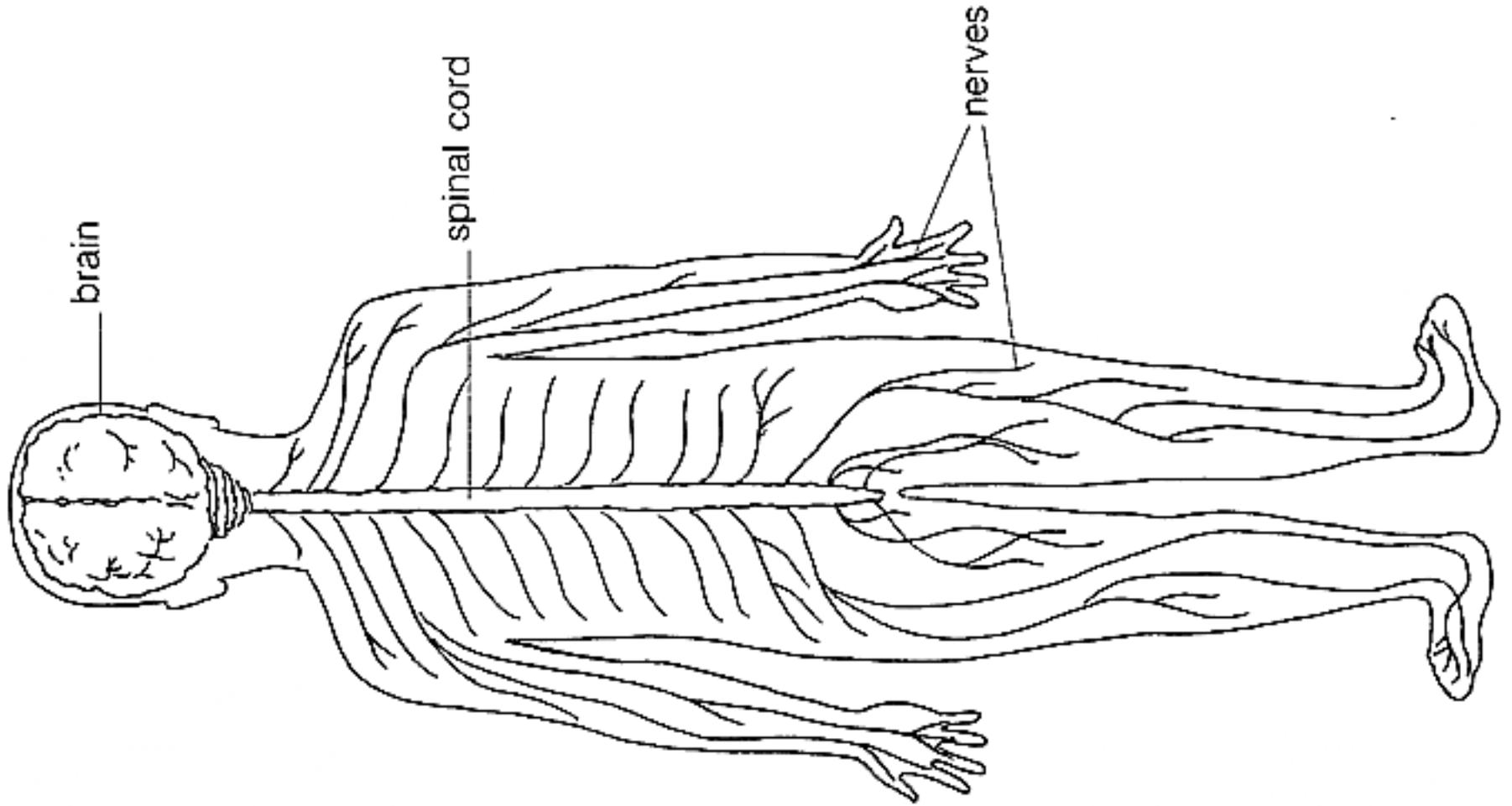
(Answer Guide)

	TRUE	FALSE
1. People who play sports like hockey should wear pads to protect their kidneys.	X	
2. The excretory system gets rid of waste air (oxygen poor)		X
3. Wearing tight pants is good for the excretory system.		X
4. If I have a kidney problem, I can treat it myself.		X
5. Regular bladder habits help keep the excretory system healthy.	X	
6. I should protect my body from getting chilled.	X	
7. I should shower frequently.	X	
8. It's O. K. to hit people on the back		X
9. Bed-wetting is a problem that affects only young children.		X
10. Changing a baby's diaper frequently helps protect his/her excretory system.	X	

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>3. Make a list of words or sayings related to nervous.</p> <p>4. Name and locate the main parts of the nervous system.</p>	<p>E.g., nerve, nervy, nervous, nerve-racking, to get on your nerves, what a nerve! etc.</p> <p>Refer to Activity Sheet GD52.</p> <p>Using the overhead transparency, name and locate the parts of the nervous system.</p> <p>The main parts of the nervous system are:</p> <ul style="list-style-type: none"> - the brain - the spinal cord - the nerves <p>Ask students about each part of the nervous system. Have students respond using the sentence patterns:</p> <p>The <u>(brain)</u> ___ is/are part of the nervous system</p> <p>Where is the <u>(brain)</u></p> <p>The <u>(brain)</u> <u>(is inside the head)</u> _____.</p> <p>The <u>(spinal cord)</u> <u>(is down the neck and back)</u> _____.</p> <p>The <u>(nerves)</u> <u>(are through the whole body)</u> _____.</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>5. Make a mobile of the main parts of the nervous system. Say the name of each part.</p> <p>6. On a real model, locate the main area of the nervous system.</p>	<div data-bbox="1150 310 1894 456" data-label="Diagram"> <pre> graph TD A[nervous system] --- B[spinal cord] A --- C[brain] A --- D[nerves] </pre> </div> <p>Have students say the name of each part. (Teachers should ensure that the brain is in the centre. In the next lesson, students will add names to the brain section.)</p> <p>Have students in pairs feel their partner's head, the back of their neck and down their back.</p> <p>Have students note that the brain is protected by a bony structure called the skull. The spinal cord is protected by a hard bony covering called the spinal column.</p>

THE NERVOUS SYSTEM



GROWTH AND DEVELOPMENT

GRADE: 6

LESSON: 5

THEME: BODY SYSTEMS

CONCEPT: THE NERVOUS SYSTEM CONNECTS ALL BODY SYSTEMS

- PREPARATION:
1. Overhead transparencies of Activity Sheets GD53, 55A, 55B
 2. The brain of an animal
 3. Collect a number of cans, punch a hole in the bottom of each, string
 4. Prepare enough for one between two students of Help (Activity Sheet GD54)
 5. About twenty objects for Kim's game
 6. 3 cans labelled cerebrum, cerebellum, brain stem
 7. Prepare a number of sets of Control Centres Of My Brain (Activity Sheet GD56)
-

VOCABULARY: cerebrum, cerebellum, brain stem

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify the main parts of the brain	Students: 1. Name and locate the main parts of the brain. 2. Examine the brain of an animal.	Background Information Page GD72 to GD78 Refer to Activity Sheet GD53. Using the overhead transparency, name and locate the main parts of the brain. Arrange with a hunter or a butcher to provide the class with the brain of an animal. Have students watch the dissection of the brain. Identify the parts of the brain.

OBJECTIVES

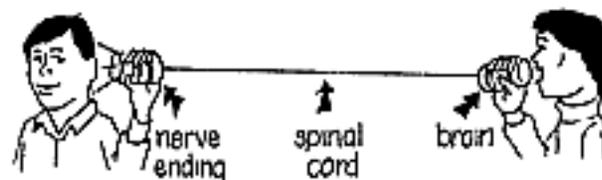
STUDENT ACTIVITIES

TEACHER NOTES

ii) describe the functions of the nervous system

3. Simulate the function of a nerve.

In pairs have students make a tin can message line. Punch a hole in the bottom of two tin cans. Feed a piece of string through to join the cans. Tie a knot at each end. Pull the string tightly.



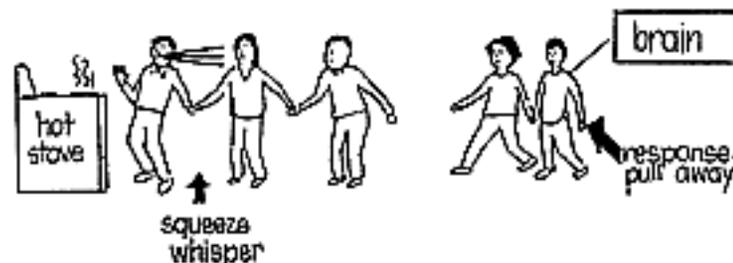
Refer to Activity Sheet GD54.

Give one student, who is the nerve ending, a copy of the activity sheet. The nerve ending has to look at the picture and send a message to the brain, e.g., "That stove is hot."

The brain has to quickly send a message back, e.g., "Take your hand away from it." Students should take turns at being the nerve ending and the brain. Emphasize that this happens in a split second.

4. Roleplay the function of a nerve.

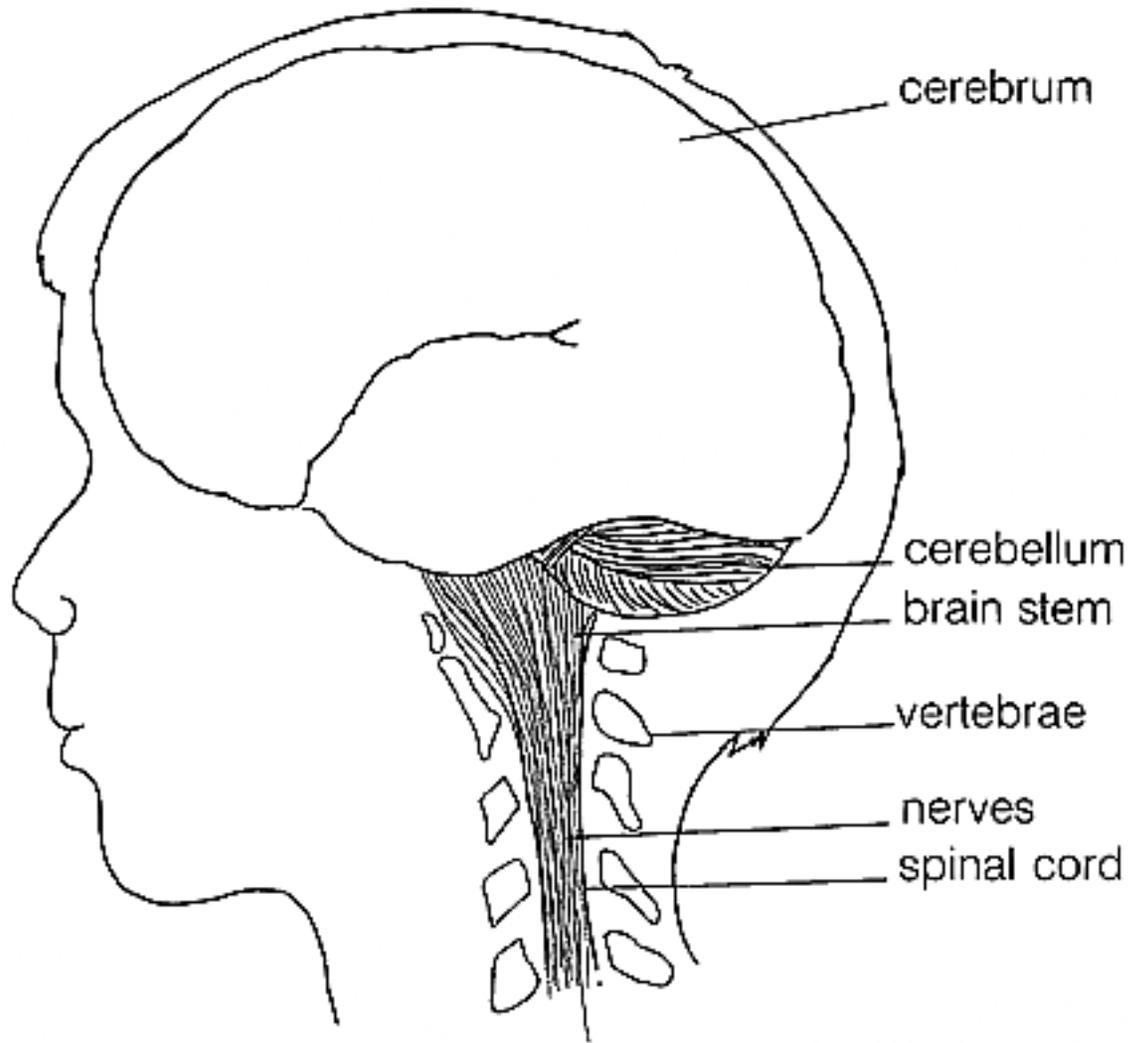
Divide the class into two groups, one for the message and one for the response. Each person has to join hands with the person next to them. The first person gets a message, e.g., hot stove, squeezes the hand of the next person, he/she quickly whispers the message, and so on, until it reaches the brain. The brain then pulls away taking the next person with him/her and so on down the line.



OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>5. Play Kim's Game to demonstrate the function of the cerebrum.</p> <p>6. Demonstrate the function of the cerebellum.</p> <p>7. Take their pulse to demonstrate the function of the brain stem.</p> <p>8. Describe the functions of the different parts of the nervous system.</p>	<p>Lay out approximately twenty objects on a table. Have students memorize them for one minute. Cover the objects. Have students write down all the objects they remember.</p> <p>The cerebrum is used to memorize things.</p> <p>Have students hold a pencil straight out in front of them. Have them try to balance a ruler on it. They will have to move the pencil backwards and forwards to keep the ruler balanced.</p> <p>The cerebellum does this for the body.</p> <p>Have students take their pulse. Ask them what is telling the heart to send the blood through the body.</p> <p>One of the functions of the brain stem is to signal the heart to pump blood.</p> <p>Refer to Activity Sheets GD55A and GD55B.</p> <p>Use overhead transparencies to discuss the functions.</p> <p>Ask students what each part of the brain does. Have students respond using the sentence patterns:</p> <p>The cerebrum controls <u>(learning)</u>.</p> <ul style="list-style-type: none"> - thinking - body movements - the senses <p>The cerebellum controls <u>(balance)</u>.</p> <ul style="list-style-type: none"> - muscle coordination

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>iii) state the importance of the nervous system</p>	<p>9. Categorize the functions of the main parts of the brain.</p> <p>10. Discuss the importance of the nervous system.</p>	<p>The brain stems controls <u>(heart rate)</u>_____</p> <ul style="list-style-type: none"> - breathing - swallowing - hunger - thirst - fear - anger <p>The nerves <u>(carry messages from a person's surroundings to the brain)</u>_____.</p> <p>The spinal cord <u>(connects the nerves to the brain)</u>_____.</p> <p>Refer to Activity Sheet GD56.</p> <p>Divide the class into small groups. Give each group a set of cards with a number of different activities. Have them sort them into 3 tins - cerebrum, cerebellum and brain stem.</p> <div data-bbox="1291 974 1801 1201" data-label="Diagram"> </div> <p>Ask students what would happen if they had no brain or if they did not have nerves to send messages to the brain.</p> <p>The nervous system is the main control centre for all body activities.</p>

THE BRAIN

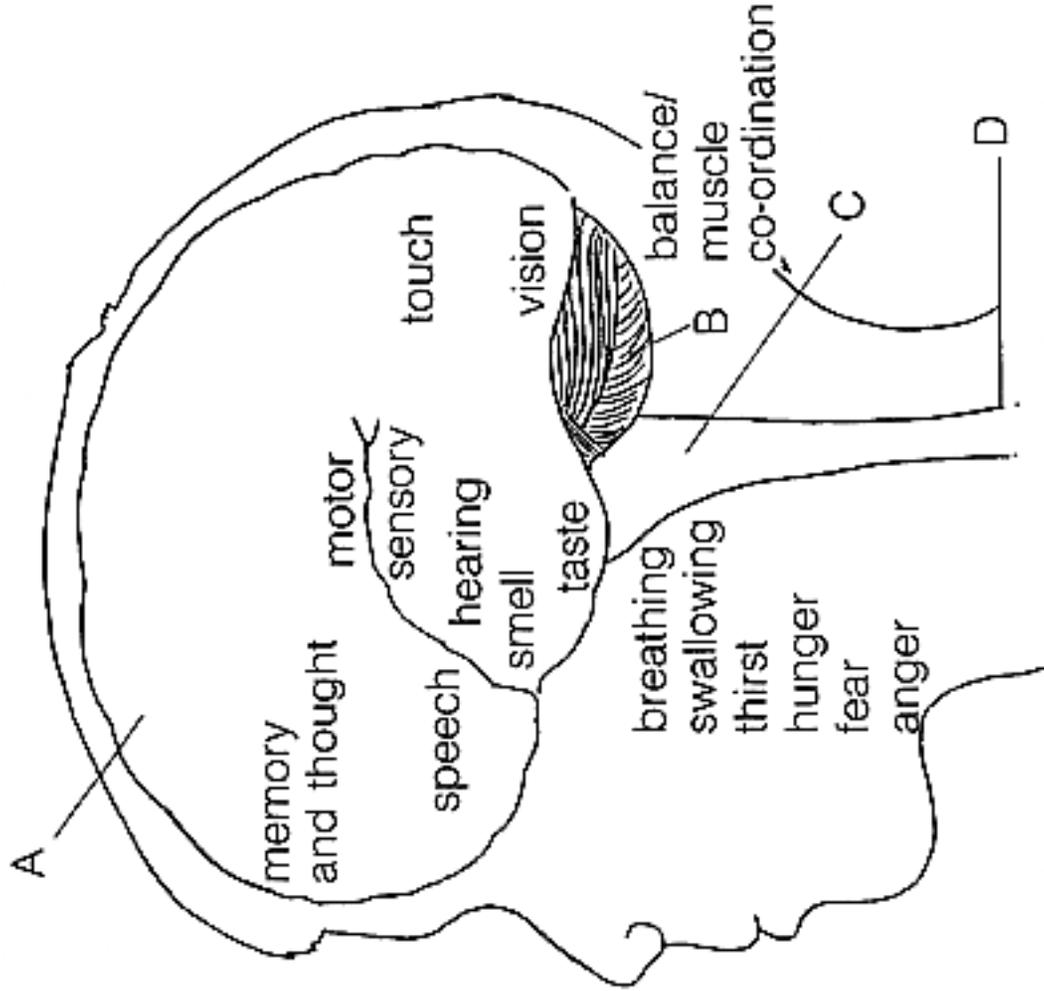


HELP!

The "nerve ending" has to look at the picture, and quickly send a message to the "brain".

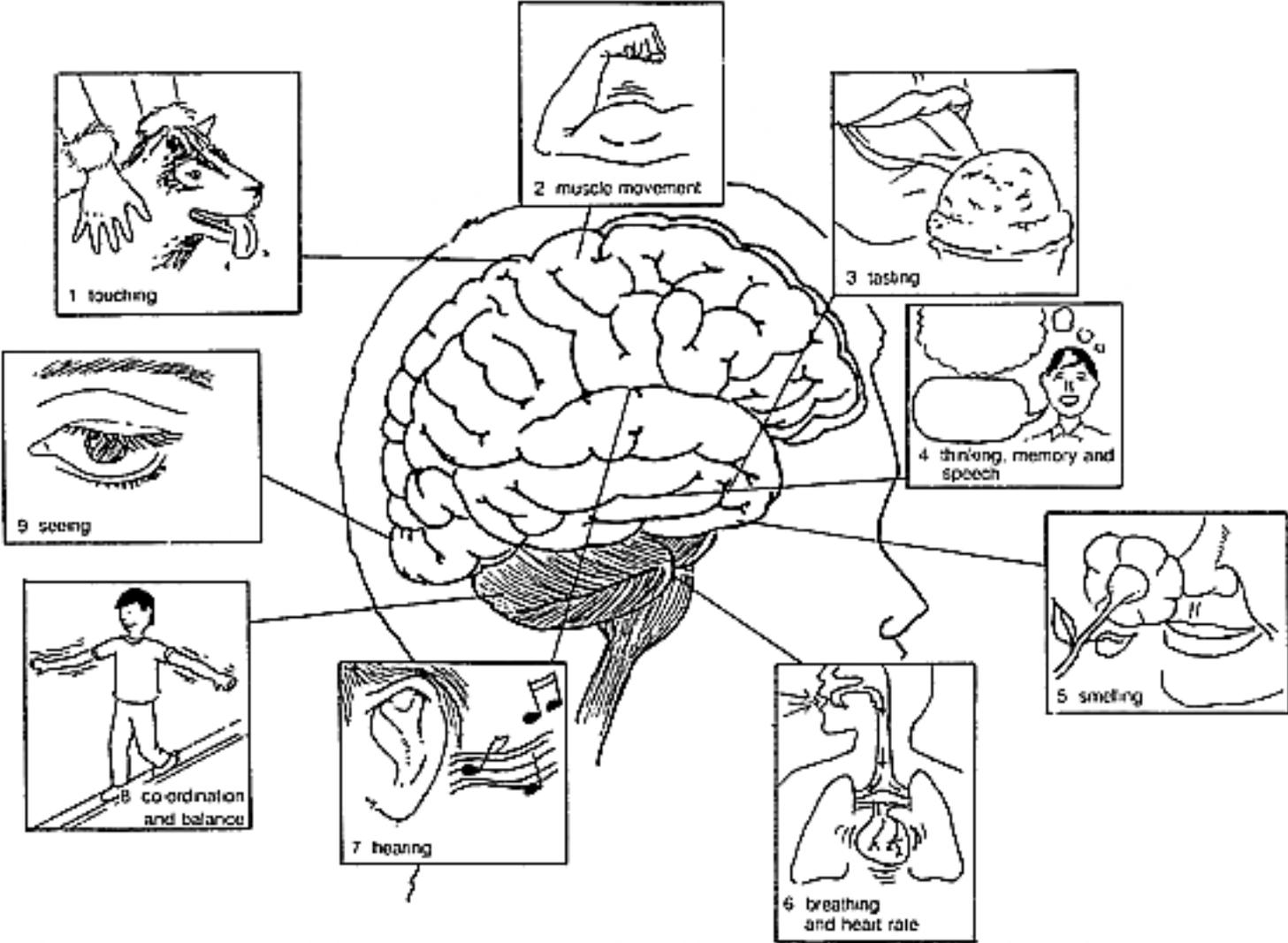
<p>Someone is going to touch a hot stove.</p>	<p>Someone is crossing the road and a truck is coming.</p>	<p>Someone in bare feet is going to walk on broken glass.</p>
<p>Someone fishing catches a fish.</p>	<p>Someone wakes in the middle of the night and smells smoke.</p>	<p>Someone puts a spoonful of burning hot food into his/her mouth.</p>

FUNCTIONS OF THE BRAIN



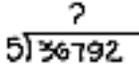
- A. cerebrum
- B. cerebellum
- C. brain stem
- D. spinal cord

MY BRAIN



CONTROL CENTRES OF MY BRAIN

Cut these into individual cards. Decide if the cerebrum, the cerebellum or the brain stem controls each activity.

<p>reading a book</p> 	<p>riding a bicycle</p> 	<p>sneezing</p> 
<p>smelling a flower</p> 	<p>breathing</p> 	<p>doing a math problem</p> 
<p>Skating</p> 	<p>heart beat</p> 	<p>walking to the store</p> 
<p>swallowing your food</p> 	<p>talking to your friend</p> 	<p>catching a ball</p> 
<p>standing up</p> 	<p>telling you that you are hungry</p> 	<p>tasting ice cream</p> 

GROWTH AND DEVELOPMENT

GRADE: 6

LESSON: 6

THEME: BODY SYSTEMS

CONCEPT: THE NERVOUS SYSTEM CONNECTS ALL BODY SYSTEMS

PREPARATION: 1. Resources for research project

VOCABULARY: concussion, epilepsy, meningitis

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>Students will be able to:</p> <p>i) name common problem conditions related to the nervous system</p>	<p>Students:</p> <p>1. Name common problem conditions related to the nervous system. Briefly discuss.</p>	<p>Background Information Page GD72 to GD78</p> <p>Ask students if they have ever had a headache. Brainstorm other problems related to the nervous system. Make a list:</p> <ul style="list-style-type: none">- headache- fainting- concussions (head injuries)- sensory problems, e.g. hearing impairment sight problems- epilepsy (fits)- meningitis- drug impairment

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES	
ii) describe ways to care for the nervous system	2. List ways to care for the nervous system.	<p>Ask students how they take care of the nervous system. Use the sentence pattern:</p> <p>I take care of my nervous system by (not) _____.</p> <p>Use an experience chart:</p>	
		<p>✓</p> <ul style="list-style-type: none"> - wearing helmets when riding motor bikes, skidoos, A.T.Vs - driving these vehicles slowly and carefully - playing in safe places - wearing protective gear when playing contact sports - following safety rules around water, motor vehicles, play equipment, chemicals and medicines - working and playing in smoke free spaces - wearing seat belts in vehicles - getting plenty of rest and sleep - eating balanced meals from the four food groups 	<p>X</p> <ul style="list-style-type: none"> - using drugs/alcohol - falling - suffocating - getting an electrical shock - lack of oxygen i.e. carbon monoxide poisoning, smoking

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	3. Complete a research project on the nervous system.	<p>Individually in pairs or small groups, have students undertake a research project. Ensure resources are available in the school for them to use. Projects might include:</p> <ul style="list-style-type: none">- disorders of the nervous system- statistics of parts of the nervous system e.g., weight of the brain, brain growth, etc- brain dominance- experiments- comparison of animal and human brains- comparison of brains and computers- reflexes intelligence- tension stress- sleeping and dreaming

GROWTH AND DEVELOPMENT

GRADE: 6

LESSON: 7

THEME: DISEASE PREVENTION

CONCEPT: THERE ARE MANY WAYS THE BODY PROTECTS ITSELF FROM DISEASE

- PREPARATION:
1. Paper cup, paper, plastic bag
 2. Overhead transparency of How Germs Enter The Body (Activity Sheet GD57)
 3. Magnifying glasses
 4. Resources for research
-

VOCABULARY: bacteria, virus, mold, contact, contaminated, defence, mucous, membranes, secretions immune, antibodies

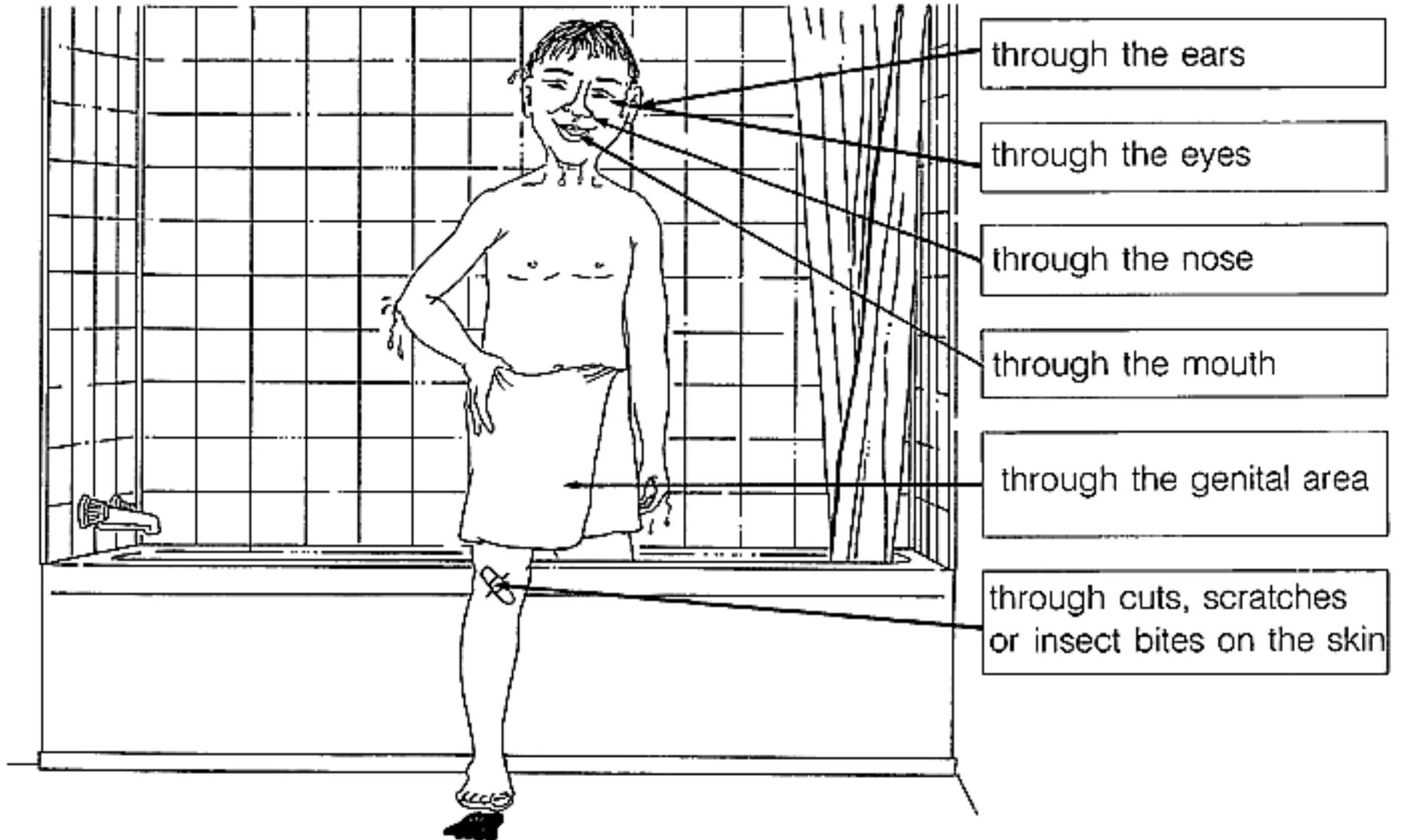
OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify ways in which diseases are transmitted	Students: 1. Identify how a cold is passed from one person to another. 2. Define the terms germ, bacteria virus and moulds. 3. List how diseases are spread. Discuss.	Background Information Page GD79 to GD81 Ask students if they have ever had a cold. Ask them how they got a cold. Use a dictionary and discussion to define the terms. Students should understand that germs are tiny, invisible and living. They live in everything and may cause disease. Bacteria viruses and moulds are types of germs. Ask students how diseases are spread. Have students respond using the sentence pattern: Diseases are spread _____.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES			
ii) name the routes of germ entry into the body iii) identify the body's three lines of defence that protect against disease	4. Simulate the airborne spread of diseases. 5. Identify how germs enter the body. 6. Play 6 pin bowling to simulate the body's lines of defence.	Record student responses using an experience chart as illustrated:			
		Through the air	By personal contact	Through water or food	By animals and insects
		- by coughing - by breathing out - by sneezing	- by touching the sick person - by touching something the sick person has touched, e.g., glass - by dirty hands	- by unclean water - by contaminated water - by contaminated hands	- by animals - by pets - by insects - by flies
		Have students cut paper into tiny pieces. Make a large hole in the bottom of a paper cup. Tape a plastic bag to the end of the cup. Put paper pieces inside the cup. Cough or sneeze into the cup. Observe the spread of germs' into the 'air'.			
		Refer to Activity Sheet GD57. Using the overhead transparency, have students identify how germs enter the body.			
		Set the pins up as follows: <div style="display: flex; justify-content: center; align-items: center; gap: 20px;"> <div style="text-align: center;"> X X X X X X </div> <div style="text-align: left;"> 3rd line of defence 2nd line of defence 1st line of defence </div> </div>			

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES																
	<p>7. Examine the inside of the nose and ear to observe examples of the body's first line of defence.</p> <p>8. Observe the blinking of the eyes as an example of the body's first line of defence.</p> <p>9. Give examples of the body's three lines of defence and how they work to protect the body from disease.</p>	<p>Using magnifying glasses, have students examine inside a partner's nose and ears. They should observe hairs, wax and mucus. Ask the students how this defends the body from disease.</p> <p>Have one student wave something close to their partner's eyes. Observe the blinking reflex.</p> <p>The body is equipped with defences to prevent people from becoming sick. Ask students what other defences the body has.</p> <p>Record information using an experience chart as illustrated:</p> <table border="1" data-bbox="1041 737 2007 1341"> <thead> <tr> <th data-bbox="1041 737 1528 776">First line of defence</th> <th data-bbox="1528 737 2007 776">Function</th> </tr> </thead> <tbody> <tr> <td data-bbox="1041 776 1528 854">- skin</td> <td data-bbox="1528 776 2007 854">- physical barrier to keep germs out</td> </tr> <tr> <td data-bbox="1041 854 1528 932">- mucous membranes</td> <td data-bbox="1528 854 2007 932">- physical barrier to keep germs out</td> </tr> <tr> <td data-bbox="1041 932 1528 1042">- hair in the respiratory system (cilia)</td> <td data-bbox="1528 932 2007 1042">- fine hairs that work with mucus to trap germs and move them to the throat</td> </tr> <tr> <td data-bbox="1041 1042 1528 1149">- body secretions (tears, saliva, gastric juice, mucus)</td> <td data-bbox="1528 1042 2007 1149">- tears wash germs out of the eyes - other chemicals kill germs - mucus traps germs</td> </tr> <tr> <td data-bbox="1041 1149 1528 1256">- reflexes (coughing, sneezing, blinking, tears)</td> <td data-bbox="1528 1149 2007 1256">- get rid of germs from the body - wash germs away</td> </tr> <tr> <th data-bbox="1041 1256 1528 1302">Second line of defence</th> <th data-bbox="1528 1256 2007 1302">Function</th> </tr> <tr> <td data-bbox="1041 1302 1528 1341">- white blood cells</td> <td data-bbox="1528 1302 2007 1341">- surround and dissolve germs</td> </tr> </tbody> </table>	First line of defence	Function	- skin	- physical barrier to keep germs out	- mucous membranes	- physical barrier to keep germs out	- hair in the respiratory system (cilia)	- fine hairs that work with mucus to trap germs and move them to the throat	- body secretions (tears, saliva, gastric juice, mucus)	- tears wash germs out of the eyes - other chemicals kill germs - mucus traps germs	- reflexes (coughing, sneezing, blinking, tears)	- get rid of germs from the body - wash germs away	Second line of defence	Function	- white blood cells	- surround and dissolve germs
First line of defence	Function																	
- skin	- physical barrier to keep germs out																	
- mucous membranes	- physical barrier to keep germs out																	
- hair in the respiratory system (cilia)	- fine hairs that work with mucus to trap germs and move them to the throat																	
- body secretions (tears, saliva, gastric juice, mucus)	- tears wash germs out of the eyes - other chemicals kill germs - mucus traps germs																	
- reflexes (coughing, sneezing, blinking, tears)	- get rid of germs from the body - wash germs away																	
Second line of defence	Function																	
- white blood cells	- surround and dissolve germs																	

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES	
	10. Describe how the body is protected from disease.	Third line of defence	Function
		<ul style="list-style-type: none"> - special white blood cells which produce antibodies 	<ul style="list-style-type: none"> - antibodies are chemicals that kill germs - there are different antibodies to fight each germ that enters the body (the antibodies which the body produces for one type of illness will not work against another)
		<p>Some of this activity will involve research Divide the class into four groups</p> <ul style="list-style-type: none"> - the germs - the first line defenders - the second line defenders - prevention and/or cure <p>Each group has to describe disease and the body. The following points will give each group their direction</p>	
		<ul style="list-style-type: none"> - germs 	<ul style="list-style-type: none"> - how they enter the body - conditions they need to multiply etc.
		<ul style="list-style-type: none"> - first line defenders 	<ul style="list-style-type: none"> - describe outer defences
		<ul style="list-style-type: none"> - second line defenders 	<ul style="list-style-type: none"> - describe inner defences
<ul style="list-style-type: none"> - prevention and/or cure 	<ul style="list-style-type: none"> - describe healthful living to prevent disease - medicines, e.g., antiseptics, penicillin, etc. 		
<p>Have each group present its findings to the class.</p>			

HOW GERMS ENTER THE BODY



GROWTH AND DEVELOPMENT

GRADE: 6

LESSON: 8

THEME: DISEASE PREVENTION

CONCEPT: THE SERIOUS COMMUNICABLE DISEASE AIDS CAN BE PREVENTED

PREPARATION: 1. Prepare a class set of True or False (Activity Sheet GD58A)

VOCABULARY: AIDS, immune system, contact, contaminated, virus

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify the cause, nature and seriousness of AIDS	Students: 1. Review germs and the body defence system. 2. Assess what they already know about AIDS and AIDS virus infections. 3. Identify what causes AIDS.	Background Information Page GD82 to GD84 This is an introductory lesson on AIDS. The topic is dealt with in more detail in Grades 7 and 8, Family Life. Briefly review the previous lesson. Refer to Activity Sheet GD58A. Have students read the statements and check the true or false column. Do <i>not</i> go over the answers yet. The students will complete the last column later in this lesson. A virus causes AIDS. The virus is commonly known as the AIDS virus.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) describe how the disease AIDS is transmitted	6. Tell how the disease is spread from one person to another.	<p>Brainstorm ways in which the disease is spread. The disease is spread in three ways:</p> <ul style="list-style-type: none"> - through sexual contact with an infected person - through an exchange of contaminated blood or blood products - through an infected pregnant woman to her fetus <p>To date (1988) AIDS has been mainly transmitted through sexual contact with an infected person.</p>
iii) identify ways to prevent the spread of AIDS	7. List ways to prevent the spread of AIDS from one person to another.	Brainstorm personal health behaviours which will reduce or prevent the spread of AIDS.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES		
		<p>Record information using an experience chart as illustrated.</p> <p>The spread of AIDS can be reduced or prevented by _____.</p>		
		<p>Sexual Intercourse</p>	<p>Exchange of Blood</p>	<p>Pregnant Woman</p>
		<ul style="list-style-type: none"> - abstaining from sexual intercourse (this behaviour is recommended by health professionals for young people) - having only one sexual partner (who is not infected) - using a latex condom with spermicide, if sexually active 	<ul style="list-style-type: none"> - not abusing intravenous drugs - not sharing intravenous drug needles 	<ul style="list-style-type: none"> - avoiding pregnancy if a person knows or suspects she has the AIDS virus - having an AIDS test, if she suspects she has the AIDS virus
	<p>8. Identify personal responsibilities regarding protection from the AIDS virus</p>	<p>In the same way as they would protect themselves from colds or measles, people have to protect themselves from AIDS. The AIDS virus does not get into the blood by itself. People let it get there.</p> <p>Ask students "Who is responsible for stopping AIDS?"</p>		

TRUE OR FALSE

Directions Read each statement Decide if it is true or false
 Put a cross in the appropriate box
 Save the worksheet for the end of the lesson
 At the end of the lesson. decide if you have changed your mind on any statement
 Write yes or no in the last column
 If 'yes', circle your answer and draw an arrow to the correct column

	True	False	Changed my mind
1. AIDS can be passed from one person to another.			
2. You can always tell when a person has the AIDS virus.			
3. Only men can get AIDS.			
4. Each person has a responsibility to prevent the spread of AIDS.			
5. You can get AIDS by being near a person with AIDS.			
6. At the moment, there is no cure or vaccine for AIDS.			
7. Many people who have the AIDS virus do not know they have the virus.			
8. Mosquitoes can spread the AIDS virus.			
9. The AIDS virus can be spread by shaking hands with an infected person.			
10. A baby can get AIDS.			

TRUE OR FALSE

(Answer Guide)

	True	False
1. AIDS can be passed from one person to another. AIDS is caused by a virus which can be spread from one person to another. It is spread by intimate sexual contact or by an exchange of blood with an infected person. It can also be transmitted from an infected pregnant woman to her baby.	X	
2. You can always tell when a person has the AIDS virus. A person who has the AIDS virus may feel and look healthy for a long time and may have no symptoms or signs of AIDS.		X
3. Only men can get AIDS. Anyone (men, women or children) can get AIDS.		X
4. Each person has a responsibility to prevent the spread of AIDS. AIDS is a communicable disease. Its spread can be prevented by people behaving in a responsible manner. Everyone can play a role in preventing the spread of AIDS.	X	
5. You can get AIDS by being near a person with AIDS. The AIDS virus cannot be spread by casual everyday contact with an AIDS carrier. This includes coughing sneezing or being in the same room as a person with AIDS.		X
6. At the moment, there is no cure or vaccine for AIDS. No cure or vaccine is available for the AIDS virus.	X	
7. Many people who have the AIDS virus do not know they have the virus. It usually takes 6 months to 5 years for people with the AIDS virus to develop the disease. At first they will show no signs of the disease.	X	
8. Mosquitoes can spread the AIDS virus. There is no evidence at present, that any insects spread the virus.		X
9. The AIDS virus can be spread by shaking hands with an infected person. The virus cannot be spread by casual contact i.e. shaking hands, sneezing, coughing, etc.		X
10. A baby can get AIDS. A pregnant woman who has the AIDS virus may give it to her unborn baby.	X	

GRADE 6

TEACHER BACKGROUND INFORMATION

GROWTH AND DEVELOPMENT

THE EXCRETORY SYSTEM

The excretory system consists of the kidneys which form urine; the ureters which carry the urine from the kidneys to the bladder; and the urethra - the exit tube leading from the bladder through the penis in males and through an opening in the vulva in females.

The **kidneys** are two reddish-brown bean-shaped organs. They are located on each side of the backbone just below the diaphragm and in front of your floating ribs. Each kidney is covered by a thin transparent membrane called the **capsule**.

The kidney functions to maintain a chemical balance in your body fluid. The kidney must:

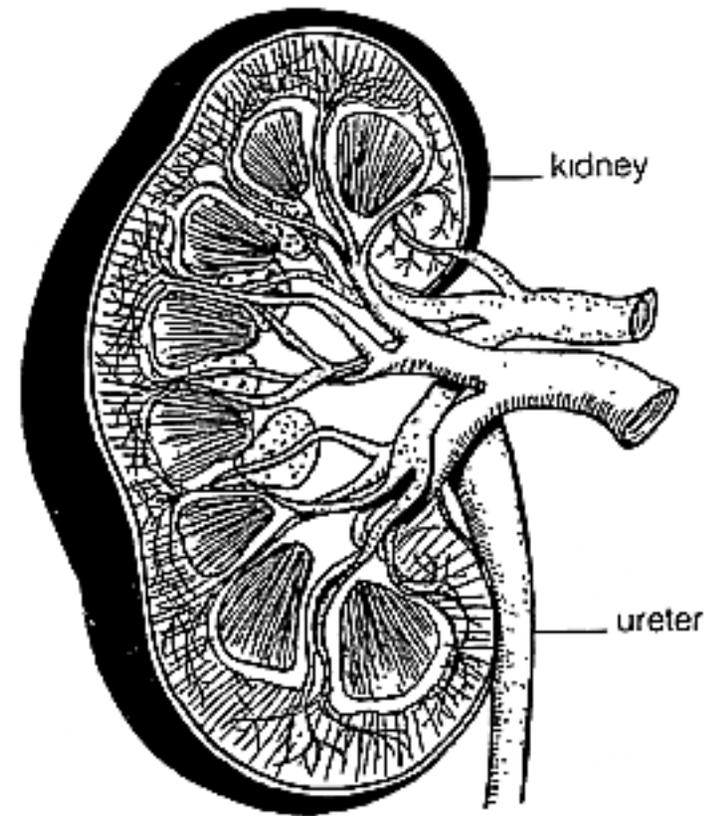
1. Filter excessive water from the blood.
2. Filter waste products (urea) from protein metabolism.
3. Filter excessive salts, sugars and other materials.
4. Maintain osmotic pressure of the blood.
5. Maintain the acid-base balance of the blood.

Basically, the job of the kidney is that of removing excess water, urea, salt and sugar from the blood. About one litre of blood passes through the two kidneys each minute.

The urine is collected within the kidney and passes into a muscular tube, the ureter, 25 cm in length, which conducts the urine to the bladder. In its final form the urine is composed mainly of water, urea and salt. The bladder which collects and stores urine, can hold about one litre of fluid. Urine is passed from the bladder outside the body via the urethra.

Adapted from: Harvey, D. and White, D., (ed.)
Body Systems and Physical Fitness.

Adult kidneys are approximately the size of a man's fist.



COMMON PROBLEM CONDITIONS OF THE EXCRETORY SYSTEM

Problems	Cause	Brief Description
bladder infection	<ul style="list-style-type: none">- bacteria enters bladder from urethra	<ul style="list-style-type: none">- signals frequent urination, burning, pus and/or blood may appear in the urine- medical care is required
kidney infection	<ul style="list-style-type: none">- bacteria or improper immune system response to infection	<ul style="list-style-type: none">- can cause impaired kidney function and lead to kidney failure- infections must be treated- medical care is required
kidney failure	<ul style="list-style-type: none">- infections- blockage- sudden drop in blood pressure- diseases e g , diabetessevere injury	<ul style="list-style-type: none">- a severe condition because body wastes are no longer removed from the body- hemodialysis and/or kidney transplant may be used in treatment
stones		

WAYS TO CARE FOR THE EXCRETORY SYSTEM

Positive health habits related to the excretory system include:

- careful toileting hygiene, females should wipe from front to back to avoid contaminating urethra and/or vagina
 - frequent showers, avoiding heavy use of bubblebaths
 - prompt changing of diapers
 - avoidance of tight fitting leans or slacks
 - use of cotton rather than nylon underwear
 - completing bladder emptying to avoid overdistention of the bladder
 - regular bladder habits (discourage the holding of urine and avoid overdistention of the bladder)
 - adequate fluid intake
 - normal exercise to improve blood circulation
 - avoidance of excessive amounts of highly spiced foods or beverages which may cause frequent urination or burning sensation
- avoidance of severe and prolonged chilling of the body
 - avoidance of self-medication for kidney ailments
 - use of protective pads and avoidance of blows on the back during contact sports
 - prompt treatment by doctors of infections (particularly streptococcal infection)
 - maintenance of normal blood pressure by following these lifestyle practices
 - regular checking of blood pressure
 - decrease in salt and alcohol intake
 - reduction of stress and smoking
 - maintenance of ideal weight for height and frame

THE NERVOUS SYSTEM

The nervous system consists of the brain, the spinal cord and the nerves.

The brain is the centre of the body's nervous system. The major parts of the brain are the cerebrum, the cerebellum and the brain stem.

The cerebrum is the largest part of the brain. It controls learning, thinking, creativity, memory, body movements and the senses. It is divided into two hemispheres.

The cerebellum is found below and to the back of the cerebrum. It controls balance, posture and muscle co-ordination.

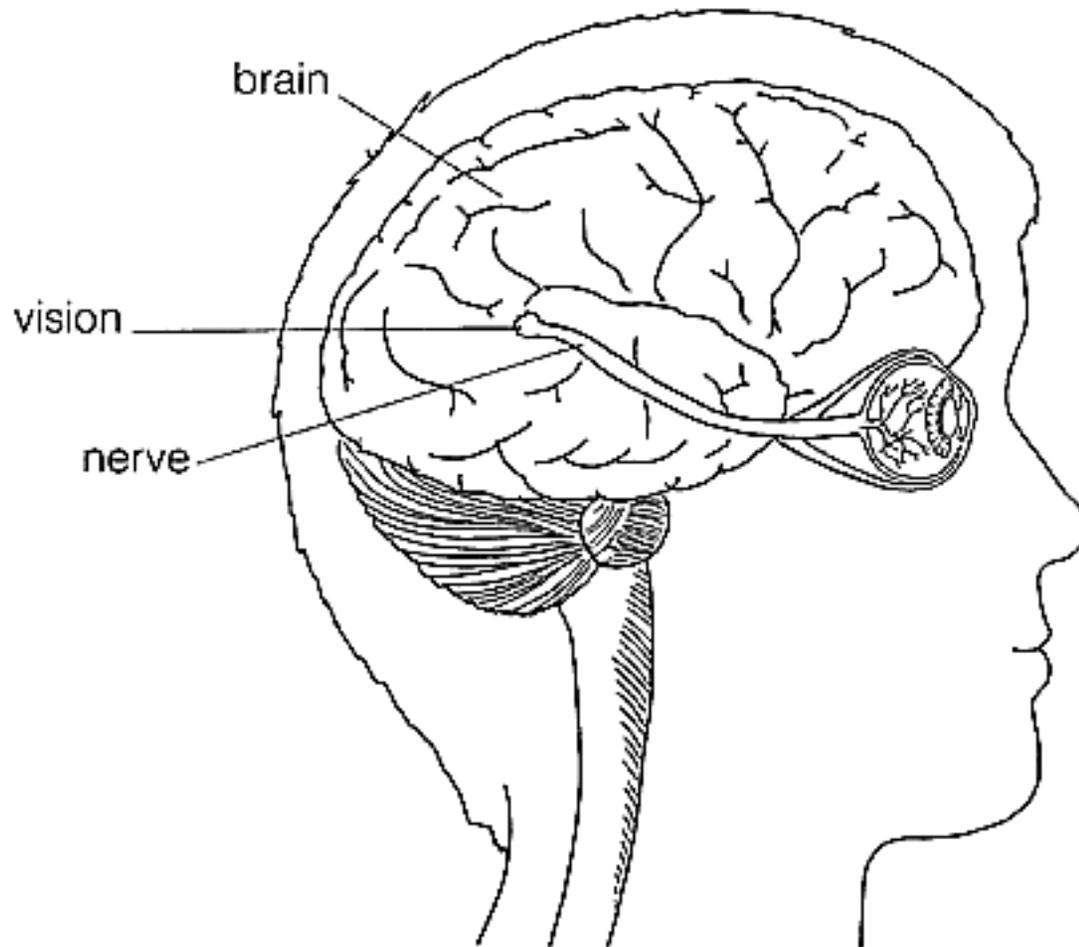
The brain stem connects the cerebrum with the spinal cord. This centre controls breathing, heart rate, swallowing, hunger, thirst, fear, anger, wakefulness and coughing.

The spinal cord runs from the brain through the spine and down the back. The nerves branch out from the spinal cord to all body parts. These nerves carry brain signals from the spinal cord to other body parts. The nerves also carry signals from the body to the spinal cord, which brings them to the brain.

Because the brain and spinal cord are so vital they have protective coverings. The bony skull (cranium) surrounds and protects the brain. The skull is tightly jointed with several protective membranes and fluid that protect the brain from shocks and sudden movements. The spinal cord is enclosed by a bony, vertebral column known as the spinal column.

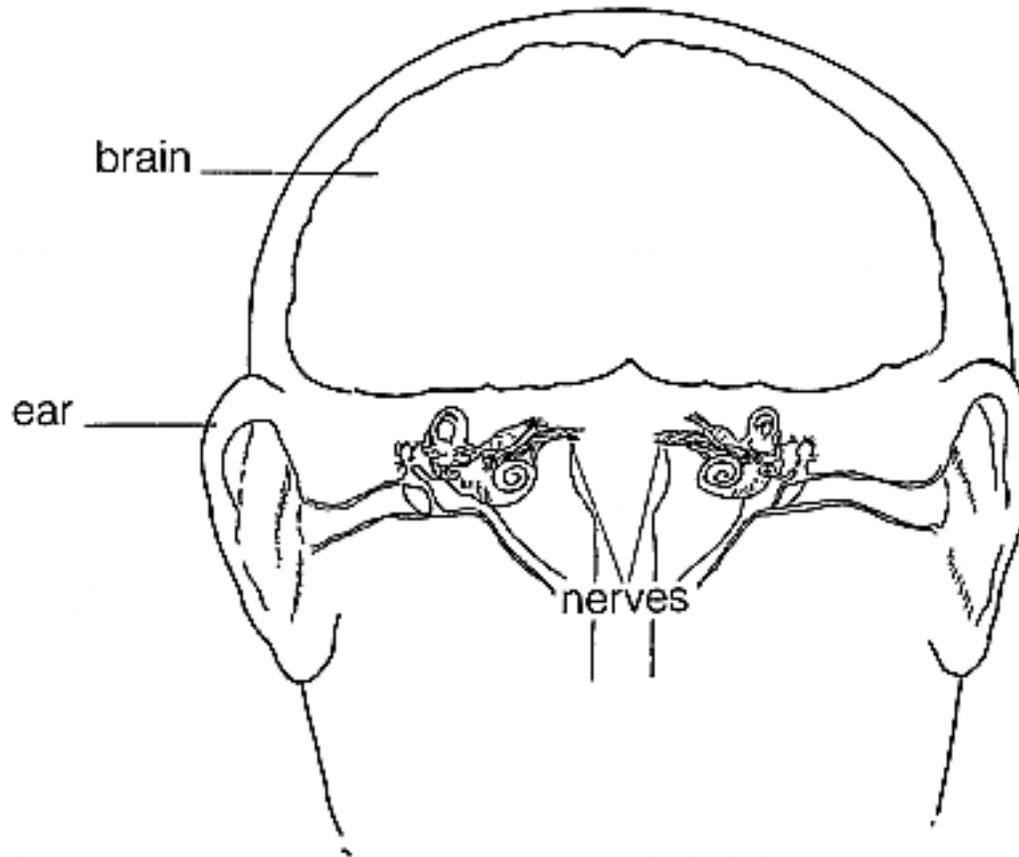
HOW WE SEE

A nerve at the back of the eye goes to the brain carrying sight messages. The brain tells you what you see.



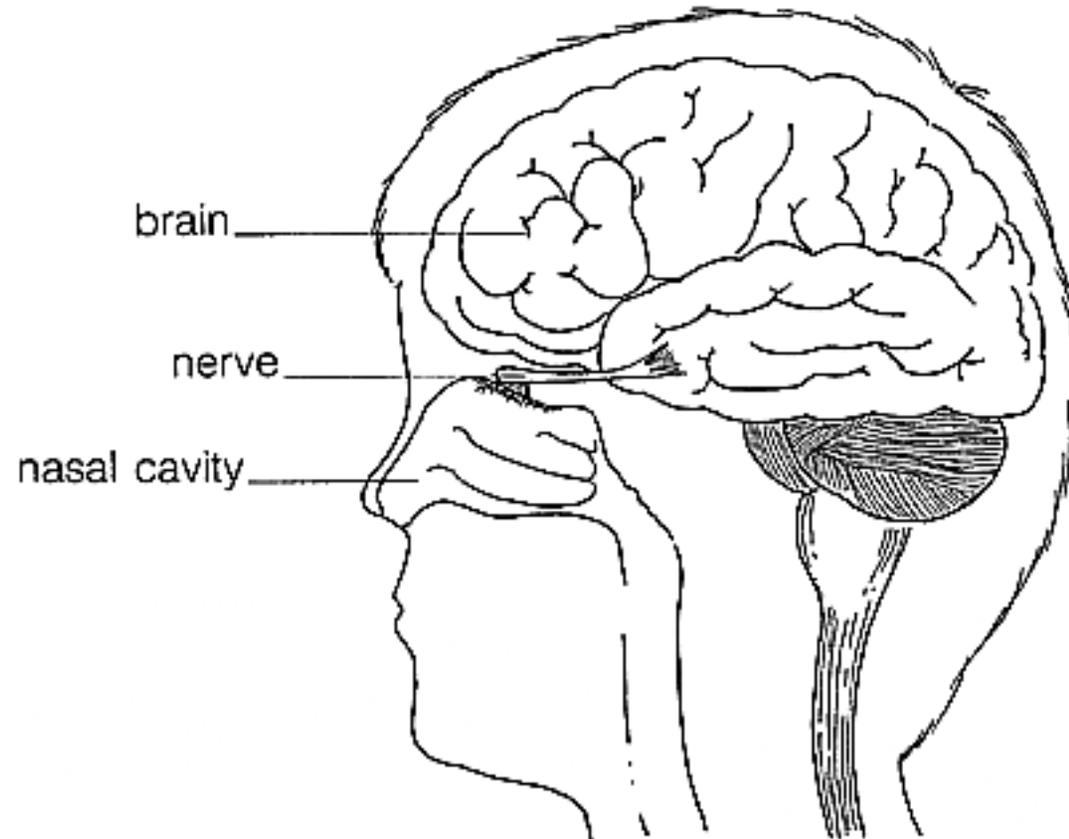
HOW WE HEAR

A nerve at the back of the ear (inside the head) runs to the brain carrying sound messages. The brain tells you what you hear.



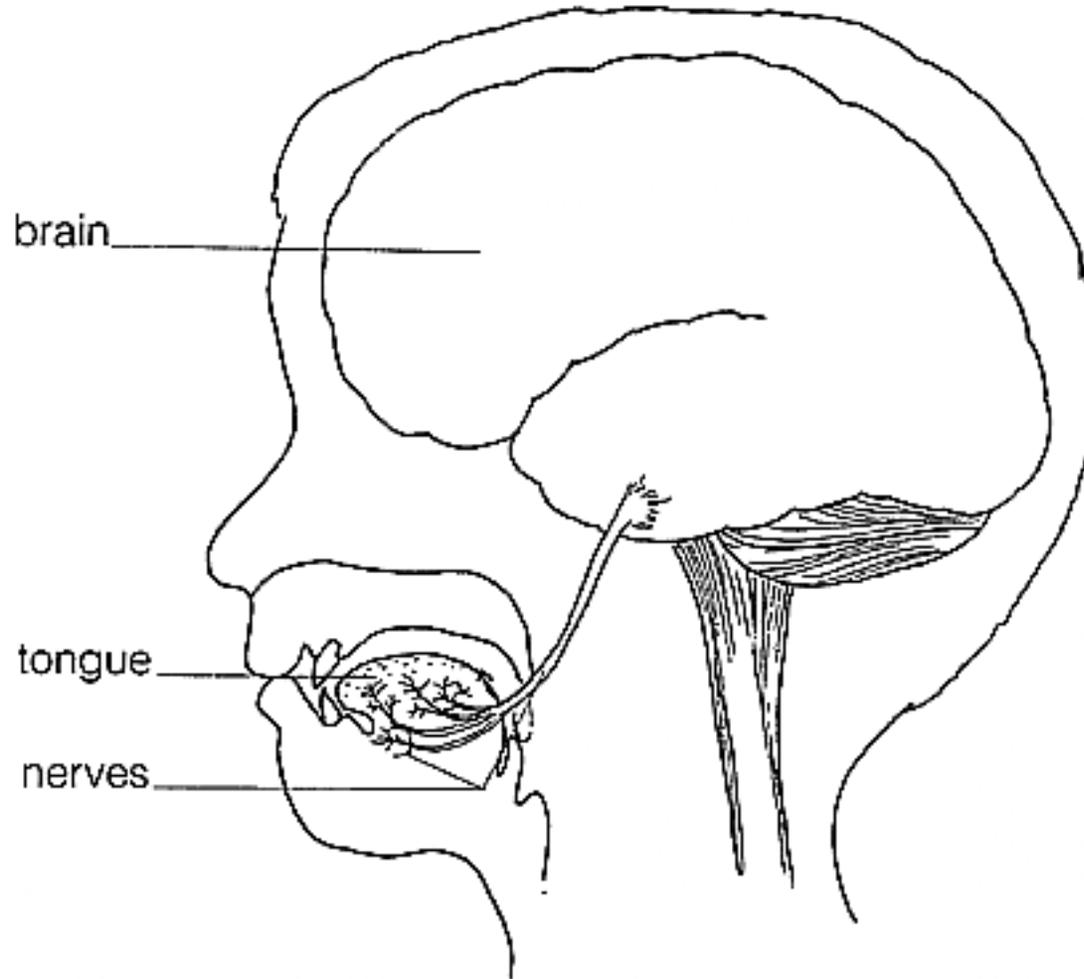
HOW WE SMELL

A nerve, with many branches in the nose, carries odour messages to the brain. The brain tells you what you smell.



HOW WE TASTE

Inside the tongue are small nerves which join a large nerve running to the brain. The tongue nerve carries a taste message to the brain. The brain tells you what you taste.



COMMON PROBLEM CONDITIONS OF THE NERVOUS SYSTEM

Problems	Cause	Brief Description
headaches	- stress, eyestrain, colds, infected sinuses, allergies, tumor, disease	- common pains in forehead, back of head and neck, behind eyes
concussion (head injuries)	- severe blow to head	- possible loss of consciousness, severe headache, blurred vision
hearing impairment	- infection (i.e. measles), damage (i.e. noise), obstruction	- gradual loss of hearing or distortion of hearing
meningitis	- germs (bacteria or virus)	- inflammation of membranes around the brain and spinal cord, contagious, stiff neck, fever, headache, nausea, vomiting
spinal cord injury	- accidents e.g., motor vehicles, falls	- loss of ability to move a part of the body due to nerve or muscle damage (paralysis)
snow blindness	- not wearing proper eye protection in bright sunlight	- sore eyes, vision impairment
epilepsy	- sudden surge of brain impulses	- convulsions - violent body shaking and loss of consciousness, small convulsions, clouded consciousness
intoxication, mood alterations	- alcohol and other drugs	- depresses or speeds up brain function which can cause lessening of self control, muscle co-ordination change, speech and vision impairment, memory and intelligence damage, coma - kidney damage - mental retardation in unborn babies caused by pregnant woman's drinking

WAYS TO CARE FOR THE NERVOUS SYSTEM

Positive health habits related to the nervous system include:

- using a helmet when riding all terrain vehicles
- driving slowly and carefully when riding all terrain vehicles
- avoiding drugs, caffeine, alcohol, tobacco, inhalants (glues, gasoline)
- playing in safe places to avoid falls, suffocation, drowning, electrical shock
- using proper sports equipment in contact sports
- following safety rules around water, motor vehicles, play equipment, medicines and chemicals
- taking care of sensory organs
- using seat belts when in motor vehicles
- choosing smoke-free places to work and play whenever possible
- eating nutritious foods
- finding time to rest, sleep and relax

DISEASES

Every day, people are exposed to many microbes (germs). Some people's health is affected by these microbes, while other people's health is not.

Germs are tiny, living things that are invisible to the human eye, but can be seen with a microscope. There are two main types of microbes.

bacteria: one cell, most common form of life, grow in water, soil, air and other living things

viruses: smaller than bacteria, grow within other living cells.

Whether a person develops a disease is related to:

- the number of germs s/he is exposed to;
- the kind of germ (some are more infectious and harmful than others);
- how healthy s/he is.

Germs enter the body by a number of different routes:

- through the air (e.g. sneezing);
- through untreated drinking water;
- through food which has been improperly prepared or stored;
- by insects;
- through cuts;
- through body orifices e.g. eyes, mouth, ears etc.

The body has a number of ways of protecting itself from disease:

- first line of defence e.g. skin, mucous membranes, hair (cilia), body secretions, reflexes
- second line of defence e.g. white blood cells which surround and dissolve germs
- third line of defence e.g. production of antibodies. (Antibodies are produced in the blood to fight germs that enter the body. Each antibody fights a different germ.)

Once a person's body has developed antibodies against a specific disease, that person is immune to the disease.

DISEASE PREVENTION

Positive health habits related to the prevention of disease include:

- covering nose or mouth when sneezing or coughing,
- covering/refrigerating food,
- properly washing and cooking food,
- protecting oneself from insect bites,
- not sharing dishes, combs, etc ,
- washing hands with soap and water before eating and after going to the bathroom,
- properly caring for cuts,
- staying away from other people if one is sick

OTHER DISEASES WITH WHICH STUDENTS MAY BE FAMILIAR

Problem	Communicable	Cause	Brief Description
AIDS	Yes	<ul style="list-style-type: none"> - virus - spread from person to person usually by sexual contact 	<ul style="list-style-type: none"> - break down of the body's immune system which makes the person susceptible to many different diseases
arthritis	No	<ul style="list-style-type: none"> - Unknown 	<ul style="list-style-type: none"> - swelling and inflammation of a joint or joints causing pain and stiffness
bronchitis	No/Yes	<ul style="list-style-type: none"> - irritants - spread from person to person by direct contact 	<ul style="list-style-type: none"> - an inflammation of the mucous membrane of the bronchi with fluid and thick mucus accumulation; - signals cold, hoarseness, coughing
cancer	No	<ul style="list-style-type: none"> - environmental, hereditary, biological factors 	<ul style="list-style-type: none"> - normal body cells become malignant
chicken pox	Yes	<ul style="list-style-type: none"> - spread from person to person by direct contact, virus 	<ul style="list-style-type: none"> - slight fever, headache, backache, loss of appetite, small red spots on the back or chest, spots enlarge and a vesicle of clear fluid appears, itchy
common cold	Yes	<ul style="list-style-type: none"> - spread from person to person by direct contact, virus 	<ul style="list-style-type: none"> - upper respiratory infection, especially of nose and throat, - signals headache, runny/stuffed nose, watery eyes, fever, cough
diabetes mellitus	No	<ul style="list-style-type: none"> - genetic and/or environmental predisposition, possible virus 	<ul style="list-style-type: none"> - inability to make or utilize insulin to break down blood sugar - a controlled diet and/or insulin injections may be necessary
ear infection	Yes	<ul style="list-style-type: none"> - environmental predisposition, virus, bacteria, spread from person to person by direct contact 	<ul style="list-style-type: none"> - severe pain, fever, draining of the ear
emphysema	No	<ul style="list-style-type: none"> - smoking, pollution 	<ul style="list-style-type: none"> - lung disorder in which the bronchioles become plugged with mucus, onset - 40-80 years old
German Measles (Rubella)	Yes	<ul style="list-style-type: none"> - spread from person to person by direct contact, bacteria 	<ul style="list-style-type: none"> - slight cold, some fever, sore throat, lymph nodes swell, rash on face and scalp, then to body and arms, spots do not run together - rash fades in 2-3 days

OTHER DISEASES WITH WHICH STUDENTS MAY BE FAMILIAR (CONTINUED)

Problem	Communicable	Cause	Brief Description
impetigo	Yes	- spread from person to person by direct contact, bacteria	- thin walled vesicle which ruptures and is covered by a honey-yellow crust, spreads in circles on exposed parts of the body
influenza (flu)	Yes	- spread from person to person by direct contact, virus	- fever, chills, headache, sore throat, cough, intestinal disorders, muscular pain
lice (pediculosis) (head lice)	Yes	- spread from person to person by direct contact	- visible white specks in the hairs of the back of the head, glands behind ears and back of the neck are enlarged, itching
meningitis	Yes	- spread from person to person by direct contact	- headache, vomiting, nausea, stiff neck, chills, fever, irritability, confusion and later convulsions
mumps	Yes	- spread from person to person by direct contact	- swelling of glands in the neck, pain, tenderness, fever, loss of appetite, back pains, headache
red measles	Yes	- spread from person to person by direct contact	- tired and uncomfortable, running nose, fever, pains in back and head, small white dots on the gums, rash at the hairline spreading down the body, spots may run together to form blotches
pneumonia	Yes	- virus, bacteria	- an infection of the lung tissue often accompanied by fluid, - signals breathing difficulty, fever and coughing
scabies	Yes	- spread from person to person by direct contact	- intense itching, more often at night, usually one month after initial infection
strep throat	Yes	- spread from person to person by direct contact, bacteria	- sore throat, headache, red pharynx, enlarged tonsils, flushed face
tuberculosis (TB)	Yes	- spread from person to person by direct contact	- mainly a disease of the lungs with development of lesions, - signals fever, weight loss, cough, sputum, blood, pain, difficult to breathe
tonsillitis	Yes	- spread from person to person by direct contact	- tonsils act as a defence against respiratory infections, signals include sore throat, enlarged tonsils, difficulty in swallowing

AIDS INFORMATION (January, 1988)

What is AIDS?

AIDS is an acronym which stands for Acquired Immune Deficiency Syndrome.

AIDS is a new and frightening disease which is caused by a virus known as HIV...Human Immunodeficiency Virus (also LAV, HTLV, ARV). The virus attacks the t-helper cells, a group of white blood cells that are an important part of the human immune system. Once they have been destroyed, the person is susceptible to a variety of opportunistic infections which are normally extremely rare, but are common in people with this disease (e.g. Kaposi's Sarcoma, Pneumocystis Carinii Pneumonia, etc.). Researchers have recently identified a second virus (HIVII) which also causes AIDS, but is less widespread than the original virus.

One of the reasons why AIDS is so frightening is that there is no cure and no vaccine. There are some new drugs, including one called AZT, that help prolong the life of an AIDS patient but they are still in the trial stage and they do not stop the progression of the disease. There is a tremendous amount of research being done but it is unlikely that there will be a vaccine for a number of years. About half the people who have developed AIDS have died.

Where did AIDS come from??

The disease probably started in Africa. The first documented case in Africa was in the mid-70's in a species of monkey, called the green monkey. It was probably transmitted to humans through a bite since it is common for people to have these monkeys as pets. The disease is not fatal to monkeys, but in humans it is deadly. The disease spread through the population in Central Africa (e.g., Zaire) and slowly spread across to Haiti via migrant workers.

It most likely reached the U.S. in 1979. The first case of the disease in the States was in 1981. It probably reached Canada sometime in 1981, since the first case in Canada was identified in 1982.

What are the present AIDS statistics in Canada?

There are currently about 59,832 people with AIDS in the world, 41,770 in the U.S. and about 1303 in Canada (as of Oct 5, 1987).

Canada

SEX	ALIVE	DEAD	TOTAL
Adult male	588	624	1212
Adult female	29	36	65
Infant male	3	10	13
Infant female	5	8	13
Totals	625	678	1303

International

North America	43,657
Europe	6,249
Asia	175
Oceania	628
Africa	5,126
South and Central America	3,997
Total	59,832

For each person with the disease AIDS, scientists estimate that there are from 50 to 100 people who are infected with the virus.

Normally when the body is invaded or exposed to a virus such as a cold virus, the body's immune system comes into play, producing antibodies against the virus which help to combat the invader. In the case of HIV, the virus which causes AIDS, it invades the body, and after a period of time, antibodies to the virus are produced. The difference is that these antibodies are not effective in controlling the virus. Instead, they serve as an indicator that the person has been infected with the HIV virus. Although there is a lag time after exposure, before antibodies can be detected, the infected person can still pass the virus on to others at this time. Some people never produce antibodies but are carriers of the virus.

Who can get AIDS?

AIDS can affect anyone. In Africa, 50% of people with the disease are women. When AIDS first reached North America, and started to affect homosexuals, it became known as "The Gay Plague". However, the incidence of AIDS among the heterosexual population is increasing rapidly.

High risk groups

The majority of the people with AIDS in North America are still homosexual or bisexual men. Although intravenous drug abuse is not as big a problem in Canada as it is in the U.S., people who share drug needles are at high risk of contracting the AIDS virus. People who received massive blood transfusions between 1979 and 1985 represent another high risk group. Sexual partners of any of these people are also at risk. Most of the children who have the disease have contracted it from infected parents, either prenatally or during birth itself. These are the "High Risk Groups".

How do people get AIDS?

Most people are not in danger of becoming infected with the AIDS virus. AIDS is hard to get. It is not nearly so infectious as the flu, colds or measles.

It is not spread by casual contact such as touching, coughing, sneezing, handling food, sharing work or living space or from toilets. It is not spread from donating blood.

AIDS is spread from an infected person to an uninfected person through the exchange of blood, semen and vaginal fluid. This is usually through sexual intercourse. The virus gets into the blood through small cuts or damage to the lining of the vagina, penis or rectum. The rectum is especially liable to be damaged during intercourse.

It can also be spread when IV drug abusers share needles.

Although there have been a few case studies suggesting that the AIDS virus is transmitted through breastmilk, these are *not* scientifically documented.

How do people protect themselves against AIDS?

People who have been in a monogamous relationship for at least the past six years and who don't inject illegal drugs, are not at risk, as long as they continue to have sex only with each other.

If the AIDS virus is present, some sexual practices are more likely than others to allow transmission of the virus. Some activities are completely safe, others are extremely risky, others have some risk associated...

- i) **completely safe:** dry kissing, hugging, massage, mutual masturbation, and other activity that does not allow blood, semen, or vaginal fluid to enter the body are completely safe.
- ii) **low risk:** French kissing - although small amounts of the virus have been found in saliva in laboratory situations, there are no known cases of people who have been infected this way.
- iii) **moderate risk:** oral sex - there is some risk of the virus being transmitted from vaginal fluid or seminal fluid to cuts in the mouth.
- iv) **very high risk:** anal sex - the lining of the rectum is quite delicate and easily torn. This usually happens during anal intercourse, even though the individual may not be aware of it. The virus is passed from the semen of the infected person to the blood of the uninfected person through these tiny cuts.

Vaginal intercourse is not as dangerous but the virus can pass from woman to man and vice versa.

People can protect themselves from infection by practising behaviours which help prevent or reduce the spread of AIDS.

- i) **abstinence:** Since AIDS is transmitted usually through sexual intercourse, people who abstain from sexual activity are at low risk of contracting the disease. This method is effective and is recommended by health professionals for young people.

If people are sexually active

- ii) ***knowing their sexual partner:*** Abstaining from casual sex - knowing the person well and being able to communicate openly about past sexual practices will not ensure safety, but will reduce the risks.

- iii) ***limiting the number of sexual partners:*** The more sexual partners a person has, the less they are likely to know whether or not their partner is infected.

- iv) ***using a condom and spermicide properly:*** If people engage in sexual activities which could involve the exchange of bodily fluids, e.g., vaginal, anal or oral sex, condoms and spermicide should be used. Condoms are not foolproof. Each year one in ten couples who use condoms as a means of birth control have a pregnancy. However, condoms, when used properly do reduce the risk of transmitting the virus. Latex condoms, (not those made from animal membrane), used in conjunction with a spermicide which contains Nonoxynol-9, is effective in killing the virus, and are recommended by health professionals.

Is there a test for AIDS?

Several types of tests have been developed to detect the HIV antibody. These tests will indicate if a person's body has developed the antibody to the AIDS virus. When a positive test is found, the test is repeated, and then followed with a different test procedure. (If the result is consistently positive, the person is considered positive for the antibodies to HIV.)

The test is highly accurate when used on a high risk population. It is not at all accurate when used on the general population. In a group of low risk people, the test procedure produces a high percentage of what are called "false positive" results, i.e., the test indicates that people have the disease, when, in fact, they do not have it. The consequences of this may be extremely harmful. Therefore, testing is recommended for people in high risk groups.

Resources for AIDS education

Further information on AIDS can be obtained from the following agencies:

N.W.T. AIDS Program
Dept. of Health
Govt. of the N.W.T.
P.O. Box 1320
Yellowknife, N.W.T.
X1A 2R3
Phone: (403) 873-7017

National AIDS Centre
Health and Welfare Canada
LCDC Building
Tunney's Pasture
Holland Ave.
Ottawa, Ont.
K1A 0L2
Phone: (613) 957-1774

Otto Schaefer Health Library and Resource Centre
Dept. of Health
Govt. of the N.W.T.
P.O. Box 1320
Yellowknife, N.W.T.
X1A 2L9
Phone: (403) 873-7713

Family Life Educators
Dept. of Health
Govt. of the N.W.T.
P.O. Box 1320
Yellowknife, N.W.T.
X1A 2L9
Phone: (403) 920-7711

Your local Nursing Station/Health Centre/Hospital

GRADE 6

FAMILY LIFE

THE FAMILY LIFE UNIT

INVOLVEMENT OF PARENTS

Parents are the primary educators of their children on family life education. Schools should play a supporting role to supplement parental education.

Generally, most parents support family life education in school. However, they may have a number of questions about the program before they will give that support. For that reason, it is vital for schools to involve parents in discussing the unit, *before using the materials*.

Parents must be given an opportunity to find out what will be taught in the lessons, to meet the teachers (and other resource people) who will be delivering the program, and to ask questions. This can be done most effectively by holding a parent information session.

This should include:

- the principal of the school
- teachers who will be teaching the lesson
- any resource people, such as the community health nurse, who might be involved with the lessons.

Most parents attending the meeting want to find out about the content, objectives and methods used in the unit. Basic information during the session should include:

- a brief outline of the program
- a sample of some of the activities in which students will participate
- sample handouts
- copies of any activities in which parents will participate during the evening
- translation of goals, etc., as necessary
- viewing of any films which may be used

It is important to emphasize that the purpose of the Family Life unit is to support, and not to replace, the parent or family role and responsibility. The parent information session is one important way for teachers to show that they want and welcome parental support, involvement and concern.

Parent meetings are often a good opportunity to initiate ongoing parenting groups. Parents may decide to meet regularly during the year to discuss topics related to Family Life or other health programs in the school. The G.N.W.T. Family Life Education Consultants in the Department of Health may be able to assist in the development of parent groups.

Following the meeting, parents will be able to decide whether they want their children to be involved in the lessons.

PARENTS, WHO DO NOT WISH THEIR CHILDREN) TO PARTICIPATE IN THE LESSONS, MAY INDICATE TO THE SCHOOL THAT THEY WILL BE WITHDRAWING THEIR CHILDREN) FROM THIS PARTICULAR UNIT PARENTS MUST MAKE THE FINAL DECISION.

Schools must make alternative arrangements for students who are withdrawn from these classes.

In order to withdraw their children) from the classes, parents must sign a withdrawal form (see sample).

FAMILY LIFE CLASSES

NAME _____

GRADE _____

I do not wish _____ to participate in the Family Life classes which will be offered by the school in the near future.

Parent/Guardian signature

Date

Because of the need to foster a positive classroom atmosphere, teachers need to take time to get to know their students. Teachers should teach the Mental and Emotional Well-Being and the Growth and Development units before introducing the Family Life lessons. Many of the skills which students will be developing in the Mental and Emotional Well-Being unit, such as decision-making skills, communication skills, relationship-building and coping skills, will assist in the development of an atmosphere conducive to effective Family Life education.

FAMILY LIFE

GRADE: 6

LESSON: 1

THEME: FAMILIES

CONCEPT: AS CHILDREN GROW, THEIR RESPONSIBILITIES AND RELATIONSHIPS WITHIN THE FAMILY CHANGE

PREPARATION: 1. Prepare a class set of "That s Responsibility" poem (Activity Sheet FL53)
2. Materials for project cubes

VOCABULARY: responsibilities, responsible

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify their responsibilities within the family	Students: 1. Learn the "That's Responsibility" poem. 2. Identify the responsibilities of he person in the poem. 3. Identify responsibilities which they have within the family.	Background Information Page - Refer to Activity Sheet FL53. Ask students what responsibilities they have at home. Have students respond using the sentence pattern: In my family, I am responsible for _____.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES									
ii) describe how responsibilities change with age	4. Identify things a baby may be responsible for. 5. Identify things a child may be responsible for. 6. Identify things a teenager may be responsible for. 7. Identify things an adult may be responsible for.	Ask students what responsibilities babies have. Record student responses in column 1 of an experience chart as illustrated:									
		<table border="1"> <thead> <tr> <th data-bbox="1060 375 1297 418">Baby</th> <th data-bbox="1297 375 1524 418">Child</th> <th data-bbox="1524 375 1766 418">Teenager</th> <th data-bbox="1766 375 2020 418">Adult</th> </tr> </thead> <tbody> <tr> <td data-bbox="1060 418 1297 711">- no responsibilities</td> <td data-bbox="1297 418 1524 711"> - brushing teeth - getting dressed - tidying up toys </td> <td data-bbox="1524 418 1766 711"> - cleaning own room - earning pocket money looking after younger brother or sister </td> <td data-bbox="1766 418 2020 711"> - looking after family - providing for family - being a role model </td> </tr> </tbody> </table>	Baby	Child	Teenager	Adult	- no responsibilities	- brushing teeth - getting dressed - tidying up toys	- cleaning own room - earning pocket money looking after younger brother or sister	- looking after family - providing for family - being a role model	
Baby	Child	Teenager	Adult								
- no responsibilities	- brushing teeth - getting dressed - tidying up toys	- cleaning own room - earning pocket money looking after younger brother or sister	- looking after family - providing for family - being a role model								
		Have students discuss the chart using the sentence pattern: A baby may be responsible for _____. Add student responses to the experience chart started in Student Activity 4. Have students respond using the sentence pattern: A child may be responsible for _____. Add student responses to the experience chart started in Student Activity 4. Have students respond using the sentence pattern: A teenager may be responsible for _____. Add student responses to the experience chart started in Student Activity 4. Have students respond using the sentence pattern: An adult may be responsible for _____.									

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES				
ii) describe how relationships with other family members change with age	8. Describe how responsibilities change as people in the family get older. 9. Describe how changing responsibilities within the family affect relationships. 10. Make project cubes on changing responsibilities.	<p>People have more responsibilities as they get older.</p> <p>Young people with more responsibilities are becoming:</p> <ul style="list-style-type: none"> - less dependent on parents - more independent <p>Brainstorm how their relationships with specific family members have changed.</p> <p>Record student responses using an experience chart as illustrated.</p> <table border="1" data-bbox="1184 813 2018 927"> <thead> <tr> <th data-bbox="1184 813 1598 850">Younger Family Members</th> <th data-bbox="1598 813 2018 850">Parents</th> </tr> </thead> <tbody> <tr> <td data-bbox="1184 850 1598 927"> <ul style="list-style-type: none"> - role models - care giver </td> <td data-bbox="1598 850 2018 927"> <ul style="list-style-type: none"> - less dependent - questioning authority </td> </tr> </tbody> </table> <p>In small groups, have students make project cubes to display information about changing responsibilities.</p> <div data-bbox="1331 1057 1919 1422"> </div>	Younger Family Members	Parents	<ul style="list-style-type: none"> - role models - care giver 	<ul style="list-style-type: none"> - less dependent - questioning authority
Younger Family Members	Parents					
<ul style="list-style-type: none"> - role models - care giver 	<ul style="list-style-type: none"> - less dependent - questioning authority 					

THAT'S RESPONSIBILITY

Helping when we sweep the floor;
Buying groceries from the store;
Looking after Ben, who's four;
That's responsibility.

Helping teacher to clean up;
Giving water to my pup;
Washing up my dirty cup;
That's responsibility.

Helping Pat, who's cut her knee;
Baking bannock for our tea;
Doing my jobs in the family;
That's responsibility.

Heather Nolsoe
Helen Balanoff



FAMILY LIFE

GRADE: 6

LESSON: 2

THEME: FAMILIES

CONCEPT: ELDERS HAVE AN IMPORTANT ROLE IN FAMILIES

PREPARATION:

1. Invite an elder to visit the class
2. Organize an elders' tea
3. Tape recorders, cameras for interviewing

VOCABULARY: experience

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify the importance of elders in the family	Students: 1. Invite an elder from the community to come to the class to talk about his/her life, how it has changed and some special moments with his/her family. 2. Describe the role of elders in the family.	Background Information Page - Have the students prepare questions to ask the elder. The questions should later help students to determine the role of elders. Ask students about the roles of elders. Have students respond using the sentence pattern: Elders _____ (give advice) _____.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>3. Explain why elders are important in families.</p> <p>4. Organize a tea party for elders in the community.</p> <p>5. Make a class book entitled "Our Elders".</p>	<ul style="list-style-type: none"> - give lots of love - look after children - teach younger people - offer support - listen and understand - tell about the past - have a lot of experience <p>Ask students what it would be like if there were no elders, how they would learn about the past, etc.</p> <p>Have students respond using the sentence pattern:</p> <p style="padding-left: 40px;">Elders are important because they _____ _____.</p> <p>Prior to the tea, have students decide on some questions which they can ask elders. During the tea, have students interview/photograph the elders.</p> <p>Use photos and information from the tea party and the recorded student responses from Student Activity 3 to make into a class book.</p> <p>Share this book with other classes.</p>

FAMILY LIFE

GRADE: 6

LESSON: 3

THEME: HUMAN DEVELOPMENT
AND REPRODUCTION

CONCEPT: THE ENDOCRINE SYSTEM REGULATES AND CONTROLS A VARIETY OF BODY ACTIVITIES

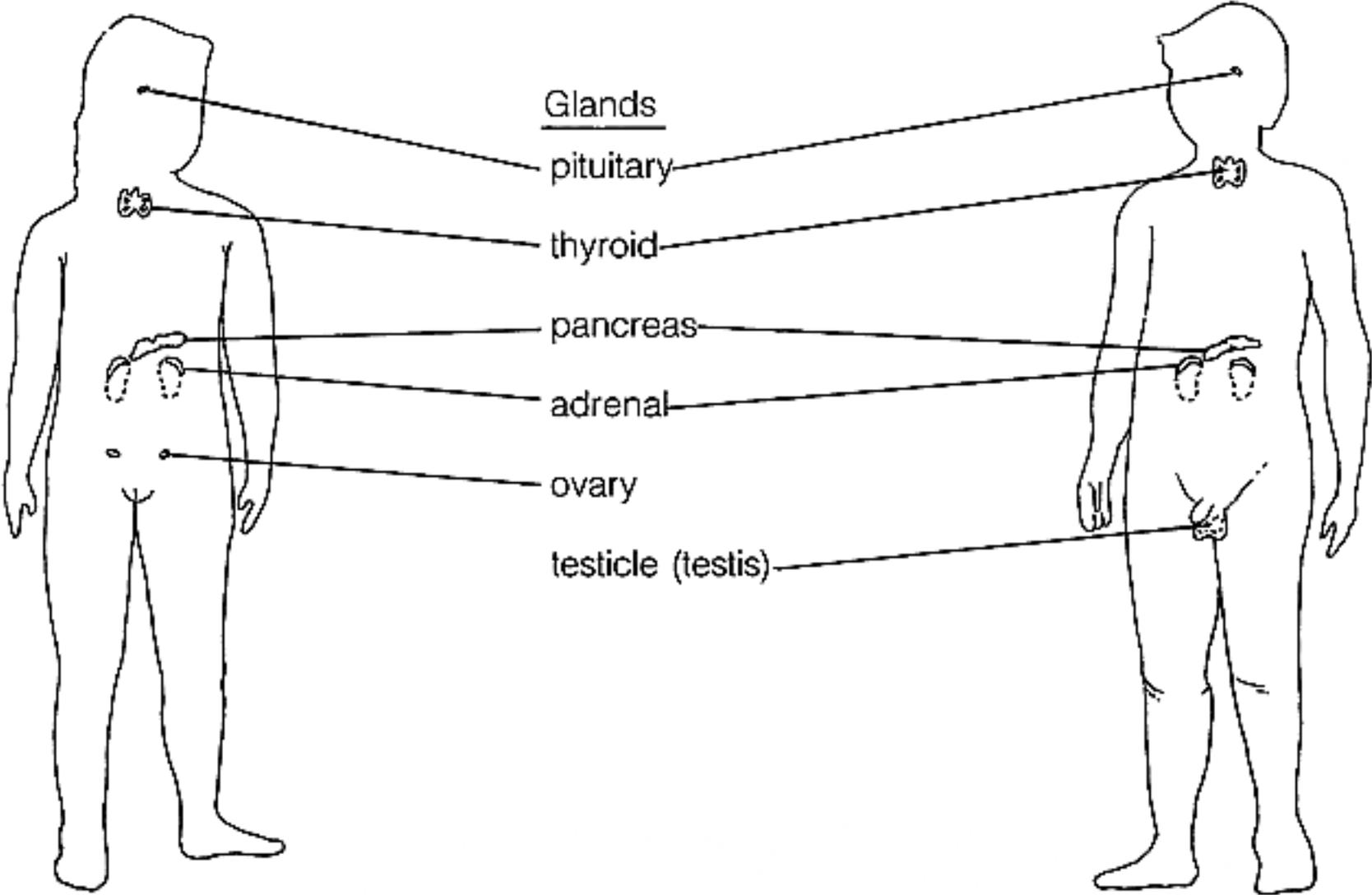
- PREPARATION:
1. Make several large sets of letters that spell endocrine
 2. Overhead transparency of Endocrine System (Activity Sheet FL54)
 3. Prepare a class set of Will The Real Gland Please Stand Up? worksheet (Activity Sheet FL55)
 4. Prepare a class set of Endocrine System Match Up worksheet (Activity Sheet FL56)
-

VOCABULARY: gland, endocrine, thyroid, pituitary, adrenal

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) name and locate the main parts of the endocrine system	Students: 1. Define the term gland. 2. Locate the glands in their neck. 3. Recognize the word endocrine.	Background Information Page FL74 - FL80 Use a dictionary and discussion to define the term. Students should understand that a gland is an organ that produces a chemical substance. Explain that the endocrine system is made up of different glands. Ask students if they have ever had swollen glands. Have them feel the glands in their neck. Write the word endocrine on the chalkboard.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>4. Name and locate the main parts of the endocrine system.</p> <p>5. Complete Will The Real Gland Please Stand Up? Worksheet.</p> <p>6. Complete the Endocrine System Match Up worksheet.</p>	<p>Divide the class into groups of nine students. Give each group the nine letters of endocrine. When the teacher says "Go", each group has to organize itself to spell the word endocrine.</p>  <p>When the group is in the right order, have them spell out the word. Refer to Activity Sheet FL54.</p> <p>Use the overhead transparency to name and locate the main parts of the endocrine system. The main parts of the endocrine system are the:</p> <ul style="list-style-type: none"> - thyroid gland - pituitary gland - adrenal glands - pancreas - sex glands (ovaries and testicles) <p>Ask students to name the parts of the system. Have students respond using the sentence pattern:</p> <p>The _____ is part of the endocrine system.</p> <p>Refer to Activity Sheet FL55.</p> <p>Have students complete the worksheet by looking at the words in each row. They have to decide which is the correct spelling of each endocrine system part and circle it.</p> <p>Refer to Activity Sheet FL56.</p> <p>Have students complete the worksheet by drawing a line from the name to the correct gland.</p>

ENDOCRINE SYSTEM



WILL THE REAL GLAND PLEASE STAND UP?

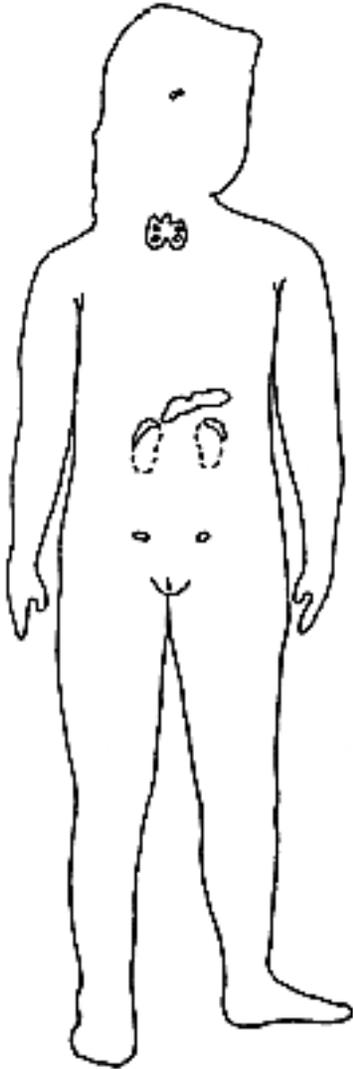
Directions: Choose the correct spelling for each gland and circle it.

1.	thriyod	thryoid	thyriod	thyroid	thryiod
2.	pitutiary	pituitary	pitatuiray	pituriary	pitutairy
3.	adrealnal	ardenal	adrenal	adranel	adrenel
4.	pankreas	pancrias	pancraes	pancrease	pancreas
5.	ovarys	oravies	ovaries	overies	ovareis
6.	testicles	testikles	testicels	testacles	tetsacles

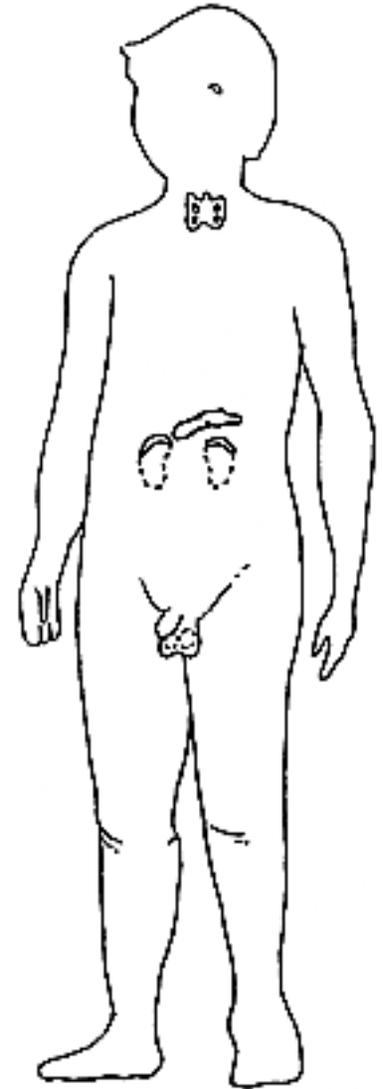


ENDOCRINE SYSTEM MATCH UP

Draw a line from the name to the correct gland.



- adrenal
- ovary
- testicle (testis)
- pituitary
- thyroid
- pancreas



FAMILY LIFE

GRADE: 6

LESSON: 4

THEME: HUMAN DEVELOPMENT
AND REPRODUCTION

CONCEPT: THE ENDOCRINE SYSTEM REGULATES AND CONTROLS A VARIETY OF BODY ACTIVITIES

- PREPARATION:
1. Two chairs, one labelled TRUE one labelled FALSE
 2. Prepare enough situation cards for one between two students (Activity Sheet FL57A)
 3. Prepare a class set of What Do Our Glands Do? worksheets (Activity Sheet FL58A)
-

VOCABULARY: hormones

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify the functions of the major endocrine glands	Students: 1. Review the name and location of the major endocrine glands. 2. Describe the main function of the endocrine glands. 3. Define the term hormone. 4. Play Thumbs Up. Thumbs Down.	Background Information Page FL74 to FL80 From previous lesson. Ask if students know what the functions of the endocrine glands are. They should understand that the endocrine glands produce hormones. Use a dictionary and discussion to define the term. Students should understand that a hormone is a chemical substance that passes into the blood and stimulates organs to action. Have students listen for the word hormone. Say a number of different words. When they hear the word hormone, they give a thumbs up sign. For any other word, they give a thumbs down sign.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>7. Tell which glands are responsible in specific situations.</p> <p>8. Complete the What Do Our Glands Do? Worksheet.</p>	<p>Refer to Activity Sheet FL57A.</p> <p>In pairs, have one student pick out a situation card and read it to his/her partner. The partner has to identify which gland is responsible. Answers are given on Activity Sheet FL57B.</p> <p>Refer to Activity Sheet FL58A.</p> <p>Have students complete the worksheet by matching the name of the gland to its function. Some glands have more than one function. Answers are given on Activity Sheet FL58B.</p>

SITUATION CARDS

Which gland is responsible?

1. Mary is 12. She is much smaller than the other students in her class.	2. Fred has always been very fat. The doctor told him one of his glands didn't work properly.
3. A bear came close to Jim. He grabbed his gun and shot it.	4. John has diabetes. His body cannot control its blood sugar level.
5. Jane is 14. She has not started her periods yet.	6. Peter had an erection.
7. Thelma always eats lots, but she is really thin.	8. Margaret's breasts are starting to get bigger.

SITUATION CARDS

(Answer Guide)

1. pituitary

2. thyroid

3. adrenal

4. pancreas

5. ovaries/pituitary

6. testicles

7. thyroid

8. ovaries/ pituitary

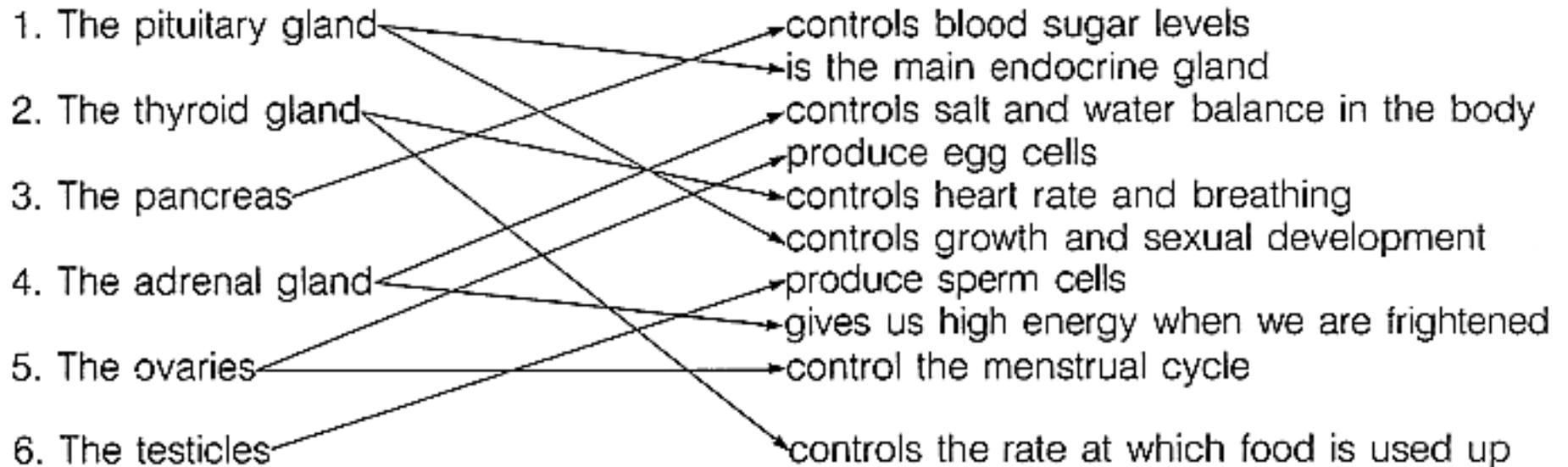
WHAT DO OUR GLANDS DO?

Match the names of the glands with the functions by drawing lines. Some have more than one function.

- | | |
|------------------------|---|
| 1. The pituitary gland | controls blood sugar levels
is the main endocrine gland |
| 2. The thyroid gland | controls salt and water balance in the body
produce egg cells |
| 3. The pancreas | controls heart rate and breathing
controls growth and sexual development |
| 4. The adrenal gland | produce sperm cells
gives us high energy when we are frightened |
| 5. The ovaries | control the menstrual cycle |
| 6. The testicles | controls the rate at which food is used up |

WHAT DO OUR GLANDS DO?

(Answer Guide)



FAMILY LIFE

GRADE: 6

LESSON: 5

THEME: HUMAN DEVELOPMENT
AND REPRODUCTION

CONCEPT: THE ENDOCRINE SYSTEM REGULATES AND CONTROLS A VARIETY OF BODY ACTIVITIES

PREPARATION: 1. Prepare a class set of Time for Change worksheet (Activity Sheet FL59A)

VOCABULARY: erection, ejaculation

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) describe the changes in males and females at puberty as they relate to the endocrine system	Students: 1. Review major reproductive organs. 2. Review the functions of the pituitary gland, the ovaries and the testicles. 3. Review the changes that occur in males and females during puberty.	Background Information Page FL74 to FL80 From Grade 5, Lessons 4 and 5. From previous lesson. From Grade 5, Lesson 3.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES			
		Ask students what changes occur in males and females. Record student responses using an experience chart as illustrated:			
		Physical - oily skin - pimples - voice breaks - muscles develop	Mental - making plans - making decisions - thinking - communication	Emotional - less self-centred - aware of other people's feelings - mood swings	Social - spending more time with friends - wanting to be one of the crowd
		Have students discuss the chart using the sentence pattern:			
		During puberty, _____.			
	4. Describe the pubertal changes in males and females related to the reproductive system.	Ask students about specific changes related to reproduction. Record information using an experience chart as illustrated:			
		Males - penis, scrotum and testicles get bigger - sex hormones develop - production of sperm - erections - ejaculations		Females - development of breasts - vulva, vagina and uterus get bigger - ovaries produce sex hormones - eggs develop in the ovaries - eggs are released - menstruation begins	
		Have students discuss the chart using the sentence pattern:			
		During puberty, _____.			
	5. Identify the endocrine glands responsible for pubertal changes.	Have students identify which endocrine glands affect these changes.			

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	6. Complete the Time For Change worksheets.	<p>The <i>pituitary gland</i> sends hormones to the different body systems. This signals the start of puberty. The <i>ovaries</i> produce egg cells. The <i>testicles</i> produce sperm cells.</p> <p>Refer to Activity Sheet FL59A.</p> <p>Have students complete the worksheets by filling in the blanks.</p> <p>Answers are given on Activity Sheet FL59B.</p>

TIME FOR CHANGE

Fill in the blanks with words from the list at the side of the page.

- | | |
|--|-------------|
| 1. During puberty, a boy's _____ begin to develop. | sperm |
| 2. The pituitary gland controls _____ development. | uterus |
| 3. _____ is produced in the testicles. | ovaries |
| 4. The release of semen from the penis is called an _____. | body shapes |
| 5. The _____ gets bigger to allow a baby to grow. | voice |
| 6. _____ changes are more noticeable in boys than girls. | muscles |
| 7. _____ produce egg cells. | ejaculation |
| 8. Blood flowing into the penis causes an _____. | breasts |
| 9. During puberty, girls' _____ develop. | erection |
| 10. During puberty, both boys' and girls' _____ change. | sexual |

TIME FOR CHANGE

(Answer Guide)

1. During puberty, a boy's muscles begin to develop.
2. The pituitary gland controls sexual development.
3. Sperm is produced in the testicles.
4. The release of semen from the penis is called an ejaculation.
5. The uterus gets bigger to allow a baby to grow.
6. Voice changes are more noticeable in boys than girls.
7. Ovaries produce egg cells.
8. Blood flowing into the penis causes an erection.
9. During puberty, girls' breasts develop.
10. During puberty, both boys' and girls' body shapes change.

FAMILY LIFE

GRADE: 6

LESSON: 6

THEME: HUMAN DEVELOPMENT
AND REPRODUCTION

CONCEPT: MENSTRUATION IS A NATURAL OCCURRENCE IN FEMALES

PREPARATION: 1. Overhead transparency of Main Events of the Menstrual Cycle (Activity Sheet FL60)
2. Prepare enough for one between two students of Sort It Out (Activity Sheet FL61)
3. Prepare a class set of Menstruation sentence diamonds (Activity Sheet FL62)

VOCABULARY: ovum, ova, ovulation

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) describe the process of menstruation as it relates to reproduction	Students: 1. Review the female reproductive organs. 2. Describe the main events of the menstrual cycle.	Background Information Page FL81 - FL84 From Grade 5, Lesson 5. Refer to Activity Sheet FL60. Use the overhead transparency to discuss the main events of the menstrual cycle. The main events of the menstrual cycle are: - menstruation (beginning of cycle) - new egg develops (ovum) - egg is released (ovulation) - egg starts to travel to the uterus - if egg is not fertilized, beginning of new cycle

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>3. Sort the main events of the menstrual cycle into the correct order.</p> <p>4. Explain why females menstruate.</p> <p>5. Make a sentence diamond about menstruation.</p>	<p>Refer to Activity Sheet FL61.</p> <p>Give pairs of students five cards each, with an event on each card. The students have to sort the cards into the order in which the events happen.</p> <p>Ask students why females menstruate. Have students respond using the sentence patterns:</p> <p>Every month, _____.</p> <ul style="list-style-type: none"> - a female's body gets ready for a pregnancy - an egg is released from the ovaries - the lining of the uterus gets thicker - the egg travels along the Fallopian tube <p>If the egg is fertilized, _____.</p> <ul style="list-style-type: none"> - it attaches itself to the wall of the uterus - it grows for nine months - the lining of the uterus provides nourishment <p>If the egg is not fertilized, _____.</p> <ul style="list-style-type: none"> - it starts to dissolve - it must leave the body - the lining of the uterus leaves the body <p>It is important to emphasize that, although a girl's body is physically able to have a baby, mentally, emotionally and socially she is not ready to have a baby.</p> <p>Refer to Activity Sheet FL62.</p> <p>Have students make a sentence diamond outlining various aspects of menstruation.</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>ii) identify some menstrual discomforts and ways to relieve them</p>	<p>6. Identify some of the discomforts females may experience during menstruation.</p> <p>7. Describe ways of relieving discomfort during menstruation.</p>	<p>Ask students what discomforts females may experience during menstruation. Have students respond using the sentence pattern:</p> <p>Sometimes girls _____.</p> <ul style="list-style-type: none"> - get headaches - feel sick - get cramps <p>Ways of relieving discomfort include:</p> <ul style="list-style-type: none"> - rest - mild exercise - a warm bath <p>If problems occur, a doctor or nurse should be consulted.</p>

MAIN EVENTS OF THE MENSTRUAL CYCLE



Menstruation

- beginning of the cycle
- the lining of the uterus leaves the body

New Ovum Develops

- lining of the uterus begins to prepare for possible pregnancy

Ovulation

- release of mature ovum from ovary

Ovum starts to travel along the Fallopian tube to the uterus

Menstruation

- if ovum is not fertilized, a new cycle begins

SORT IT OUT!

The ovum starts to travel along the Fallopian tube to the uterus.

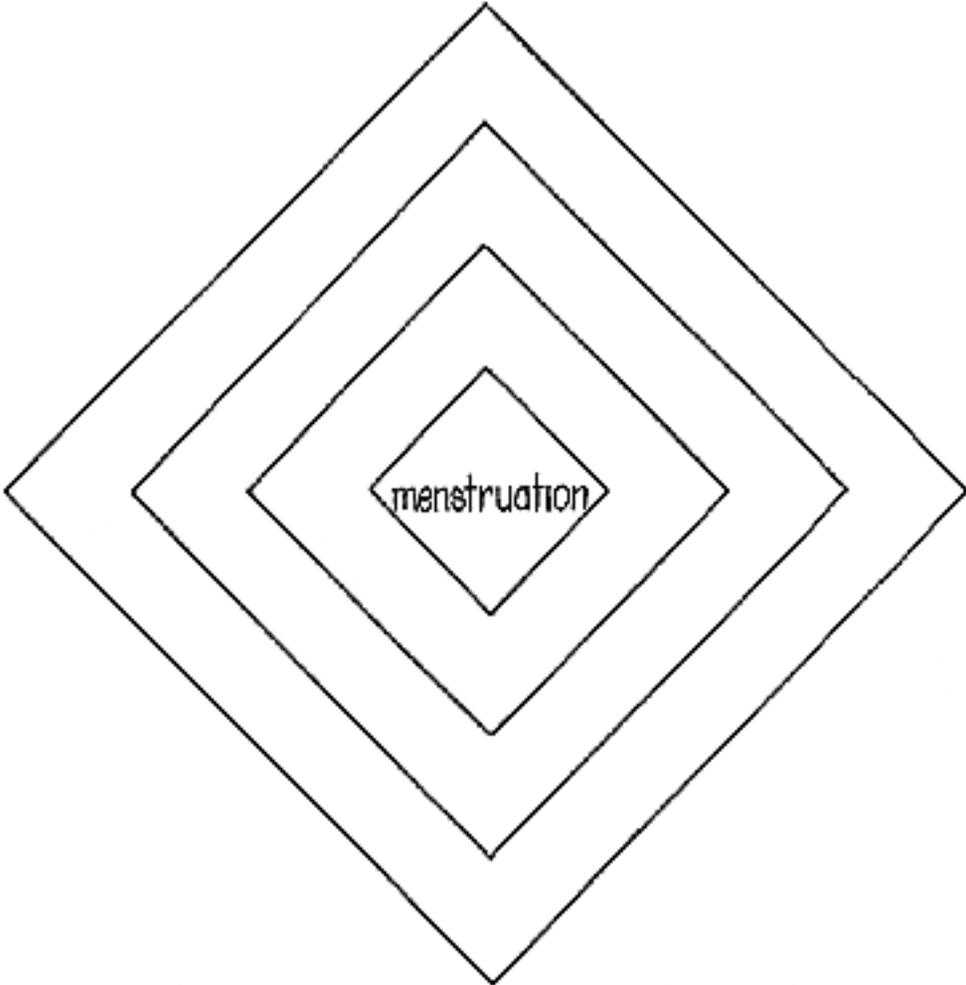
If the ovum is not fertilized, a new cycle begins.

The mature ovum is released from the ovary.

The lining of the uterus begins to thicken to prepare for a baby.

A new ovum develops.

MENSTRUATION



FAMILY LIFE

GRADE: 6

LESSON: 7

THEME: HUMAN DEVELOPMENT
AND REPRODUCTION

CONCEPT: HUMAN LIFE IS FORMED BY THE UNION OF AN EGG AND SPERM

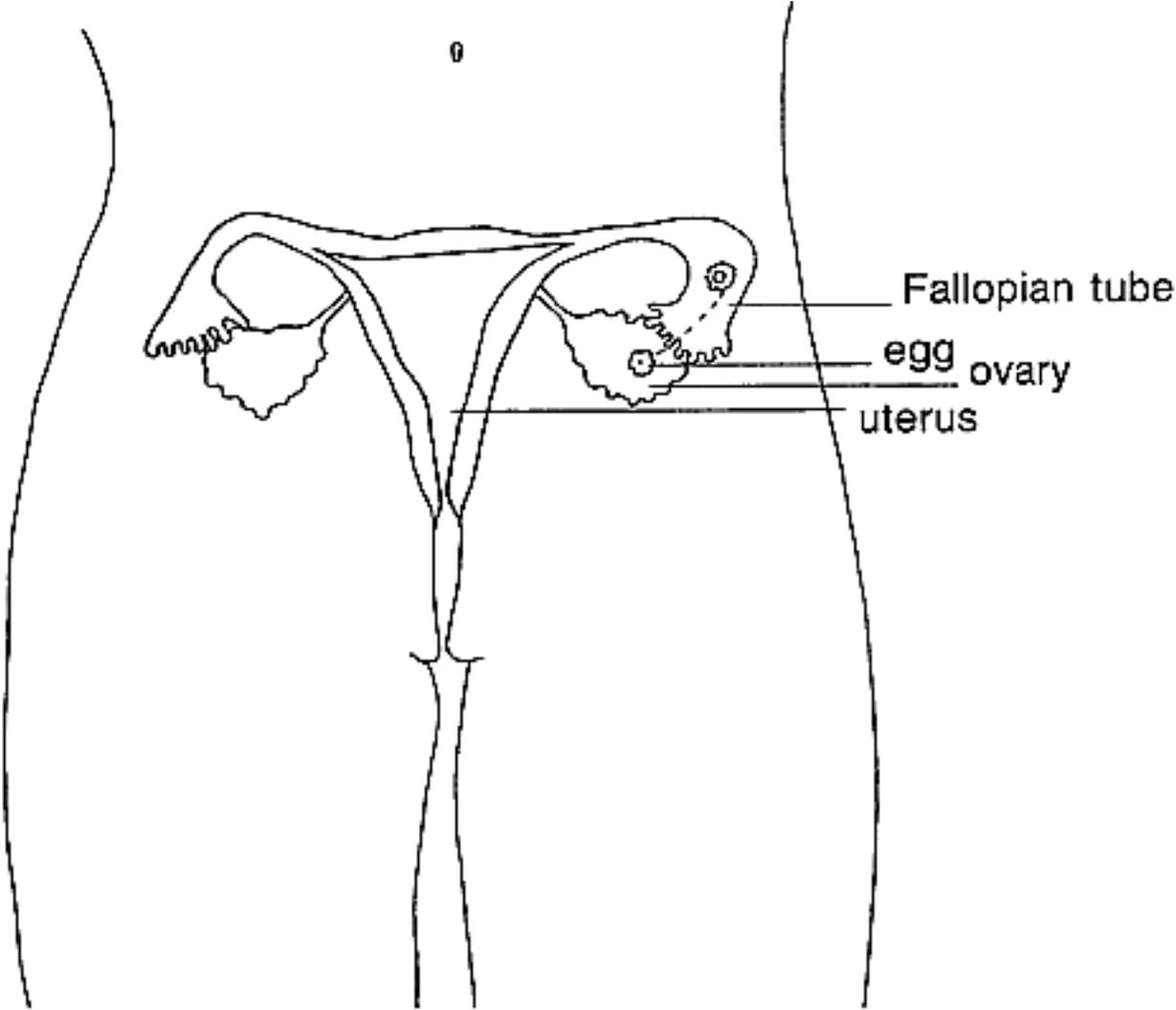
PREPARATION: 1. Overhead transparencies of Activity Sheets FL63, 64, 65, 66, 67
2. Materials for a book

VOCABULARY: implantation, fetal development, fetus, embryo, uterine

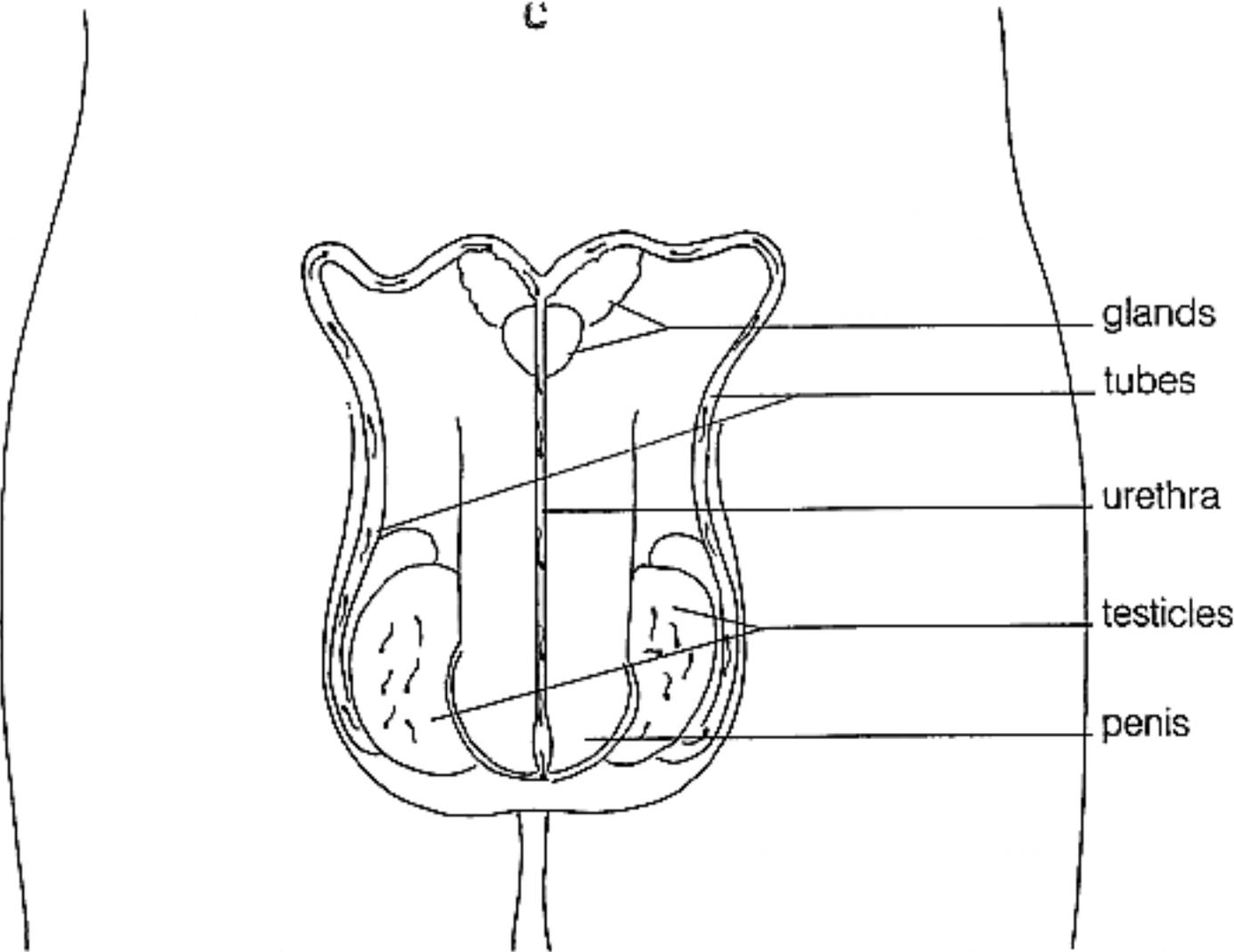
OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) describe the processes involved in the development of new life	Students: 1. Review the journeys of the egg cell and sperm cell.	Background Information Page FL80 and FL85 This is a review of Grade 5, Lesson 7. Refer to Activity Sheets FL63, 64. Use the overhead transparencies to review.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES							
ii) describe the stages of fetal development	2. Describe the process of sexual intercourse.	Ask students to describe intercourse. Record information in column one of an experience chart as illustrated:							
	3. Describe the process of fertilization. 4. Describe the process of implantation.	<table border="1"> <thead> <tr> <th data-bbox="1073 391 1461 431">Sexual Intercourse</th> <th data-bbox="1461 391 1738 431">Fertilization</th> <th data-bbox="1738 391 2018 431">Implantation</th> </tr> </thead> <tbody> <tr> <td data-bbox="1073 431 1461 634"> <ul style="list-style-type: none"> - blood fills the penis and makes it firm - the penis fits into the vagina - sperm enters the vagina through the penis </td> <td data-bbox="1461 431 1738 634"> <ul style="list-style-type: none"> - the sperm cell join with the egg cell in Fallopian tubes - new life begins (conception) </td> <td data-bbox="1738 431 2018 634"> <ul style="list-style-type: none"> - the fertilized egg cell attaches itself to the uterus wall </td> </tr> </tbody> </table>	Sexual Intercourse	Fertilization	Implantation	<ul style="list-style-type: none"> - blood fills the penis and makes it firm - the penis fits into the vagina - sperm enters the vagina through the penis 	<ul style="list-style-type: none"> - the sperm cell join with the egg cell in Fallopian tubes - new life begins (conception) 	<ul style="list-style-type: none"> - the fertilized egg cell attaches itself to the uterus wall 	<p>Refer to Activity Sheet FL65.</p> <p>Use the overhead transparency.</p> <p>Add information to column two of the experience chart started in Student Activity 2.</p>
Sexual Intercourse	Fertilization	Implantation							
<ul style="list-style-type: none"> - blood fills the penis and makes it firm - the penis fits into the vagina - sperm enters the vagina through the penis 	<ul style="list-style-type: none"> - the sperm cell join with the egg cell in Fallopian tubes - new life begins (conception) 	<ul style="list-style-type: none"> - the fertilized egg cell attaches itself to the uterus wall 							
5. Describe how the baby develops from the egg.	Refer to Activity Sheet FL66, 67.	Use the overhead transparencies to discuss the development.							
6. Make a book "A New Life Begins".		Make a book in the shape of a baby In the book, draw pictures and write about how a baby develops.							

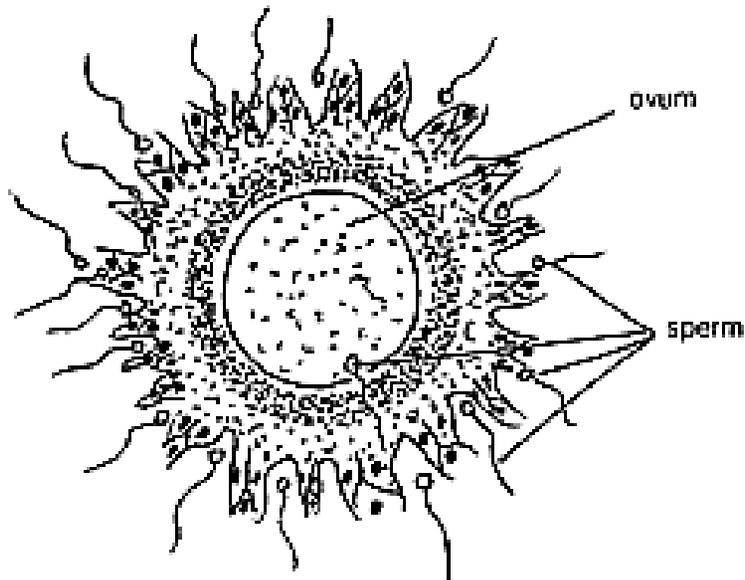
THE JOURNEY OF THE EGG



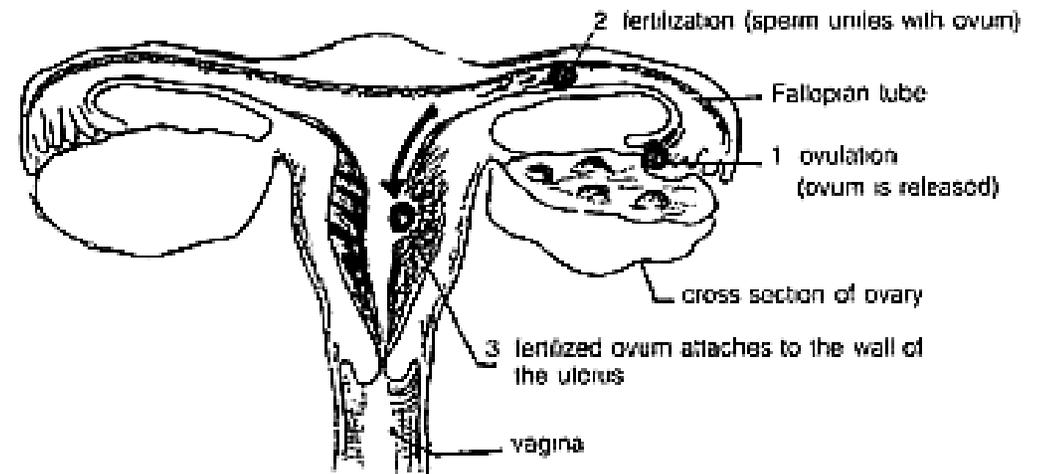
THE JOURNEY OF THE SPERM



FERTILIZATION AND IMPLANTATION

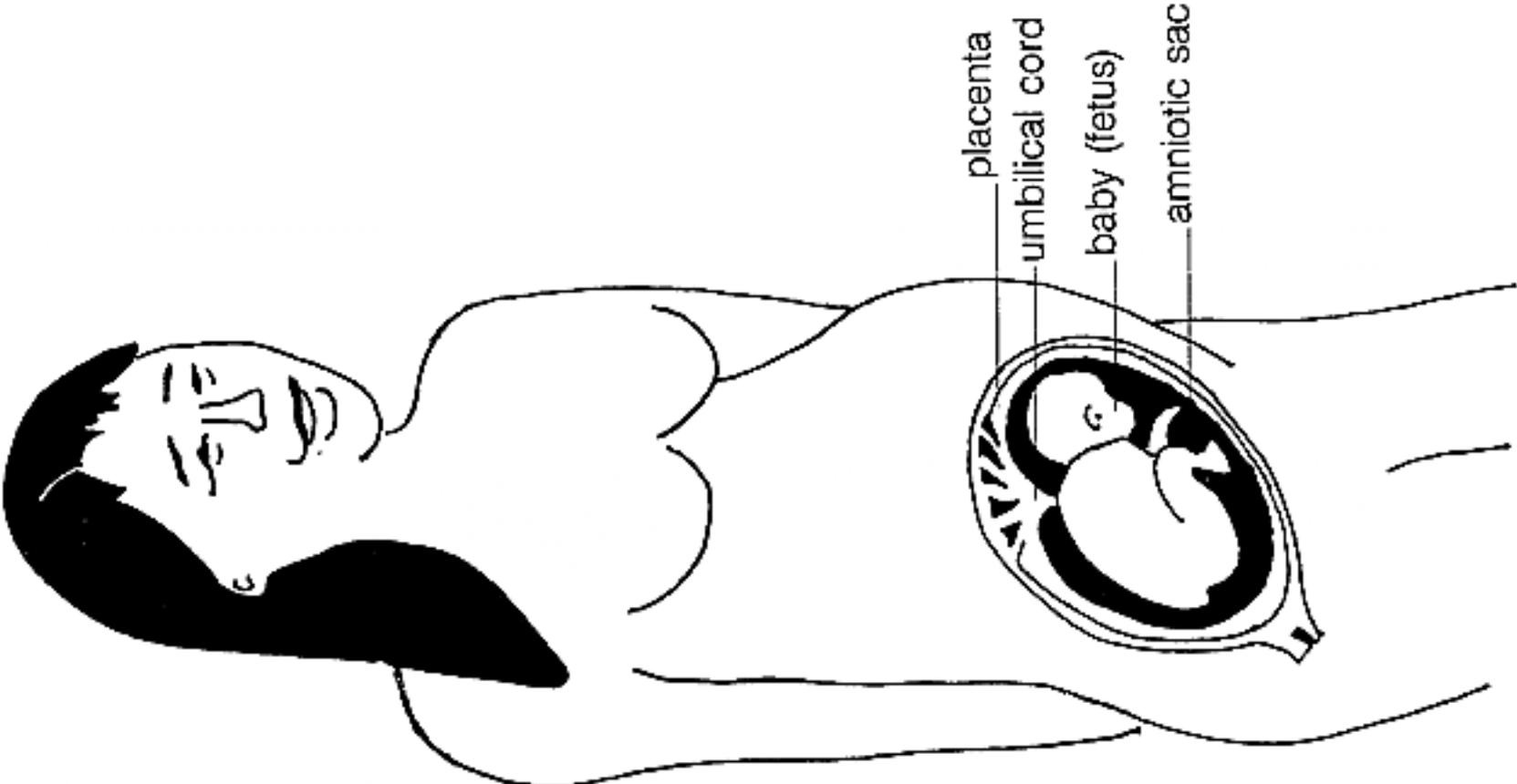


A single sperm bores through the outer surface of an ovum. The action causes conception, the start of a pregnancy. This cutaway drawing is a greatly enlarged view.



When a sperm enters an ovum at ovulation, fertilization occurs and pregnancy begins. The fertilized ovum enters the uterus and attaches itself to the inner wall.

PREGNANCY



FAMILY LIFE

GRADE: 6

LESSON: 8

THEME: ABUSE PREVENTION

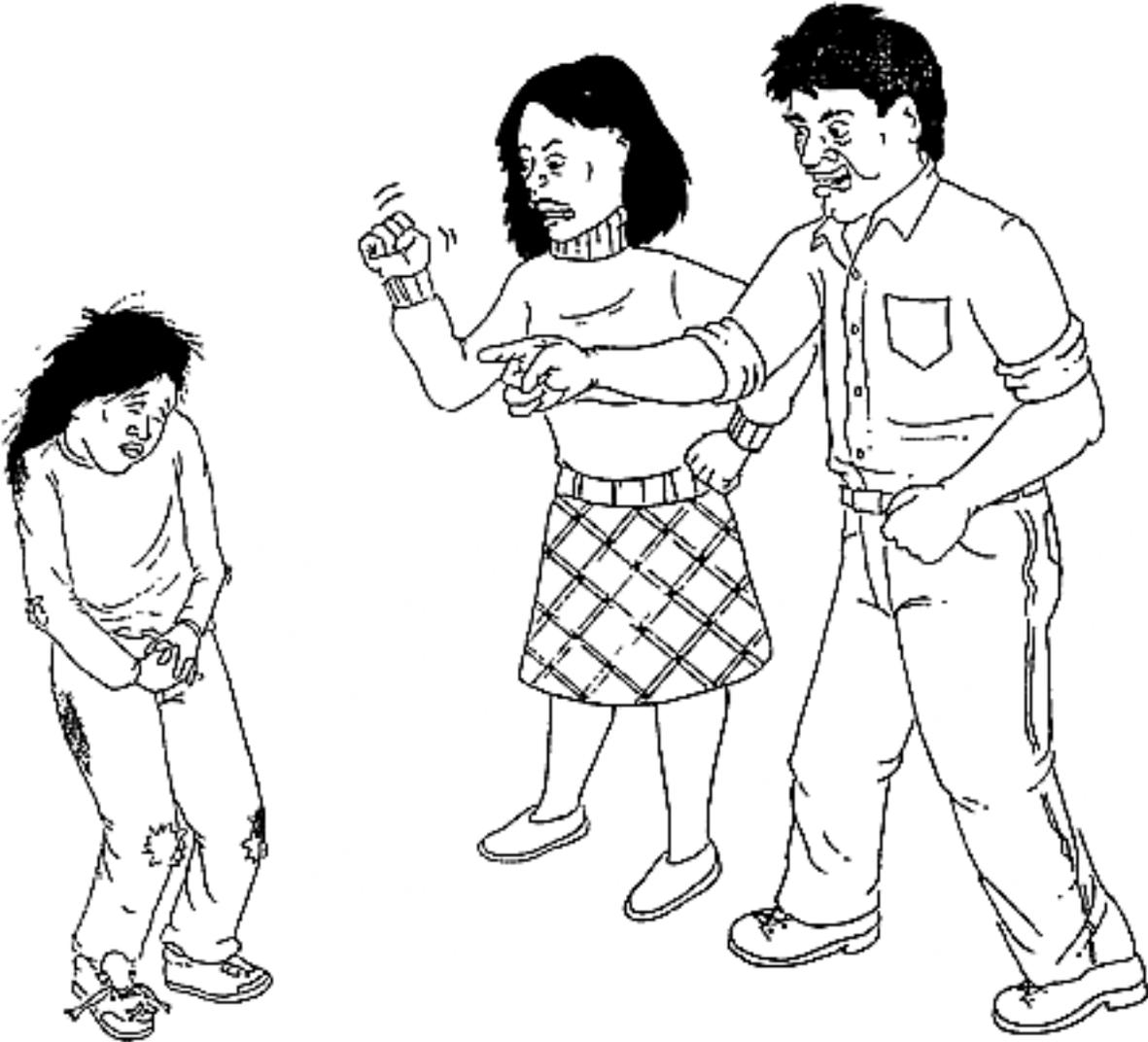
CONCEPT: NO ONE HAS THE RIGHT TO SEXUALLY ABUSE A CHILD

PREPARATION: 1. A picture of a child being abused (Activity Sheet FL69 - optional)
2. Prepare enough sets of situation cards for one for each group (Activity Sheet FL70)

VOCABULARY: abuse, sexual

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) describe sexual abuse	Students: 1. Identify what abuse is. 2. Define the term abuse. 3. Identify other words related to abuse.	Background Information Page FL86 to FL89 Teachers should first ensure they are familiar with the Department of Education's "Procedures for Reporting Suspected Child Abuse". Use of Activity Sheet FL69 is optional. Discuss what is meant by abuse. Have students brainstorm words to describe an abusive situation. Lead students to the word abuse. Use a dictionary and discussion to define the term. Students should understand that abuse means to hurt someone or something by treating him/her/it badly. E.g., abusive, abused

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) identify responsible behaviours which help prevent abuse	<p>7. Identify responsible behaviours which help prevent abuse.</p> <p>8. Describe what to do in a potentially abusive situation.</p>	<p>Brainstorm behaviours which may help prevent abuse. Use the sentence pattern:</p> <p>I can prevent sexual abuse by _____.</p> <ul style="list-style-type: none"> - knowing when a situation may be unsafe - recognizing when someone is bribing me - understanding what a secret is - recognizing when someone is threatening me - knowing my feelings - being able to talk about my feelings - being careful around strangers - making sure an adult knows where I am - not being alone with someone I don't trust - knowing who will help me <p>Refer to Activity Sheet FL70.</p> <p>Divide the class into small groups. Give each group a set of situation cards. Have them discuss the situations in relation to the following questions (where appropriate):</p> <ol style="list-style-type: none"> 1. Could this be an unsafe situation? Why/why not? 2. Is the person behaving in a way that should make me careful, i.e., bribe, threat, secret, touch? 3. How do I feel? 4. Does someone know where I am? 5. What should I do? <p>When the groups have completed the various situations, discuss as a whole class.</p>



SITUATION CARDS

<p>1. You are going home from school. A man you don't know asks you to go with him in his truck to show him where the nursing station is.</p>	<p>2. A man offers you ten dollars if you will let him touch your private parts.</p>
<p>3. You are sitting outside your house. A woman asks you what time it is.</p>	<p>4. A man you know well makes you touch his private parts. He tells you it is a secret and you must not tell anyone.</p>
<p>5. A woman is following you as you walk home late from the community hall.</p>	<p>6. Someone is forcing you to kiss him/her when you don't want to.</p>

FAMILY LIFE

GRADE: 6

LESSON: 9

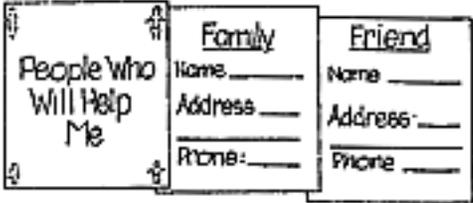
THEME: ABUSE PREVENTION

CONCEPT: NO ONE HAS THE RIGHT TO SEXUALLY ABUSE A CHILD

PREPARATION: 1. Will They Help You? (Activity Sheet FL71)
2. Materials for zig-zag book

VOCABULARY: support, system

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) recognize supportive people	Students: 1. Review the meaning of the term sexual abuse. 2. Describe the responses which would indicate someone was prepared to help them.	Background Information Page FL86 to FL89 From previous lesson. Ask students how they know if someone will help them. Have students respond using the sentence pattern: Someone who is going to help me might say _____. - I believe, you - It's not your fault - I'm sorry that happened to you - I'm glad you told me - I'm going to help you

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES			
ii) identify family and community members who will provide support	3. Practise recognizing responses that indicate support.	Refer to Activity Sheet FL71.			
	4. Identify the two types of support systems.	Students have to imagine that they have just told someone that they are being abused. The teacher reads out three responses. Students have to stand up when they hear a response that indicates support. Emphasize to students that if they don't get one of these responses, they should keep telling someone else until they do.			
	5. Brainstorm members of each support system.	There are two types of support systems: <ul style="list-style-type: none"> - family and friends - community members Record student responses using an experience chart as illustrated:			
6. Make their own book of support people.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: left;">Family and Friends</th> <th style="width: 50%; text-align: left;">Community Members</th> </tr> </thead> <tbody> <tr> <td style="vertical-align: top;"> <ul style="list-style-type: none"> - parents - grandparents - uncles/aunts - adult brother/sister - close friend </td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> - elder - neighbour - teacher - priest/minister - health worker - R.C.M.P. - social worker </td> </tr> </tbody> </table>	Family and Friends	Community Members	<ul style="list-style-type: none"> - parents - grandparents - uncles/aunts - adult brother/sister - close friend 	<ul style="list-style-type: none"> - elder - neighbour - teacher - priest/minister - health worker - R.C.M.P. - social worker
Family and Friends	Community Members				
<ul style="list-style-type: none"> - parents - grandparents - uncles/aunts - adult brother/sister - close friend 	<ul style="list-style-type: none"> - elder - neighbour - teacher - priest/minister - health worker - R.C.M.P. - social worker 				
	Have each student make their own zig-zag book of support people from each type of support system. <div style="text-align: center; margin-top: 10px;">  </div>				

WILL THEY HELP YOU?

Response #1	Response #2	Response #3
1. Don't tell lies!	I'm glad you told me. I'll help you.	You must have done some-' thing to make him do it.
2. You'll get into trouble if you say that.	He's a really good person. He'd never do that!	I believe you. It's not your fault.
3. I'm sorry that happened to you.	You've done the right thing. I'll get someone to help you.	What an awful thing to say about Jim Smith. I don't believe you.
4. You're imagining things!	What did <i>you</i> do?	Thank you for telling me. I'll help you.

GRADE 6

TEACHER BACKGROUND INFORMATION

FAMILY LIFE

THE TERMINOLOGY OF THE FAMILY LIFE UNIT

Some students may have difficulty understanding or participating in the discussions because they have different words to describe the concept. Many students will know only the "common" or "slang" terminology. In the Family Life classes, students will be learning and using the medical terminology.

Medical Terminology	Common	Slang
urinating	peeing	pissing

Students may use the "common" or "slang" term initially, because they are comfortable using and/or do not know the medical term. Once the medical term has been taught in class, teachers should ensure that students refer to the concepts using the correct medical terminology.

PUBERTY

Puberty is the stage of life when the body changes from that of a child into that of an adult. It is the time when the male/female body develops the capacity to reproduce. Puberty begins at different times for different people and progresses at different rates among individuals. Girls can begin puberty between eight and ten years of age. Boys generally enter puberty two years later at ten to twelve years. The production of hormones stops the growth of girls at approximately sixteen years of age, boys at eighteen years.

Puberty signals the beginning of adolescence, the period of development which leads to adulthood. During this period, young people experience a number of physical, emotional, social and mental changes.

	Males	Females
Changes related to reproduction	<ul style="list-style-type: none"> - penis, scrotum and testicles get bigger and mature - endocrine glands secrete hormones which produce sperm - erections may occur - ejaculation may occur 	<ul style="list-style-type: none"> - vulva, vagina and uterus get bigger - endocrine glands secrete hormones which trigger the beginning of ovulation and menstruation - eggs (ova) develop in the ovaries - cervix produces mucus
General Changes	<ul style="list-style-type: none"> - height and weight increase - shoulders get broader - muscles develop - growth of body hair <ul style="list-style-type: none"> - on upper lip, face - chest - under arms - in pubic areas - skin changes <ul style="list-style-type: none"> - becomes oilier and coarser - increased chance of pimples and acne - increased body perspiration and odour - voice breaks and deepens 	<ul style="list-style-type: none"> - height and weight increase - body fat and supporting tissue increase, especially around hips - breasts develop - growth of body hair <ul style="list-style-type: none"> - under arms - on arms and legs - in pubic areas - skin changes <ul style="list-style-type: none"> - becomes oilier and coarser - increased chance of pimples and acne - increased body perspiration and odour - voice deepens, but not as much as in males - face becomes fuller - nipples stand out

Males

Females

Mental/Emotional/Social Changes

- skills develop over time →
- planning →
- decision-making →
- thinking →
- communication →
- attitude towards opposite sex changes →
- acceptance by the group is important →
- spend more time with friends →
- more aware of other people s feelings →
- mood swings →
- sexual feelings develop →

THE ENDOCRINE SYSTEM

The endocrine system is made up of glands which secrete hormones into the bloodstream. The endocrine system regulates and controls a variety of body activities. Glands are organs or tissues that produce a chemical substance.

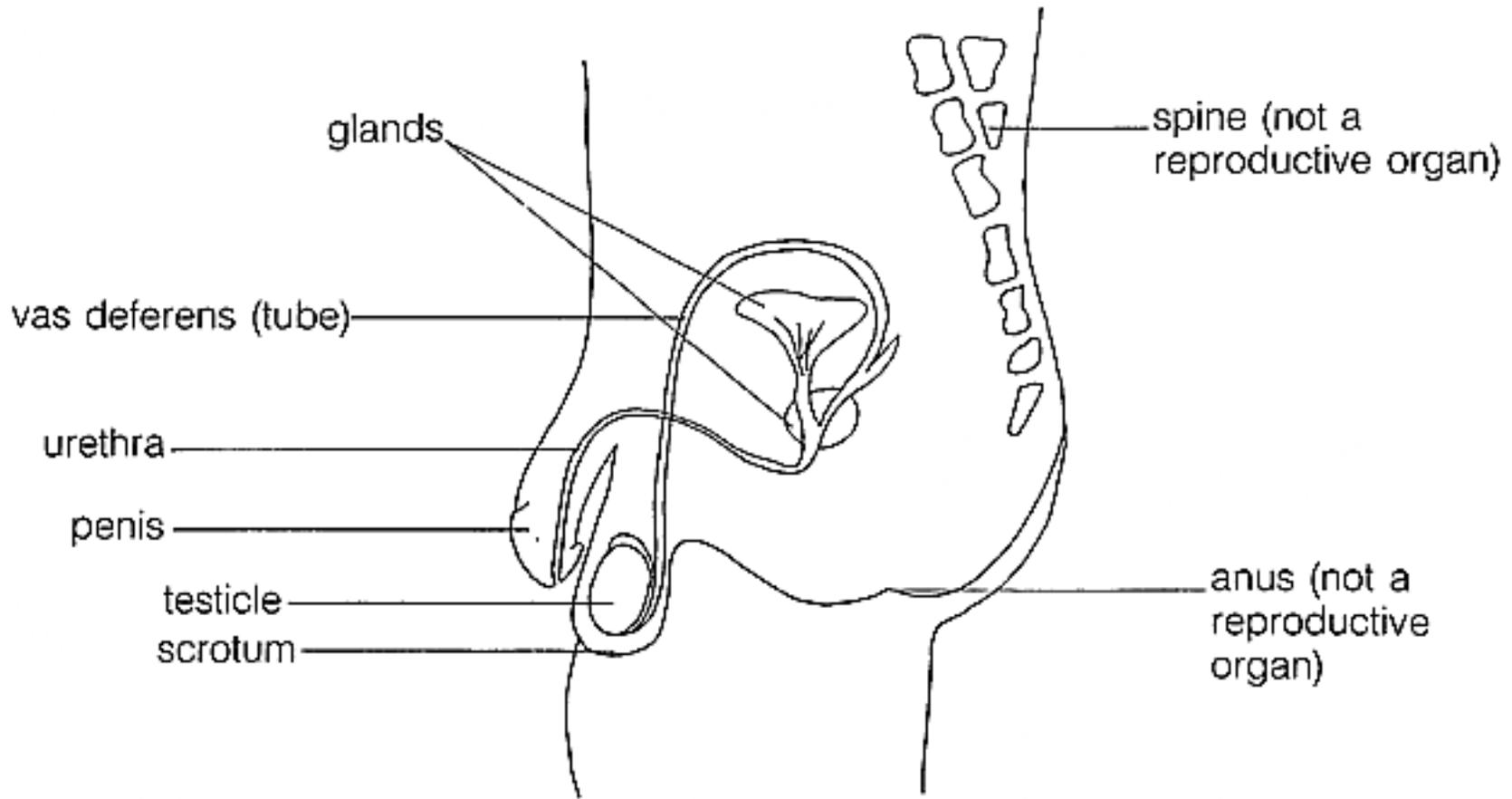
Gland	Location	Function
Pituitary	- at the base of the brain near the centre	- the main gland in the body - controls growth and sexual development - controls other endocrine glands
Thyroid	- in the neck behind the trachea	- affects physical and mental development - controls the body's energy rate (metabolism) - controls heart rate and breathing
Adrenals	- above each kidney	- produces adrenalin which increases heart rate, blood pressure, blood sugar level when in an excited state such as fright, anger, etc - controls salt and water balance
Pancreas	- near small intestine, just below the stomach	- produces insulin - controls blood sugar level
Ovaries	- in the pelvic area, on either side of the uterus	- controls the development of egg cells
Testes	- in scrotum	- controls the development of sperm cells

Puberty is stimulated by the action of the pituitary gland.

THE REPRODUCTIVE SYSTEM

The reproductive system is the system which begins to develop during puberty. It is the system which, when fully matured, allows new life to begin.

THE MALE REPRODUCTIVE ORGANS



TERMS RELATED TO THE MALE REPRODUCTIVE SYSTEM

sperm: the male reproductive cell; it generally lives for 24 to 72 hours; males do not begin to produce sperm until puberty

scrotum: the outer sac or bag which holds the testicles

testicles: two glands located inside the scrotum, these are where sperm are produced; it is common for each testicle to be slightly different in size

vas deferens: the tube which leads from each testicle to the urethra; sperm travels along this tube from the testicle to the urethra

glands: the sperm passes many glands; these glands produce fluids which protect and lubricate the sperm; the mixture of sperm and fluids is called semen

urethra: a tube inside the penis which carries both urine and semen to outside of the body; semen and urine do not travel down the urethra at the same time

penis: an external body organ through which urine and sperm leave the body

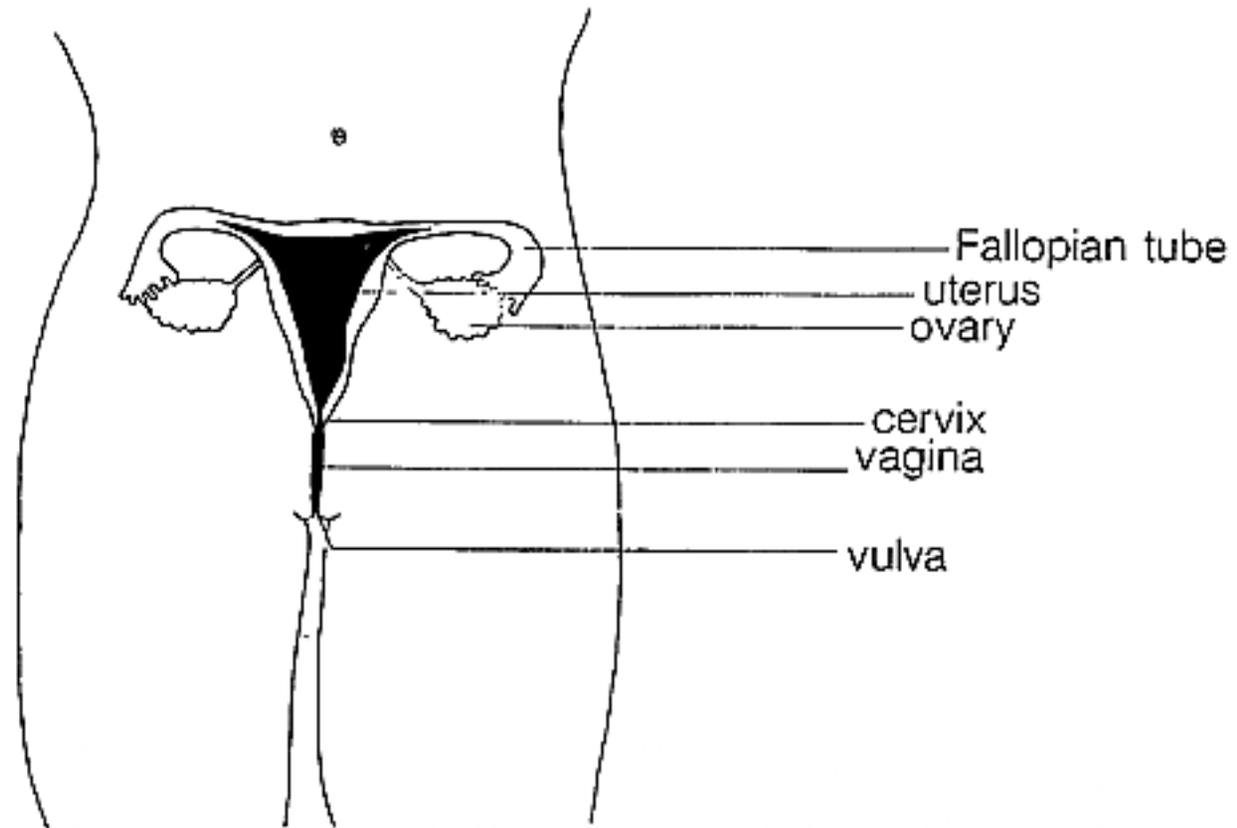
ejaculation: the discharging of semen from the body through the penis

erection: the penis grows larger, becomes stiff and hard and sticks out from the body. This happens because blood flows into the loose skin of the penis. It can result from sexual stimulation (e.g., a sexual thought, seeing an attractive person, or from rubbing the penis) or spontaneously without any apparent reason. Erections are a natural occurrence which tend to happen more frequently during puberty.

wet dreams: ejaculations which occur at night as a result of a dream

masturbation: the rubbing or stroking by a person of his/her own sexual parts. Masturbation does not cause physical harm. It is normal if a person chooses to masturbate. It is also normal if a person chooses not to masturbate.

THE FEMALE REPRODUCTIVE ORGANS



TERMS RELATED TO THE FEMALE REPRODUCTIVE SYSTEMS

<i>egg:</i>	the female reproductive cell; it generally lives for 48 to 72 hours; females are born with eggs; eggs are stored in the ovaries; at puberty the ovaries start to release one egg a month, ovum – singular; ova - plural
<i>vulva:</i>	the area situated between the legs which protects the openings of the vagina and the urethra; on either side of the vulva are soft folds of tissue called labia; this does not include the anus
<i>vagina:</i>	the opening through which blood leaves the body at menstruation; the opening through which the male penis enters during sexual intercourse; the opening through which a baby is born
<i>cervix:</i>	the neck of the uterus
<i>uterus:</i>	a muscular pear shaped organ; where the fertilized egg grows and develops into a fetus; each month the lining of the uterus thickens to receive an egg; if the egg is not fertilized; the lining of the uterus leaves the body during menstruation
<i>ovaries:</i>	the organs where the eggs develop and are stored; once a month; an egg is released from the ovaries; the ovaries contain thousands of tiny, undeveloped egg sacs
<i>Fallopian tubes:</i>	two tubes which connect the ovaries and the uterus The released egg travels from the ovaries along the Fallopian tubes; hairs on the walls of the tubes help the egg to move along; the sperm fertilizes the egg in the Fallopian tubes

THE REPRODUCTIVE PROCESSES

<i>Sex cell development:</i>	The female reproductive cell, the ovum, develops in one of the ovaries and is released once a month. The male reproductive cell, the sperm, develops in the testicles, and is released during sexual stimulation.
<i>The pathway of the sperm:</i>	The sperm travels from the testicles along the tube (the vas deferens) to the urethra, to the outside of the body.
<i>The pathway of the ovum:</i>	The ovum travels from the ovary along the Fallopian tube to the uterus.
<i>Sexual intercourse:</i>	In order for new life to begin, the ovum has to join with a sperm. The erect penis enters the vagina. Millions of sperm are deposited into the vagina. They travel into the uterus and along the Fallopian tubes.
<i>Fertilization (Conception):</i>	When a sperm cell and an egg cell join together, fertilization takes place
<i>Implantation:</i>	Shortly after fertilization, the cell divides and continues to divide until 64 cells are produced. This cluster of cells attaches itself to the wall of the uterus, where it will be nourished and protected.
<i>Gestation:</i>	The time during which the fetus develops in the uterus for approximately 40 weeks. This is also called pregnancy
<i>Birth:</i>	At the end of that time, the baby is ready to leave the uterus, through the cervix and vagina into the world.

MENSTRUATION

Menstruation is a natural occurrence in a female's life. However, if girls have not been prepared for it, it can be a frightening and worrying experience. It is a signal that her body is preparing itself physically to reproduce. The onset of menstruation varies from person to person - it may begin at nine years of age or at fifteen. The average age, however, is twelve to thirteen years. It continues from then until menopause, usually around forty to fifty. Once a girl starts to menstruate, it may take several years before her menstrual cycle becomes regular.

The Main Events

The length of the menstrual cycle may vary from three to six weeks. Usually every four weeks a female's body prepares itself for a possible pregnancy through the action of the female sex hormones. An egg matures in one of the ovaries and the lining of the uterus begins to thicken, preparing to receive a fertilized egg. This lining is rich in blood and will bring nutrients to the developing baby. About twelve to sixteen days before the menstrual flow occurs the ripened egg is released from the ovary (this is called ovulation) and travels along the Fallopian tube. If the egg is fertilized by a sperm within two to three days, a baby begins to develop. It develops for nine months in the uterus. During pregnancy, menstruation does not normally occur.

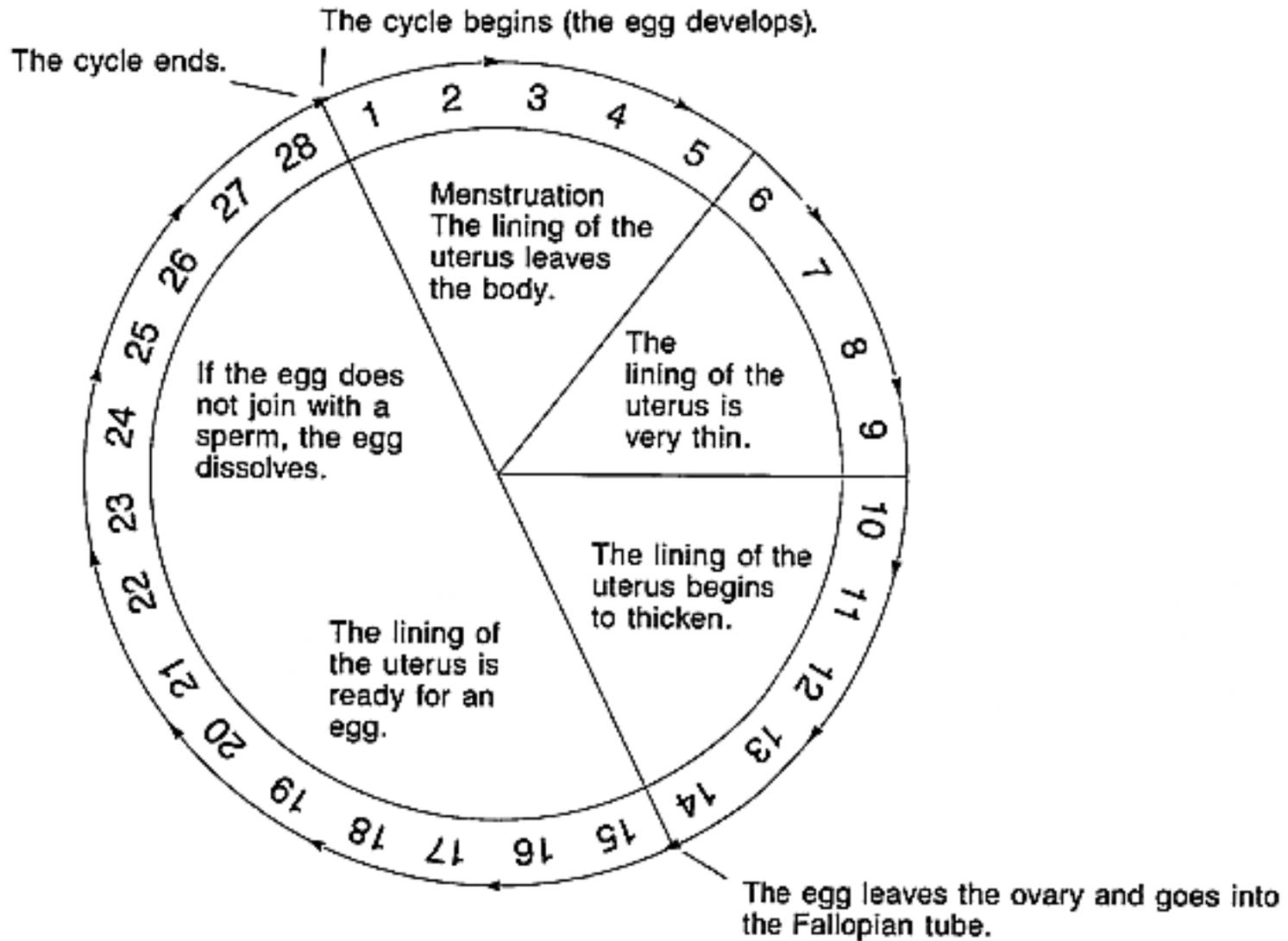
If the egg is not fertilized, it dissolves. The lining of the uterus is not needed to nourish and protect a baby, and so it is shed and leaves the body through the vagina. The flow of blood and tissue is called menstruation, a menstrual period, or a monthly period.

The menstrual cycle begins on the first day of menstruation and ends the day before the next menstrual period begins. It is usually about twenty-eight days. A menstrual period generally lasts four or five days, but may vary from three to seven.

No one can tell exactly when a girl will begin to menstruate. Some girls experience a slight vaginal discharge several months before their first period.

Only a small amount of blood leaves the body each month. The blood flow is usually heavier at the beginning of menstruation.

THE MENSTRUAL CYCLE



Menstrual Hygiene

The two main types of menstrual protection which are used to absorb the blood are sanitary napkins (pads) and tampons. Pads are worn externally, usually held in place on the undergarments by an adhesive strip. Tampons are inserted into the vagina. Health professionals do not recommend the use of tampons by young girls.

During menstruation it is particularly important to maintain personal hygiene. When menstrual blood collects on the pad and contacts the air, bacteria grow causing an odour. Some important points to remember:

- sanitary pads should be changed at least four times daily
- females should wash the vulva regularly from front to back
- sanitary pads should be wrapped and disposed of in the garbage

Menstrual Discomfort

Most females do not experience discomfort during menstruation. However, some do experience:

- nausea
- cramps
- headaches
- a bloated feeling
- tenseness
- tiredness

These are thought to be related to hormonal action. Rest, warm baths, mild exercise and/or massaging the lower abdomen may help. If there are severe symptoms or if symptoms persist, a doctor or nurse should be consulted.

Most girls continue to participate in sports activities during menstruation.

History of Menstrual Aids

Still in some primitive tribes, menstruating women go to live in special huts apart from the rest of the community. A grass mat at their feet collects the menstrual flow. After each period the mat is burned.

Inuit women used moss wrapped in a clean, cloth rag as a sanitary pad. They would collect the moss in the summertime and store it for use in the winter. They disposed of these pads by burning them. Similarly, in many tribes of Africa, menstruating women for centuries have used "bandages" made out of grass or some kind of vegetable fibre. These bandages were burned after use.

Depending on the availability of materials, women began to use wads of cloth thick enough to absorb the menstrual fluids. These cloths required soaking, washing and drying during the time of their use.

By the turn of the 20th century packaged linen cloths, very much like diapers, were used. These were made specifically for sanitary protection, being shaped in a more comfortable style. They still needed soaking, washing and drying and still presented problems of absorbency and discomfort.

It was around 1918 that disposable sanitary pads or napkins were first introduced. Made of cotton, cellulose or a combination of both and wrapped in gauze for use with pins and belts, this type of protection has been in use ever since.

The tampon is the newest commercial form of menstrual protection, having been developed by a doctor more than forty years ago. However, the use of tampons is not a new idea. In ancient times in some parts of the world women used rolls of soft wood internally. In other parts of the world women used rolls of grass and roots.

The Cultural Importance of Menstruation

In many cultures a girl is treated differently when she has begun to menstruate. She may be treated in a more grown up way by her family and friends.

In some cultures the beginning of menstruation is designated as a time of celebration. Feasts or special ceremonies to celebrate womanhood are held. The girl is given adult clothing to wear she is expected to do women's work and perhaps marry.

In traditional Inuit culture, a girl who had begun to menstruate was no longer spoken to as a child and was given increased responsibilities and privileges. In traditional Dene culture, a girl who had begun to menstruate had to live in a tent away from the community to practise the skills her mother had taught her. She was helped in this passage to womanhood by an elderly man, usually her grandfather, who would cook for her and serve her food. It was believed that if she did these things for herself it would increase the heaviness of the menstrual flow. After her first period had passed she was welcomed back to the community and honoured by a special feast.

In today's society many of these traditions have been lost or are simply not practised any longer. A girl's feelings about menstruating may vary depending on how much she knows about it and the accuracy of her information.

A NEW LIFE BEGINS – FERTILIZATION TO BIRTH

TIME	APPROXIMATE SIZE	DEVELOPMENT
1 st Day	Smaller than a pinhead 	The egg cell and sperm cell join to form a single cell
7 Days	About the size of this dot • 	The group of cells attach to the uterine lining. It is now called an embryo
1 Month	Length: 0.6 centimeters 	The heart begins to beat. The nervous and digestive systems form. The eyes and ears are visible.
2 Months	Length: 2.5 centimeters 	The embryo has a large head with a brain and facial features. The fingers and toes appear. The embryo is called a fetus.
3 Months	Length: 7.5 centimeters 	The face is clearer. The first signs of the sex of the fetus appear. The excretory system develops rapidly.
4 Months	Length: 15 centimeters 	The fetus kicks its legs and moves its arms. The skin develops.
5 Months	Length: 25 centimeters 	The rate of growth slows. Fine hair develops. The mother and doctor can listen to the fetal heart. The fetus can suck its thumb.

TIME	APPROXIMATE SIZE	DEVELOPMENT
6 Months	Length: 30 centimeters 	The fetus moves more often. The eyes are open. Outside sound or pressure can increase fetal heartbeat.
7 Months	Length and weight vary 	The fetus is fully developed but does not have enough fat cells to control body temperature. Will need to be in an incubator if born. Greatest change in length and weight occurs during this months.
8 and 9 Months	Length: 46 to 56 centimeters Weight: 2.5 to 3.5 kilograms 	The organ systems complete their development. Fat cells form on the body. The baby is born.

Source: *Family Living and Human Reproduction*.
Columbus, OH: Charles E. Merrill, 1982, pp 38-39.

CHILD ABUSE

The U.S. National Committee for Prevention of Child Abuse (1977) defines child abuse as:

“a non-accidental injury or pattern of injuries to a child.”

Except in the case of sexual abuse by a stranger, child abuse is not usually a single act but, rather, a pattern of behaviour.

Child abuse often occurs within a 'trust' relationship i.e. the abuser has some responsibility to, or relationship with the victim (family, babysitter, etc.) or a professional relationship, such as a teacher.

What is Child Abuse?

Child abuse is a global term and takes many forms.

1. *Physical Abuse*

This can be defined as:

“any non-accidental infliction of physical injury upon a child” by a caretaker.

This may be the most easily detected form of child abuse, as scars, bruises broken bones can be seen. However, psychological scarring also occurs and does not disappear as quickly as the bruises.

2. *Child Sexual Abuse*

The British Columbia Ministry of Human Resources defines child sexual abuse as:

"the sexual exploitation of a child who is not developmentally capable of understanding or resisting the contact, or a child or adolescent who may be psychologically or socially dependent upon the perpetrator."

It includes a range of behaviours, from exposing of private parts, forced participation in masturbation and fondling to full intercourse.

3. *Emotional Abuse or Maltreatment*

This can be defined as all acts of omission or commission which result in

"the absence of a nurturing environment for the child."

Acts of omission include ignoring or passively rejecting the child, or withholding affection or praise. Acts of commission include constant yelling, demeaning remarks, threatening and verbally rejecting the child. This is probably the most widespread form of child abuse and the most difficult to identify or prove. Emotional abuse is inevitably present with the other three forms of abuse.

4. *Neglect*

This occurs when caregivers fail to provide a child with the basic necessities of life e.g. food, clothing, shelter, medical care, safety, nurturing etc. This form of abuse is usually not intentional. It can be the result of ignorance of what is appropriate care, an inability to plan ahead, unrealistic expectations of what the child can do for himself, or the consequence of parents incapacitated through illness injury or handicap.

The effects of child abuse are cumulative. The longer the abuse continues, the more serious it becomes, and the more serious are the child's injuries.

Indicators of Child Abuse

Signs of child abuse do not usually appear in isolation, but rather as a syndrome. It is most important to recognize that the *behavioural signs* are indicative of stress in a child's life and should be investigated further. However, they are not all conclusive in indicating abuse.

Type of Abuse	Physical Indicators	Behavioural Indicators
Physical	<p>Unexplained bruises and welts</p> <ul style="list-style-type: none"> - on face, lips, or mouth - on torso, back, buttocks, or thighs - in various stages of healing - clustered or forming patterns - shaped like recognizable object (e.g., belt buckle) - appearing regularly after absences, weekends, or vacation periods <p>Unexplained burns</p> <ul style="list-style-type: none"> - by cigars or cigarettes, especially on soles, palms, back, or buttocks - by immersion in hot liquid, especially, on hands, feet, buttocks, or genitalia - shaped in a recognizable form (e.g., electric range coils, electric iron) - by rope on arms, legs, neck, or torso <p>Unexplained fractures</p> <ul style="list-style-type: none"> - of skull, nose, or facial bones - in various stages of healing - in multiple locations <p>Unexplained lacerations or abrasions</p> <ul style="list-style-type: none"> - on mouth, lips, gums, or eyes - on external genitalia 	<p>Wary of adult contacts</p> <p>Apprehensive when other children cry</p> <p>Extreme aggressiveness or extreme withdrawal</p> <p>Fear of parents</p> <p>Fear of going home</p> <p>Reporting of injury by parents or others</p>
Sexual	<p>Difficulty in walking or sitting</p> <p>Torn, stained, or bloody underclothes</p> <p>Pain or itching in genital area</p> <p>Bruises or bleeding in external genitalia, vaginal, or anal areas</p> <p>Venereal disease symptoms, especially in pre-teens</p> <p>Pregnancy</p>	<p>Unwillingness to change clothing or to participate in physical education classes</p> <p>Withdrawal, fantasy, or infantile behaviour</p> <p>Bizarre, sophisticated, or unusual sexual behaviour or knowledge</p> <p>Poor peer relationship</p> <p>Chronic delinquency</p> <p>Reporting of sexual assaults</p>

Type of Abuse	Physical Indicators	Behavioural Indicators
Emotional	Speech disorders Lag in physical development Severe allergies, asthma, or ulcers Alcohol or drug abuse	Habit, disorders (e.g., thumb sucking, lip biting, rocking) Antisocial or destructive conduct Psychoneurotic traits (e.g., hysteria, obsessions, compulsions, phobias, hypochondria) Behaviour extremes of compliance or aggression Inappropriate adult or infantile behaviour Mental and emotional developmental lags Suicide threats or attempts
Neglect	Consistent hunger Poor hygiene Inappropriate dress Unattended physical problems or medical needs Alcohol or drug abuse	Begging or stealing food Early arrivals and late departures Constant fatigue or listlessness Chronic delinquency, especially thefts Reporting of no caretaker at home

(Adapted from *The Educator's Role in the Prevention and Treatment of Child Abuse and Neglect*. Washington, D.C.: U.S. Department of Health and Human Services, 1984)

**DEPARTMENT OF EDUCATION GUIDELINES FOR EDUCATION
PERSONNEL REPORTING SUSPECTED CHILD ABUSE**

Any person employed by the Department of Education, a Board of Education, or a Divisional Board of Education in the Northwest Territories who suspects child abuse shall:

1. Immediately report orally the details of the suspected abuse to the local or regional representative of the Department of Social Services.
2. Inform the principal of the school of the report.
3. Follow-up the oral report to the local or regional representative of the Department of Social Services, as soon as possible, with a written report to the Superintendent of Child Welfare in Yellowknife.
4. Upon receiving a report from an employee, the principal shall immediately inform the Regional Superintendent of Education that a report of suspected child abuse has been made.
5. Staff shall not contact the child's family or the suspected perpetrator or anyone else to inform or further investigate the circumstances of the suspected abuse. This is the responsibility of the Department of Social Services and the R.C.M.P.
6. Any information, oral or written, about child abuse cases is confidential. All written records or reports must be treated confidentially and should not be placed in the child's record or cumulative file. Information necessary in the conduct of the investigation or subsequent treatment of the child or the offender must be shared with the authorized agencies.
7. The above procedures will also be followed by adult educators with regard to children who are or, in the absence of evidence to the contrary, appear to be under the age of 18 years of age. However, adult educators are not required to inform the principal of the school.

Supt. of Child Welfare
Department of Social Services
Boy 1320
Yellowknife, X1A 2L9
(403-873-7709)

GRADE 6

NUTRITION

NUTRITION

GRADE: 6

LESSON: 1

THEME: FOOD CLASSIFICATION

CONCEPT: FOODS ARE CLASSIFIED INTO FOUR FOOD GROUPS ON THE BASIS OF NUTRIENT CONTENT

PREPARATION:

1. Prepare a set of flash cards for Student Activity 1
2. A copy of the Nutrient True/False sheet (Activity Sheet N40)
3. A ball or bean bag
4. Materials for the Food Group Book

VOCABULARY: leader nutrients, important, infection

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>Students will be able to:</p> <p>i) identify the leader nutrients found in each of the four food groups and their functions</p>	<p>Students:</p> <ol style="list-style-type: none">1. Review the food groups, the leader nutrients of each and their functions.	<p>Background information: Page N81 to N86; N94 to N100</p> <p>This is a review of Grade 4, Lessons 1 and 2, and Grade 5, Lessons 1 and 2. Nutrients are the substances ("things") in food that make us:</p> <ul style="list-style-type: none">Grow - muscles, tissues, bones, teeth, repairGlow - feel healthy, look healthy, fight infectionGo - have energy for work and play <p>Foods that contain the same leader nutrients are grouped together in the four food groups.</p>

OBJECTIVES

STUDENT ACTIVITIES

TEACHER NOTES

Develop the following chart with students. Teaching suggestions follow the chart.

FOOD GROUP	LEADER NUTRIENTS	WHY THEY ARE IMPORTANT
Milk and Milk Substitutes	calcium protein riboflavin	- builds strong bones and teeth - builds and repairs muscles and tissue - helps the body have energy
Meat, Fish, Birds and Eggs	protein iron B Vitamins	- builds and repairs muscles and tissue - helps build good blood - help the body have energy
Fruits and Vegetables	Vitamin A Vitamin C	- helps you stay healthy - gives you good sight - gives you good skin - helps keep your teeth and gums healthy - helps fight infection
Bannock, Bread and Cereals	carbohydrates iron B Vitamins	- give you energy to work and play - helps build good blood - help the body use energy

OBJECTIVES

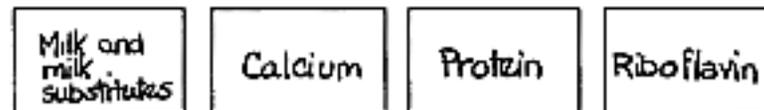
STUDENT ACTIVITIES

TEACHER NOTES

(The B Vitamins, including riboflavin have not been taught in Grades 4 and 5).

Using large index cards, make flash cards for each item on the chart.

- 1) Give four students a food group card and 11 students a leader nutrient card. The students with the leader nutrient cards have to go to the person with the correct food group card. For example students with these cards should stand together.



Have students practise the sentence patterns.

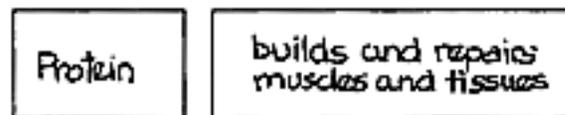
_____ is a leader nutrient in the _____ group.

_____, _____ and _____ are leader nutrients in the _____.

Use these groupings to develop the first two columns of the chart.

- 2) Give half the class a leader nutrient card and the other half a function card. Students have to find their partner.

For example:



OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>ii) list foods that are rich in the leader nutrients in each food group</p>	<p>2. Play the True/False Game.</p> <p>3. Name foods which belong to each food group and are excellent sources of the leader nutrient.</p> <p>4. Make a Food Group Book.</p>	<p>Have students make a sentence from their cards. Use these pairings to complete the chart.</p> <p>Refer to Activity Sheet N40. The teacher reads the statements from the True/False worksheet to students. If they think the statement is True, they stand up. If the statement is false, they sit down. Discuss false questions to correct any misinformation.</p> <p>Have students form one large circle, or several small circles with one student in the middle. The student in the middle throws a ball or bean bag to one of the students in the circle and at the same time calls out the name of one of the food groups. The student in the circle has to name a food from that food group and throw the ball back to the student in the centre. If a student cannot name a food from the food group, s/he has to sit out.</p> <p>Have students make a cover for the book.</p> <div data-bbox="1325 911 1633 1284" data-label="Image"> </div> <p>Each book should have four sections - each one colour coded for each food group.</p>

OBJECTIVES

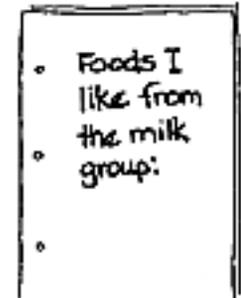
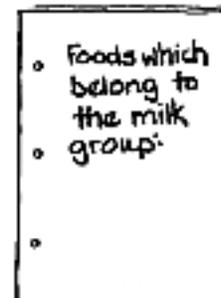
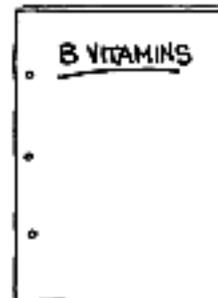
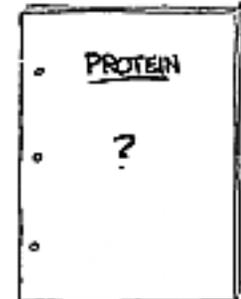
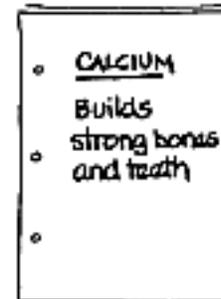
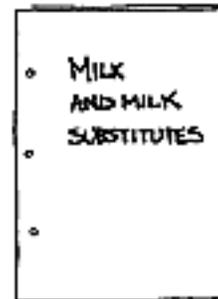
STUDENT ACTIVITIES

TEACHER NOTES

Pages should include one for each of the following:

- the title of the food group
- leader nutrients for that food group and why the leader nutrients are important
- foods which belong to that food group
- foods they like from that food group

Have students illustrate the book where appropriate.



NUTRIENT TRUE/FALSE

1. The leader nutrients in the bannock, bread and cereal group are carbohydrates, iron and B Vitamins.

True

2. Carbohydrates build strong teeth and bones.

False

3. Calcium is a leader nutrient in the meat, fish, birds and eggs group.

False

4. Vitamins A and C are the leader nutrients in the fruit and vegetables group.

True

5. Carbohydrates provide the body with energy.

True

6. Vitamin A fights infection.

False

7. Calcium builds strong bones and teeth.

True

8. Protein is one of the leader nutrients in the milk group.

True

9. Protein is a leader nutrient in the bannock, bread and cereals group.

False

10. Protein builds and repairs tissue such as muscle.

True

11. The fruits and vegetables group have calcium as a leader nutrient.

False

12. Calcium is a leader nutrient in the milk group.

True

13. The B Vitamins help your body use energy.

True

14. Iron makes good blood.

True

15. Eating bannock, bread and cereals will help you see in the dark.

False

NUTRITION

GRADE: 6

LESSON: 2

THEME: FOOD SELECTION

CONCEPT: EATING THE RECOMMENDED DAILY SERVINGS FROM EACH FOOD GROUP WILL ENSURE A BALANCED DIET

PREPARATION: 1. A copy of the NWT Food Guide (available in all schools or from Dr. Otto Schaefer Resource Centre)
2. Prepare the materials for the Cafeteria Simulation Game (Activity Sheets N41A to 41M)

VOCABULARY: balanced, intake, recommended

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) describe what is meant by a balanced food intake for one day	Students: 1. Describe what is meant by a nutritious meal.	Background information: Page N87 to N88 A traditional diet of eating the whole animal provided(s) all the nutrients which the body require(s)(d). However today many people eat a diet of country food and store bought food which needs to be balanced to ensure nutritional requirements are met. A nutritious morning meal must contain one food item from at least three food groups. Other nutritious meals contain at least one food serving from each of the four food groups.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>ii) identify the recommended daily number of servings from the four food groups</p>	<p>2. Describe what is meant by a balanced food intake for one day.</p> <p>3. List the recommended daily number of servings from the four food groups.</p> <p>4. List foods that do not belong to a food group.</p> <p>5. Choose meals for a daily, balanced food intake.</p>	<p>A nutritious snack is a food from one or more of the food groups that is to be eaten between meals.</p> <p>A balanced food intake for one day consists of the recommended minimum number of daily servings from the four food groups, based on NWT Food Guide, and water. By choosing a variety of the right kinds of foods in appropriate amounts, people can get the right combination of nutrients for growth, health and energy.</p> <p>Choose daily from:</p> <ul style="list-style-type: none"> 3 - 4 servings from Milk and Milk Substitutes 3 - 5 servings from Bannock, Bread and Cereal 4 - 5 servings from Fruits and Vegetables 2 servings from Meat, Fish, Birds and Eggs <p>Active and growing adolescents may select foods greater than the ranges of recommended numbers of daily servings in order to meet their energy and growth needs.</p> <p>Foods that are high in salt, sugar and fats and low in nutrients do not belong to a food group. Some examples: potato chips, chocolate bars, pop, gum and chips.</p> <p>Refer to Activity Sheets N41 A to 41 M. Conduct a cafeteria simulation. Prepare a class set of each food item. Display "piles" of each food to resemble a cafeteria line. Display prices prominently. At the entrance to the cafeteria place cardboard trays. Have two student as cashiers at the exit. Give each student \$2.00 to buy food for the day at the cafeteria. The goal is to ensure a balanced food intake by selecting at least the minimum number of required servings from each food group, and by limiting the number of foods that do not belong to a food group.</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
		<p>Have each student go through the cafeteria line three times. Before beginning and after each "meal", have students complete the appropriate section of Activity Sheet N41 M. Simplify the simulation if necessary by offering a limited choice of foods at any one meal. Snacks are not specifically mentioned but students might pick up an item to eat later. Discuss Activity Sheet N41 M once completed.</p> <p>(Adapted from the Ontario Egg Producers' Marketing Board)</p>

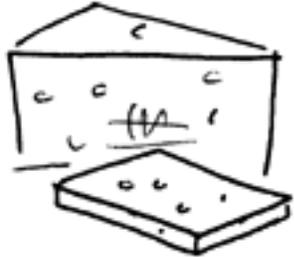
CAFETERIA SIMULATION



Milk



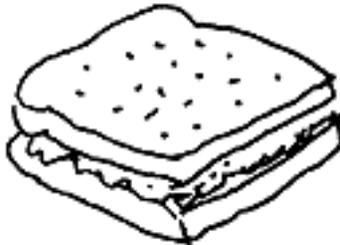
Yogurt



Cheese



Egg



Sandwich



Chicken leg

CAFETERIA SIMULATION



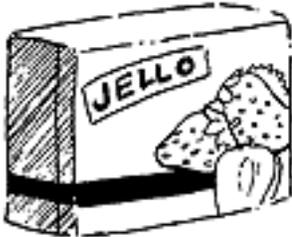
Coffee



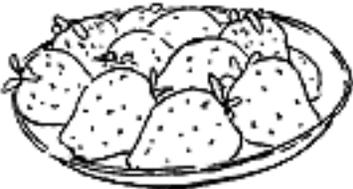
Tossed Salad



Carrot sticks



Jello



Dish of berries



Tea

CAFETERIA SIMULATION



Peanuts



Soup



Bannock



Toast (plain)

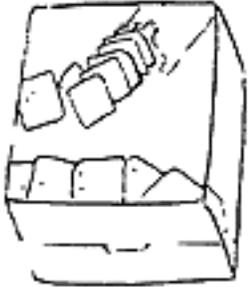


Muffin

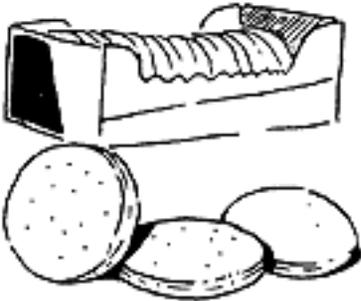


Unsweetened cereal

CAFETERIA SIMULATION



Crackers



Pilot biscuit



Bread or bun (plain)



Peas



Corn

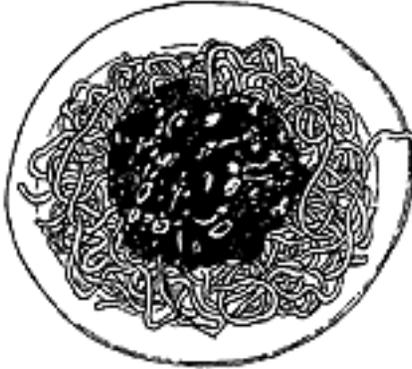


Cauliflower

CAFETERIA SIMULATION



Mashed potatoes



Spaghetti with meat sauce



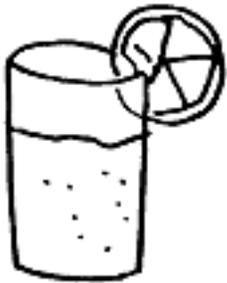
French fries



Roast



Fish



Orange juice

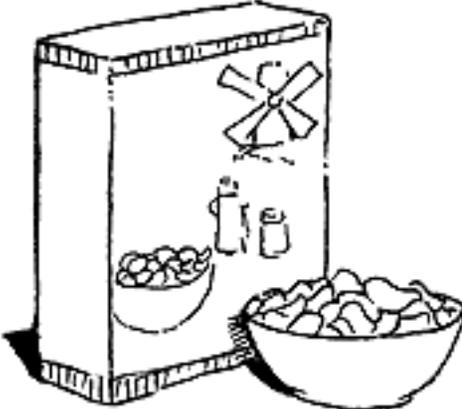
CAFETERIA SIMULATION



Chocolate bar



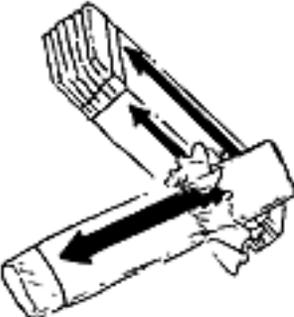
Jam



Potato chips



Butter



Gum



Kool aid

CAFETERIA SIMULATION



Apple juice



Orange



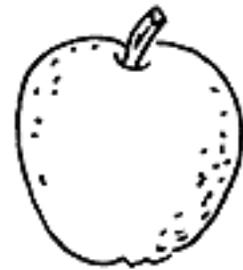
Banana



Raisins



Tomato juice



Apple

CAFETERIA SIMULATION



Hamburger



Pudding



Cake



Ice cream



Donut

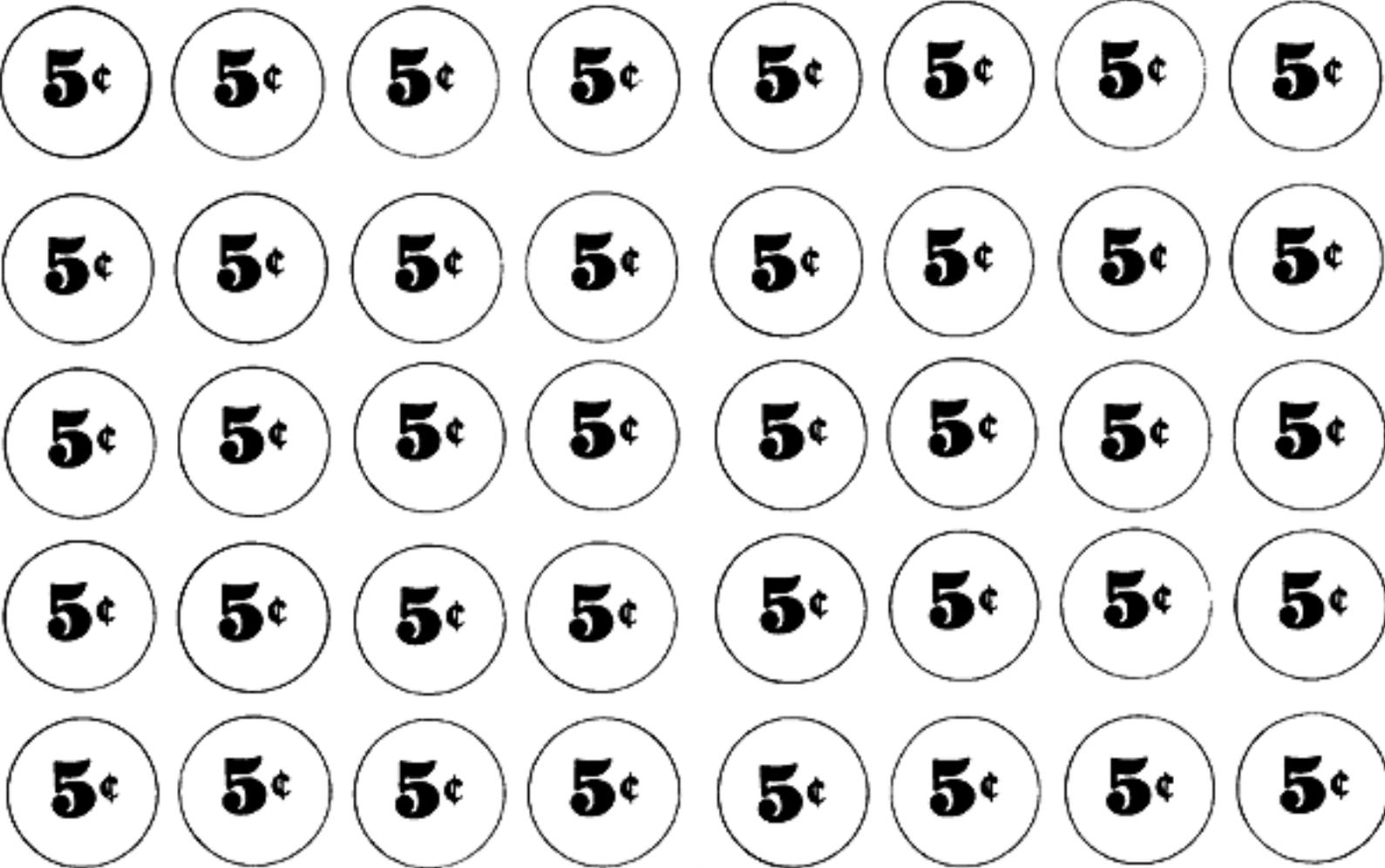


Cola

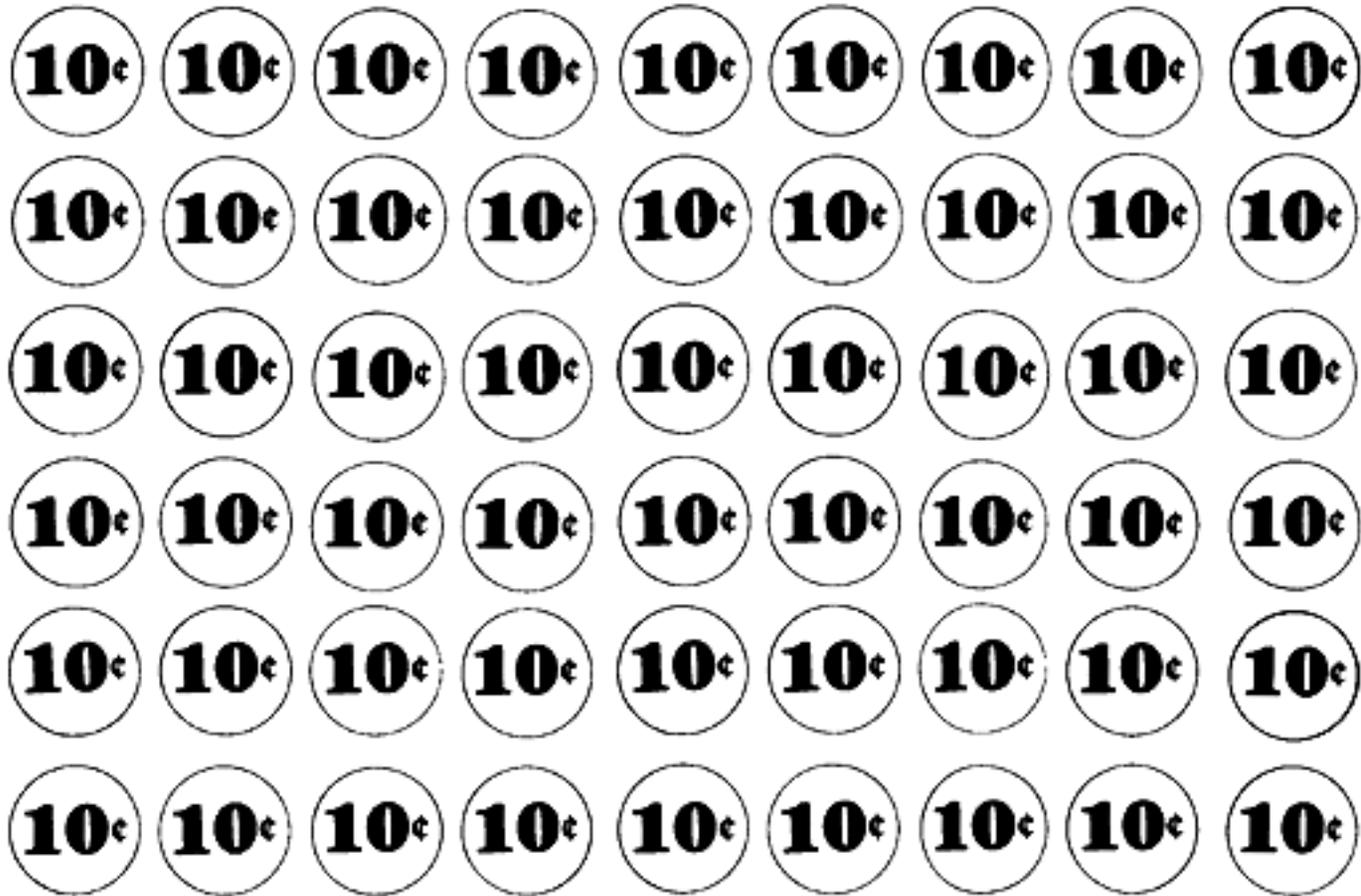
CAFETERIA SIMULATION (PRICE LIST)

Food	Cost	Food	Cost	Food	Cost
Milk	10¢	Tomato Juice	10¢	Peanuts	10¢
Peach Yogurt	10¢	Soup	10¢	Raisins	10¢
Cheese	10¢	Crackers	5¢	Pudding	10¢
Egg	15¢	Peanut butter		Cake	10¢
Bannock	10¢	sandwich	20¢	Ice cream	10¢
Toast	10¢	Ham sandwich	20¢	Jello	10¢
Butter	5¢	Hamburger	25¢	Donut	10¢
Jam	5¢	Spaghetti with		Cola	10¢
Muffin	10¢	meat sauce	25¢	Chocolate bar	10¢
Unsweetened		Chicken leg	20¢	Potato chips	10¢
cereal, Corn		Roast meat	20¢	Gum	10¢
flakes	10¢	Fish	20¢	Kool aid	10¢
Pilot biscuits	5¢	Mashed potatoes	10¢	Coffee	10¢
Orange juice	10¢	French fries	10¢	Tea	10¢
Banana	10¢	Corn	10¢		
Apple juice	10¢	Cauliflower	10¢		
Apple	10¢	Carrots	10¢		
Blueberries	10¢	Peas	10¢		
		Tossed salad	10¢		
		Bread or roll	5¢		

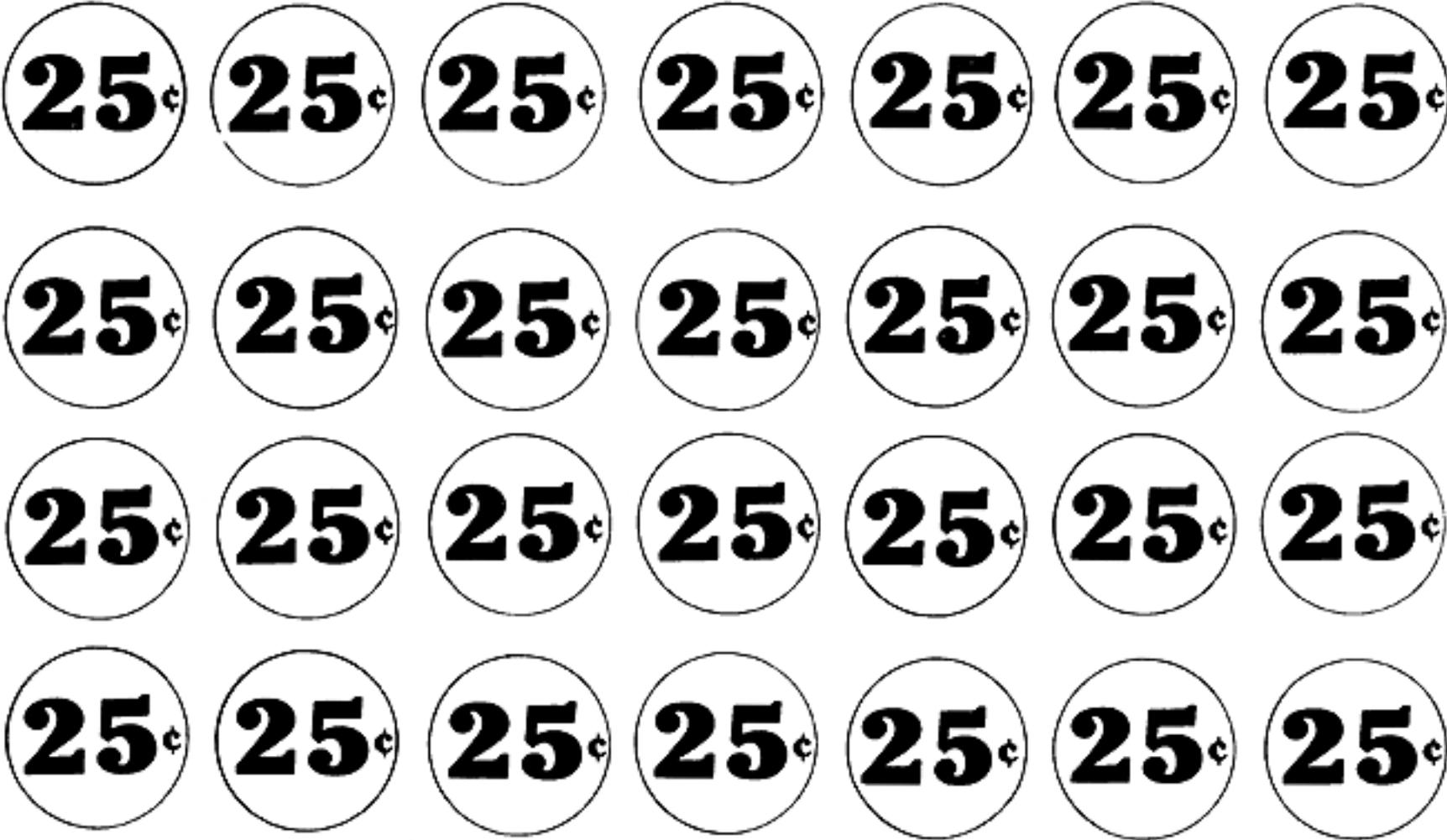
CAFETERIA SIMULATION



CAFETERIA SIMULATION



CAFETERIA SIMULATION



A DAY AT THE CAFETERIA

What will I eat today?

I need _____ servings from the _____ Group

_____	_____
_____	_____
_____	_____
_____	_____

For my second meal at the cafeteria I chose:

_____ servings from the Milk Group. I need _____ more today.

_____ servings from the Meat Group. I need _____ more today.

_____ servings from the Bread Group. I need _____ more today.

_____ servings from the

Fruit and Vegetables Group. I need _____ more today.

_____ foods that do not belong to a food group.

For my first meal at the cafeteria I chose:

_____ servings from the Milk Group. I need _____ more today.

_____ servings from the Meat Group. I need _____ more today.

_____ servings from the Bread Group. I need _____ more today.

_____ servings from the

Fruit and Vegetables Group. I need _____ more today.

_____ foods that do not belong to a food group.

For my third meal at the cafeteria I chose:

_____ servings from the Milk Group. I need _____ more today.

_____ servings from the Meat Group. I need _____ more today.

_____ servings from the Bread Group. I need _____ more today.

_____ servings from the

Fruit and Vegetables Group. I need _____ more today.

_____ foods that do not belong to a food group.

How did I do?

I had _____ servings from the Milk Group.

I had _____ servings from the Meat Group.

I had _____ servings from the Bread Group.

I had _____ servings from the Fruit and Vegetable Group.

I had _____ foods that do not belong to a food group.

NUTRITION

GRADE: 6

LESSON: 3

THEME: FOOD SELECTION

CONCEPT: EATING THE RECOMMENDED DAILY SERVINGS FROM EACH FOOD GROUP WILL ENSURE A BALANCED DIET

- PREPARATION:
1. Prepare an overhead transparency of Activity Sheet N42A
 2. Samples of food which students can measure to demonstrate serving sizes of different foods
 3. Spoons, measuring cups, weigh scales
 4. Prepare a class set of the Serving Sizes worksheet (Activity Sheet N42B)
 5. Prepare a class set of the Healthy Eating Puzzle (Activity Sheet N43A - 43B Teacher Answer Guide)
-

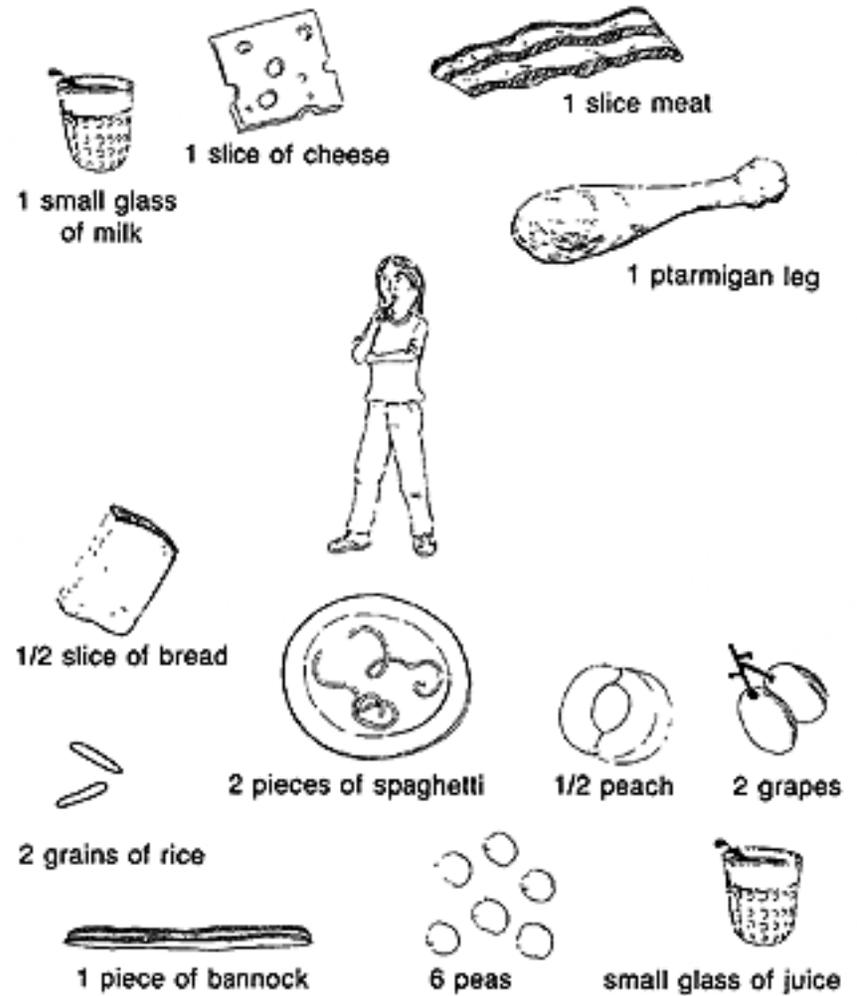
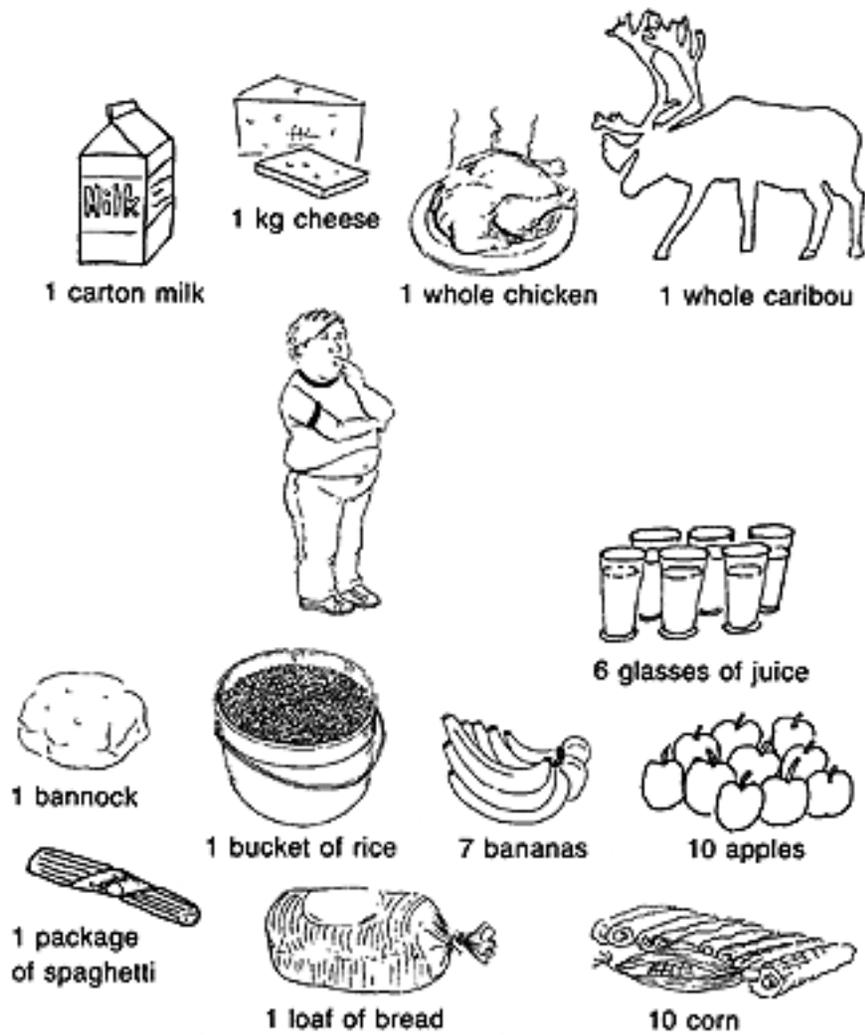
VOCABULARY:

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify and give examples of serving sizes of food within each of the food groups	Students: 1. Explain why there are specific serving sizes.	Background information: Page N87 to N88 Refer to Activity Sheet N42A. Show students the overhead transparency. Ask students to explain what the problem is. Both people think they are eating the recommended numbers of daily servings. There are specific serving sizes of each food within each food group to make sure that people eat certain amounts of the various nutrients.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) explain the importance of the recommended daily servings for the four food groups	<ol style="list-style-type: none"> 2. Demonstrate examples of serving sizes of foods within one food group. 3. Complete the Serving Sizes worksheet. 4. Explain why it is important to eat the recommended sizes of daily servings from each food group. 	<p>Refer to the NWT Food Guide (reverse side). Divide students into four groups. Each group is assigned one food group. Have students research a serving size for foods within their food groups. Then students measure and demonstrate the serving sizes to the class. Encourage students to measure a variety of food which would be used in regular meals.</p> <p>Refer to Activity Sheet N42B.</p> <p>Each nutrient has a specific function. In order for it to function effectively, it has to be present in certain amounts. These amounts are regulated in the number and size of daily servings for each food group. Discuss what might be affected if we eat too little or too much of specific nutrients.</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES																
	5. Complete the Healthy Eating Puzzle.	<p>Record responses on an experience chart as illustrated.</p> <table border="1" data-bbox="1039 370 2018 769"> <tr> <td data-bbox="1039 370 1478 415">Nutrient</td> <td data-bbox="1482 370 2018 415">Too much or too little may affect</td> </tr> <tr> <td data-bbox="1039 418 1478 464">calcium</td> <td data-bbox="1482 418 2018 464">- bones and teeth</td> </tr> <tr> <td data-bbox="1039 467 1478 513">protein</td> <td data-bbox="1482 467 2018 513">- muscles and tissue</td> </tr> <tr> <td data-bbox="1039 516 1478 561">carbohydrates</td> <td data-bbox="1482 516 2018 561">- amount of energy for work and play</td> </tr> <tr> <td data-bbox="1039 565 1478 610">iron</td> <td data-bbox="1482 565 2018 610">- blood</td> </tr> <tr> <td data-bbox="1039 613 1478 659">Vitamin A</td> <td data-bbox="1482 613 2018 659">- health, sight, skin</td> </tr> <tr> <td data-bbox="1039 662 1478 721">Vitamin C</td> <td data-bbox="1482 662 2018 721">- teeth and gums - the body's ability to fight infection</td> </tr> <tr> <td data-bbox="1039 724 1478 769">B Vitamins</td> <td data-bbox="1482 724 2018 769">- the body's ability to use energy</td> </tr> </table> <p>Teachers can use the chart and cards from Lesson 1 to review this.</p> <p>Refer to Activity Sheet N43A. Refer to Activity Sheet N43B for the answers.</p>	Nutrient	Too much or too little may affect	calcium	- bones and teeth	protein	- muscles and tissue	carbohydrates	- amount of energy for work and play	iron	- blood	Vitamin A	- health, sight, skin	Vitamin C	- teeth and gums - the body's ability to fight infection	B Vitamins	- the body's ability to use energy
Nutrient	Too much or too little may affect																	
calcium	- bones and teeth																	
protein	- muscles and tissue																	
carbohydrates	- amount of energy for work and play																	
iron	- blood																	
Vitamin A	- health, sight, skin																	
Vitamin C	- teeth and gums - the body's ability to fight infection																	
B Vitamins	- the body's ability to use energy																	

SERVING SIZES



SERVING SIZES

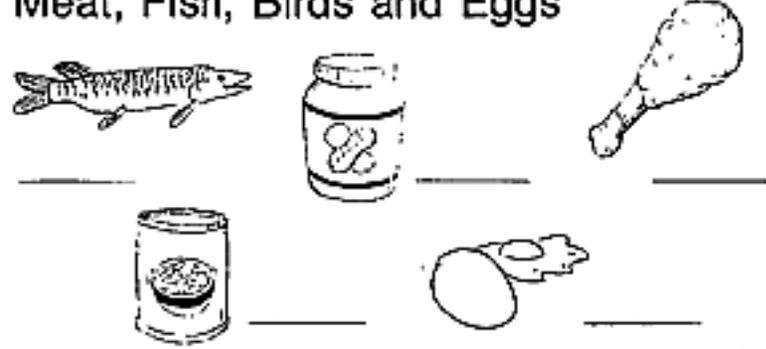
Decide what the recommended serving size is for the following foods. Write it by the food.

Milk and Milk Substitutes



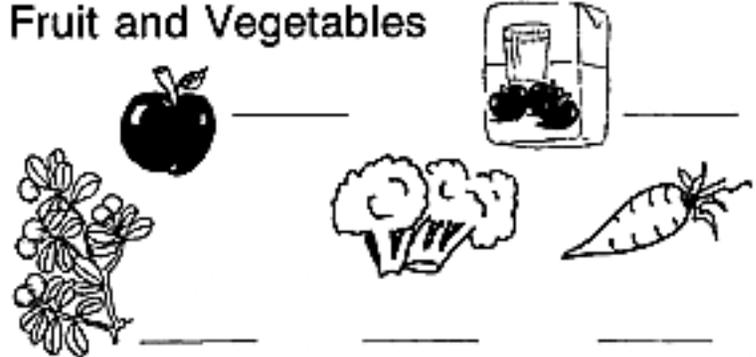
_____ _____ _____

Meat, Fish, Birds and Eggs



_____ _____ _____
_____ _____

Fruit and Vegetables



_____ _____ _____
_____ _____ _____

Bannock, Bread and Cereals



_____ _____
_____ _____ _____

HEALTHY EATING PUZZLE

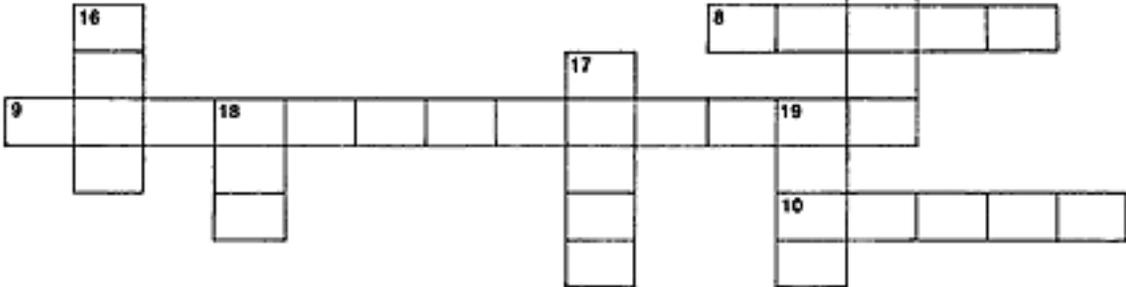
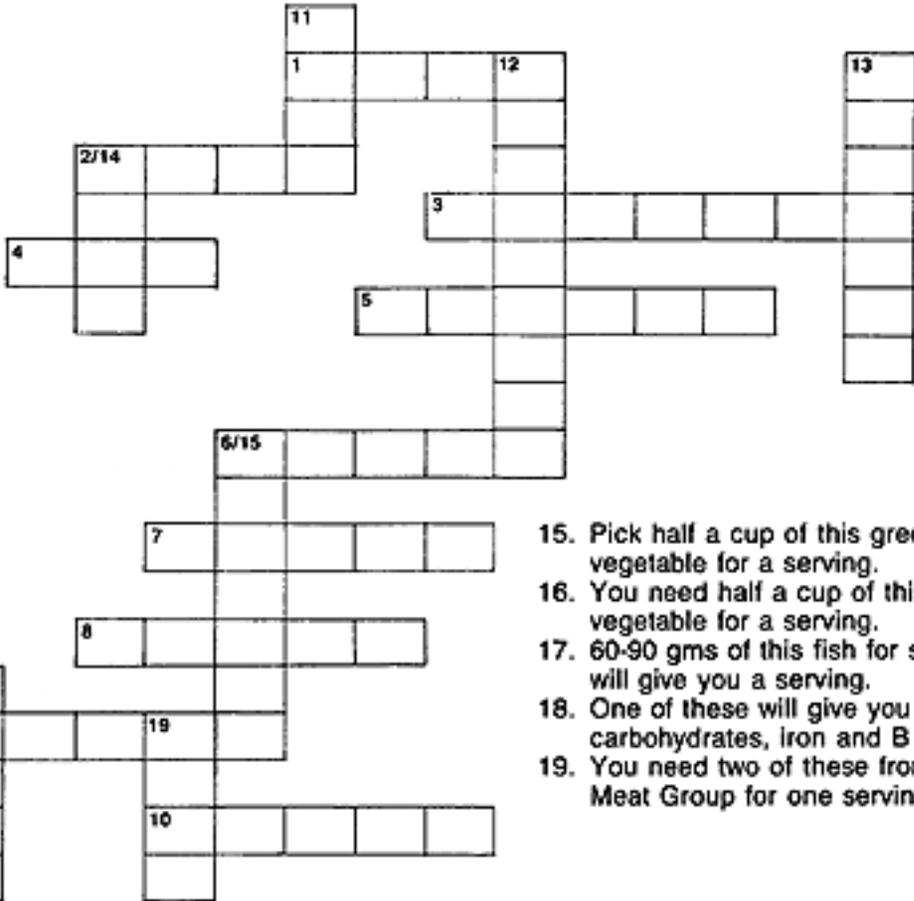
The clues will help you fill in the squares.

ACROSS

- 1. Without this mineral, your blood will be affected.
- 2. One cup of this liquid is a serving.
- 3. This is a leader nutrient in the Meat, Fish, Birds and Eggs Group.
- 4. If you eat too much food, you might get ____
- 5. This has lots of calcium.
- 6. One cup of this Meat Group food is good for one serving (they're not a meat).
- 7. One slice of ____ will give you one serving.
- 8. Half a cup of fresh apple ____ for breakfast is what you need.
- 9. This is a leader nutrient in the Bannock, Bread and Cereals Group.
- 10. Eating 60 - 90 gms of this bird is good for one serving.

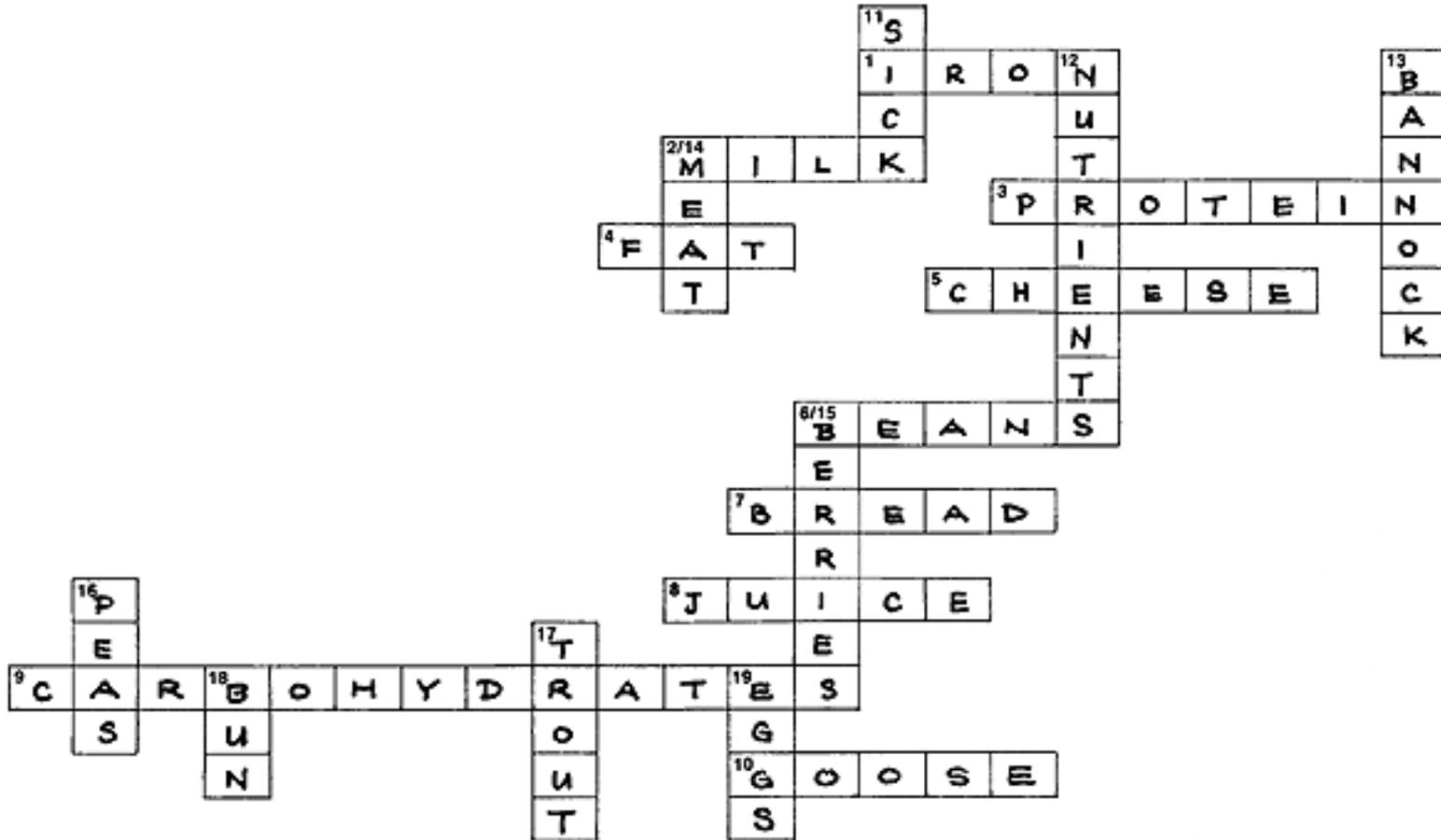
DOWN

- 11. Without Vitamin A and C you might get ____
- 12. The food groups are made up of foods that have the same leader ____.
- 13. One piece of this bread is a serving.
- 14. Instead of this, you can eat fish, birds, eggs, beans or nuts.



- 15. Pick half a cup of this green vegetable for a serving.
- 16. You need half a cup of this green vegetable for a serving.
- 17. 60-90 gms of this fish for supper will give you a serving.
- 18. One of these will give you carbohydrates, iron and B vitamins.
- 19. You need two of these from the Meat Group for one serving.

HEALTHY EATING PUZZLE (TEACHER ANSWER GUIDE)



NUTRITION

GRADE: 6

LESSON: 4

THEME: FOOD SELECTION

CONCEPT: EATING THE RECOMMENDED DAILY SERVINGS FROM EACH FOOD GROUP WILL ENSURE A BALANCED DIET

PREPARATION:

1. Prepare enough Balance Your Food worksheets for one for each group (Activity Sheet N44)
2. Prepare a class set of the Bobby's Day worksheet (Activity Sheet N45)
3. Prepare a class set of A Busy Day worksheet (Activity Sheet N46A and 46B)

VOCABULARY: analyze

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) plan a balanced food intake for one day	Students: 1. Play "I'm Going Camping..."	Background information: Page N87 to N88 Have students sit in a circle. They have to pretend that they are getting ready for a camping trip and are planning what food they will take. The first student starts by saying, "I'm going camping and I'm taking powdered milk." The next student says "I'm going camping and I'm taking powdered milk and dried fruit" and so on. When students have finished, ask why some of the food they would take would be different from what they would eat at home. Explain that the kind of food people eat often depends on their situation. e.g., camping.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) analyze daily food intake for the recommended numbers of servings from the food groups	2. Plan a balanced day's food intake for a variety of situations.	<p>Refer to Activity Sheet N44.</p> <p>Divide students into small groups. Have each group choose one of the following situations and plan foods to ensure a balanced day's food intake:</p> <ul style="list-style-type: none"> - a day which includes a packed lunch for a school picnic - a day which emphasizes country food - a day on a camping trip - a Saturday when you get up late - a special day e.g., Christmas Day <p>Have students list all meals and snacks. Mark the number of servings of each food item in the appropriate food group. Total the number of servings for the day. Compare with the NWT Food Guide. Have each group share their balanced day's food intake with the rest of the class.</p>
	3. Complete Bobby's Day worksheet.	Refer to Activity Sheet N45. Discuss as a class.
	4. Complete A Busy Day worksheet.	Refer to Activity Sheet N46A and 46B. Discuss as a class.
	5. Write a story of someone's food intake for one day and analyze it.	Have students write a story about someone's day and the food they eat. Give it to another student to analyze. Discuss as a class.

BALANCE YOUR FOOD



Write which day you are planning for _____

Foods eaten	Milk and Milk Substitutes (✓)	Bannock, Bread and Cereals (✓)	Fruits and Vegetables (✓)	Meat, Fish Birds and Eggs (✓)	Extras (✓)
Breakfast					
Lunch					
Supper					
Snacks					
Total number of servings					

BOBBY'S DAY

Bobby was late for school; his mom had tried to get him up early but he was lazy.

Bobby drank tea and had bannock with butter and jam before he left for school.

When he arrived at school he had to report to the office. Bobby could not concentrate on his school work because he was thinking of the hockey game he had to play that evening.

At lunch time his mom had made boiled caribou head with rice and onion. There was fresh bannock and tea. Bobby ate all of these things. After lunch Bobby helped his father load a sled.

Bobby returned to school and tried to concentrate on what the teacher was saying.

At supper Bobby had boiled seal, bannock and tea. He put his dishes in the sink and went to get his hockey equipment ready for the game that evening.

Bobby's family came to watch him play hockey. Bobby scored two goals in the game. Unfortunately, his team lost the game 7 to 5.

Bobby returned home after the game. He put his equipment away and showered. He snacked on dry fish, bannock and tea. Some friends came over to listen to music, they talked about the game. Bobby went to bed late that night.

Instructions:

Compare Bobby's daily diet to the NWT Food Guide. Count the number of checks (✓) under each food group/extra to find out the number of servings in the day.

Foods	Milk and Milk Substitutes	Bannock, Breads and Cereals	Fruits and Vegetables	Meat, Fish Birds and Eggs	Foods That Do Not Belong
Total Numbers of Servings					

A BUSY DAY

Esther was wakened by her mother's call. "Esther, it's quarter to nine, hurry up or you'll be late for school."

Esther hurried to get washed and dressed. She lived close to school and could run there in five minutes. On the way out the door she grabbed (an apple, a piece of bannock, a piece of chicken and a chocolate bar).

At recess, Esther had a headache and watched her friends play instead of joining them. She was hungry too, and found it hard to concentrate on math. She hurried home at noon for lunch. She could eat a bear!

She found a note on the door. "Dear Esther," the note read, "I have taken Barry to the nursing station. Please get your own lunch. Home soon. Love Mom."

Esther found a (peanut butter sandwich, a hard boiled egg, a piece of pizza or a chocolate pudding, boiled caribou and broth and rice). She poured herself a glass of (milk, Tang or apple juice) and ate her lunch. She took an oatmeal cookie and left for school.

After school Esther babysat Barry while her Mom made stew and dumplings. Esther had to choose the vegetables for her family. She chose (carrot raisin salad, cabbage salad, mashed turnips, mashed potatoes, boiled carrots) and helped get the vegetables ready.

The family went to a hockey game after supper. After the game they had Esther's favourite snack a (milkshake, coke, chips, popcorn, hamburger). She got ready for bed and was sleeping by 9:15 pm.

ESTHER'S BUSY DAY

Instructions:

Read "A Busy Day", circle those foods that you think Esther might pick. Then write down the food item and check which food group(s) it belongs to. Count the number of checks under each food group/and extras to find out the number of servings for the day. Compare Esther's choices to the NWT Food Guide.

Foods	Milk and Milk Substitutes	Bannock, Breads and Cereals	Fruits and Vegetables	Meat, Fish Birds and Eggs	Foods That Do Not Belong
Total Numbers of Servings					

NUTRITION

GRADE: 6

LESSON: 5

THEME: FOOD SELECTION

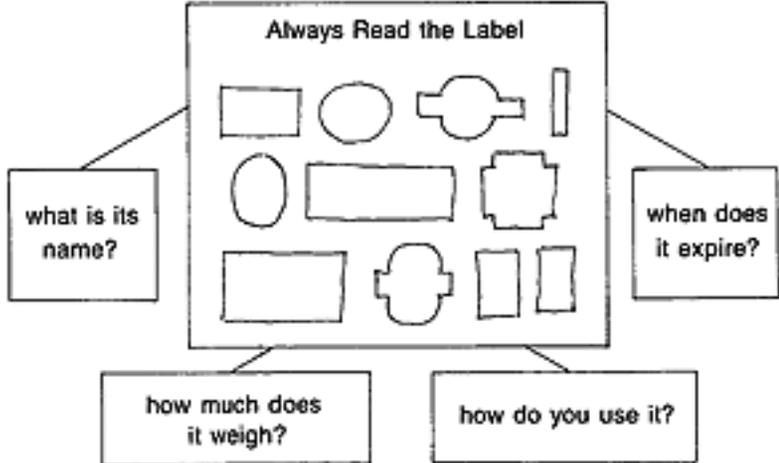
CONCEPT: LABELS ON FOOD PRODUCTS PROVIDE INFORMATION TO CUSTOMERS

- PREPARATION:
1. Some labels from foods with which students are familiar
 2. Ask students to bring 4 - 6 labels from home to class
 3. Prepare a class set of the What's On a Label worksheet (Activity Sheet N47)
 4. Prepare a class set of the Looking at Labels worksheet (Activity Sheet N48)
-

VOCABULARY: labels, information, calories, expiry date, ingredients, best before date

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) identify information about foods from their labels	Students: 1. Explain why foods which you buy in a store have labels.	Background information: Page N103 to N104 Show students some labels from food which they would recognize, e.g., a can of soup. Brainstorm with students why food has labels. Labels usually tell us _____. <ul style="list-style-type: none">- the name of the food- who makes it- where it is made- what is in it (the ingredients)

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
	<p>2. Examine four to six food labels to discover the kinds of information provided.</p> <p>3. Examine the labels and write down the first three ingredients.</p> <p>4. Complete the Looking at Labels worksheet.</p>	<ul style="list-style-type: none"> - how much of each ingredient is in it - the weight of the food - additives (if any) - the universal price code - how to use it - warnings (e.g., keep in the fridge after opening) - expiry date - the price (sometimes) <p>Labels may also tell us _____.</p> <ul style="list-style-type: none"> - the nutrients in the food - the amount of each nutrient - the serving size - the number of servings in the container - the number of calories in each serving. <p>Labels sometimes give us advertising information.</p> <p>Refer to Activity Sheet N47. Have each student bring four to six food labels from home (remind them to write the name on anything they take a label from). Encourage students to bring labels from different foods, e.g., cereal boxes, drinks/juices, cans, etc. Keep labels for use with Student Activity 5. Discuss the kinds of information found on food labels.</p> <p>Ingredients are listed in order of amount from most to least. If sugar is listed first, then that is what the food has most of. Discuss.</p> <p>Refer to Activity Sheet N48.</p>

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>ii) compare the nutrition information of similar foods from food labels</p> <p>iii) explain why it is important to read the information on food labels</p>	<p>5. Compare the nutrition information of two or more similar foods.</p> <p>6. Explain why they should always read the information on food labels before buying food.</p> <p>7. Make a bulletin board display of the labels.</p>	<p>Use some of the labels from Activity 2. Have students work in pairs. Each pair needs two or three labels from similar kinds of foods, e.g., three different kinds of cereals. Have them write down the nutrition information and decide which is the most nutritious, i.e., the nutrients, how much sugar, etc. Discuss as a class.</p> <p>Labels provide information to customers that helps them make wise choices about the food they eat.</p> <p>Use the labels to make a bulletin board display which indicates why it is important to read the labels on food.</p> 

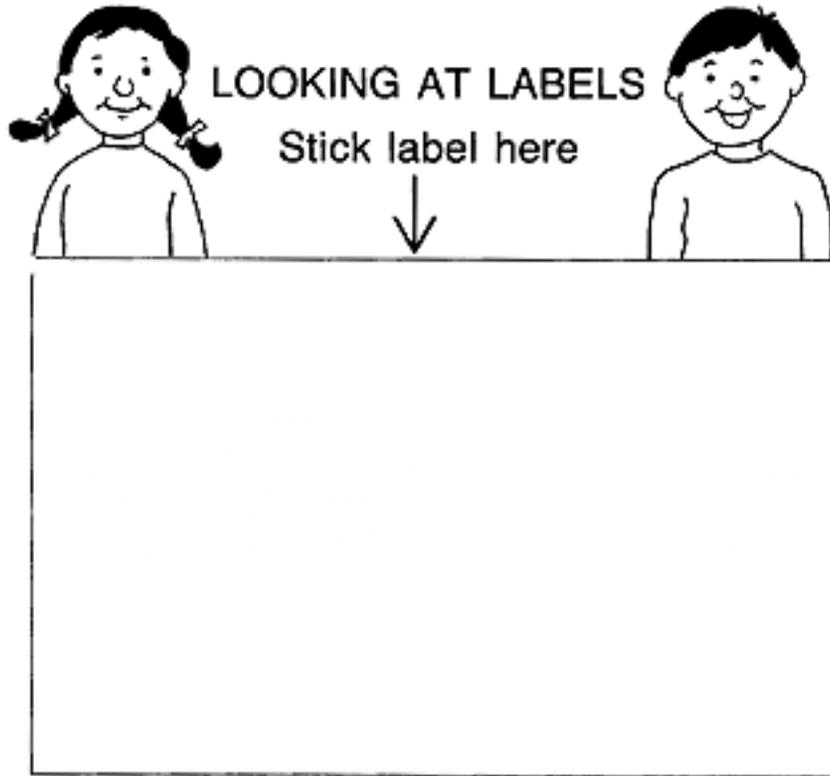
WHAT'S ON A LABEL

For each of your labels check off (✓) the information which it gives you.
Put an X if the information is not given..

Does it have...?	Label 1	Label 2	Label 3	Label 4	Label 5	Label 6
The name of the food?						
Who makes it?						
Where it is made?						
What is in it?						
How much of each thing is in it?						
The weight of the food?						
Additives?						
The price code?						
How to use it?						
Any warnings?						
The expiry date?						
The price?						
The nutrients in the food?						
The amount of each nutrient?						
The serving size?						
The number of servings in the packet?						
The calories?						
Any advertising?						

LOOKING AT LABELS

Choose one of your labels and stick it in the box.



Write down:

The name of the food? _____

Who makes it? _____

Where it is made? _____

What is in it? _____

The first three ingredients? _____

The weight of the food? _____

Additives? _____

The price code? _____

How to use it? _____

Any warnings? _____

The expiry date? _____

The price? _____

g fat for one serving _____

g carbohydrates _____

g protein vitamins minerals _____

serving size _____

servings in the container _____

calories for one serving _____

advertising _____

NUTRITION

GRADE: 6

LESSON: 6

THEME: LIFESTYLE

CONCEPT: POSITIVE NUTRITION LIFESTYLE PRACTICES PROMOTE HEALTH

- PREPARATION:
1. Prepare a class set of the Yesterday I Ate worksheet (Activity sheet N49)
 2. Prepare a class set of the Yesterday I Ate scoring sheet (Activity Sheet N50)
 3. Prepare a class set of the Eating For Health worksheet (Activity Sheets N51A and N51 B)
-

VOCABULARY:

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) assess if their food intake for one day meets the recommended daily servings	Students: 1. Complete the "Yesterday I Ate" worksheet. 2. Work out their score for the worksheet.	Background information: Page - Refer to Activity Sheet N49. Refer to Activity Sheet N50.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) design a personal nutrition program to promote health	3. Select a behaviour that promotes positive nutritional habits.	<p>Refer to Activity Sheet N51 A. Behaviours that promote positive nutrition habits include:</p> <ul style="list-style-type: none"> - following the breakfast rule - eating recommended number of daily servings from each food group - eating regularly during the day - choosing a variety of foods from each food group - eating a fresh fruit or vegetable if possible - choosing nutritious snacks - eating extras in moderation <p>Teachers should work individually with students to ensure that goals are specific, measurable and realistic, e.g., "I'm going to follow the morning meal rule for one month," not "I'm going to eat a better morning meal."</p>
iii) evaluate the effectiveness of the program	<p>4. Practise their personal programs for a given time period.</p> <p>5. Describe the degree of success of their personal programs.</p>	<p>Refer to Activity Sheet N51 B. Have students record their own progress on a daily basis for a fixed length of time.</p> <p>Refer to Activity Sheet N51 B. Have students refer to the evaluation data for their programs. These programs can be continued over an extended length of time. Goals can be altered as necessary.</p>

YESTERDAY I ATE...

Write down what you ate for each meal and snack (be honest, write that chocolate bar down too!)

	What I Ate	Number of Servings
in the morning		<input type="checkbox"/> milk and milk substitutes <input type="checkbox"/> meat, fish, birds, eggs <input type="checkbox"/> bannock, bread and cereals <input type="checkbox"/> fruits and vegetables
at noon		<input type="checkbox"/> milk and milk substitutes <input type="checkbox"/> meat, fish, birds, eggs <input type="checkbox"/> bannock, bread and cereals <input type="checkbox"/> fruits and vegetables
in the evening		<input type="checkbox"/> milk and milk substitutes <input type="checkbox"/> meat, fish, birds, eggs <input type="checkbox"/> bannock, bread and cereals <input type="checkbox"/> fruits and vegetables
for snacks		<input type="checkbox"/> milk and milk substitutes <input type="checkbox"/> meat, fish, birds, eggs <input type="checkbox"/> bannock, bread and cereals <input type="checkbox"/> fruits and vegetables
	Totals	<p>Now count the number of servings you had for the day.</p> <input type="checkbox"/> milk and milk substitutes <input type="checkbox"/> meat, fish, birds, eggs <input type="checkbox"/> bannock, bread and cereals <input type="checkbox"/> fruits and vegetables

YESTERDAY I ATE... SCORING SHEET

Did you eat . . .	YES	NO
3 - 4 servings from the milk and milk substitutes group?	<input type="checkbox"/>	<input type="checkbox"/>
2 servings from the meat, fish, birds and eggs group?	<input type="checkbox"/>	<input type="checkbox"/>
3 - 5 servings from the bannock, bread, cereals group?	<input type="checkbox"/>	<input type="checkbox"/>
4 - 5 servings from the fruits and vegetables group? regularly during the day?	<input type="checkbox"/>	<input type="checkbox"/>
follow the rule to start the day (food from at least three food groups)?	<input type="checkbox"/>	<input type="checkbox"/>
different foods from each food group?	<input type="checkbox"/>	<input type="checkbox"/>
a fresh fruit or vegetable?	<input type="checkbox"/>	<input type="checkbox"/>
only nutritious snacks (low in fat, sugar, salt/high in nutrients)?	<input type="checkbox"/>	<input type="checkbox"/>
very few extras	<input type="checkbox"/>	<input type="checkbox"/>

Give yourself two points for every Yes. Take two points away for every No. (points). Add up your total number of points (maximum 20 points).



EATING FOR HEALTH

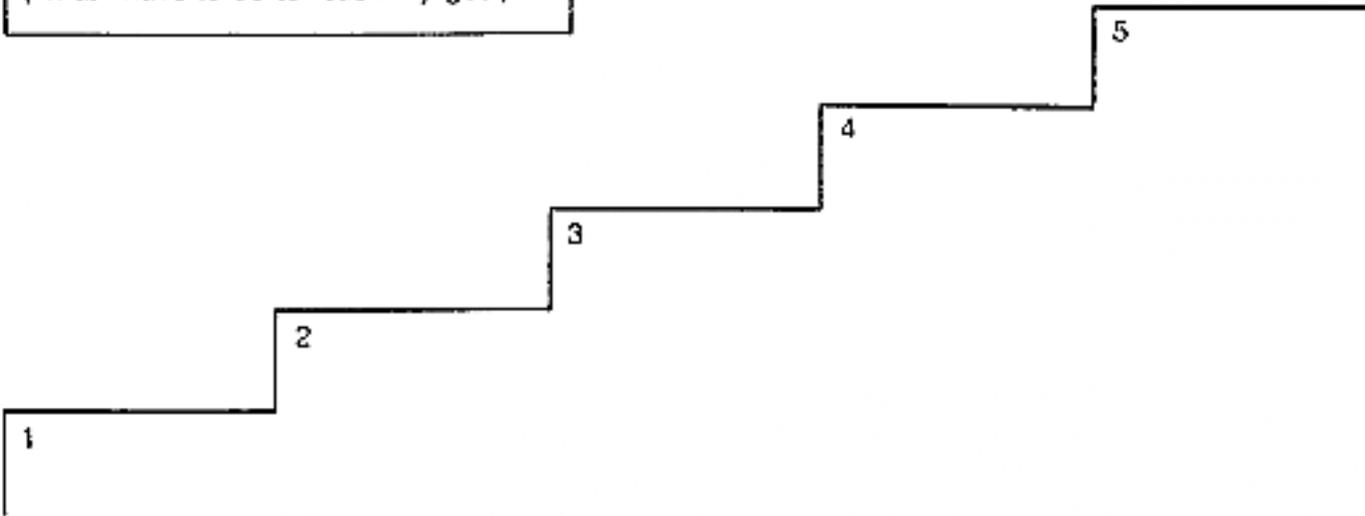
Select one thing that you can do personally to improve your own eating habits. Develop an action plan to achieve your goal.

MY GOAL

WHY I CHOSE THIS GOAL

STEPS TO REACH MY GOAL
(What I have to do to reach my goal)

SUPPORT I NEED TO REACH MY GOAL



PROGRESS

(Chart your daily progress)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
WEEK 1							
WEEK 2							
WEEK 3							
WEEK 4							

HOW DID I DO?

(Summarize your progress and assess how well you did)

GRADE 6

TEACHER BACKGROUND INFORMATION

NUTRITION

FOOD

Food is life. People, animals and plants need food to grow and remain healthy. The substances in food that help people grow and stay healthy are called nutrients.

NUTRIENTS

We need over 50 nutrients for good health. These nutrients have their own jobs to do, but often depend on each other. Because foods are different they give us different nutrients. No one food can provide all the nutrients we need. This means we must eat a variety of foods every day.

From food we also get energy to carry out daily activities. The energy comes from fats, carbohydrates and protein. If food gives more energy than needed, the extra energy is stored as fat.

If not enough energy comes from food, then the body loses weight. So, food energy must be balanced with activity to control body weight.

Although there are more than 50 nutrients essential for health and growth, there are only six major groups of nutrients:

Nutrient:	Function:
1. Protein	builds and repairs body tissue, e.g., muscles, skin
2. Fat	insulates and protects supplies energy
3. Carbohydrates	carries vitamins A, D, E and K important source of energy

4. Vitamins	Vitamin A: good night vision, healthy skin Vitamin C: healthy gums, teeth & blood vessels fights infection B vitamins: help the body use energy (Riboflavin) (Thiamin) (Niacin)
5-. Minerals	Calcium: strong bones & teeth Iron: good blood
6. Water	regulates body functions

What Foods Do We Eat To Get All These Nutrients?

Traditionally, people in the North ate a healthy diet. The hunting and fishing lifestyle was active and healthy. There were times of little food, but generally people were able to feed themselves well. People wasted very little of their food sources. For example, they would eat all of an animal they killed; the eyes, brains, lips, stomach contents, etc. That way they were able to get all the nutrients they needed. Today, lifestyle and food sources in the North have changed. Both store and country foods are needed for good health and nutrition. The stores have many nutritious foods, but also some that aren't so nutritious. People need to choose foods carefully for best nutrition and value for their money.

Here's a list of foods, from the country and the store, that will give people the nutrients that they need everyday.

Nutrient	Country Food Source	Store Food Source
Protein	Wild game (all parts of the animal), wild birds, wild bird eggs, animal blood, fish, fish eggs, organ meats (liver, kidney, heart)	Beef, pork, chicken, turkey, organ meats, fish, dried beans and peas, cheese, eggs, nuts/seeds, peanut butter
Carbohydrate	Bannock, wild berries and greens, seaweed, animal stomach contents	Bread, whole grain cereals, enriched pasta (macaroni noodles, etc.), rice, dried beans and peas, macaroni dinner, crackers, pilot biscuits
Fat	Wild birds, wild game fat, muktuk, animal intestines	Beef, pork, luncheon meats, bologna, sausages, bacon, nuts/seeds, wieners, lard, butter, margarine
Calcium	Animal stomach contents, fish heads and bones, seaweed/kelp, wild dark green vegetables, bones, wild milk	Milk, cheese, yogurt, sunflower seeds, broccoli, dried beans/peas, canned fish with bones ((salmon, sardines)
Iron	Game, wild birds, organ meats, seaweed, animal blood, wild greens	Organ meats, red meats, pumpkin seeds, green leafy vegetables, enriched cereal products, enriched pasta (macaroni, noodles, etc.)
Vitamin C	Wild greens, wild berries, seaweed	Potatoes, cabbage, broccoli, turnip, canned tomatoes, alfalfa and bean sprouts, oranges, orange and grapefruit juice, vitaminized apple juice
Vitamin A	Seal, wild birds, muktuk, animal stomach contents, seaweed, animal and fish liver, wild greens and berries	Broccoli, spinach, milk, butter, liver, carrots, squash
Vitamin D	Fish liver oils	Vitamin D fortified milk
Thiamin	Seal, wild birds, organ meats, muktuk, seaweed, bannock, wild greens	Dried beans/peas, pork, organ meats, nuts/seeds, enriched bread/cereals, enriched pasta (macaroni, noodles, etc.)
Riboflavin	Game, wild birds, stomach contents, organ meats, wild bird, eggs, seaweed, bannock	Milk products, organ meats, enriched breads, cereals, enriched pasta (macaroni, noodles, etc.)

Nutrient	Country Food Source	Store Food Source
Niacin	Animal stomach contents, seaweed, bannock, organ meats, wild game, wild birds	Organ meats, enriched breads and cereals, enriched breads and cereals, enriched pasta (macaroni, noodles, etc.)

As shown in the above list, some foods provide more than one nutrient. Example: Wild game provides protein, fat, iron, vitamin A, thiamin and riboflavin. Also, some foods are the main source of more than one nutrient. Example: fortified milk is a main source of calcium, and it is also a main source of Vitamin D.

The Food Guide (Canada's Food Guide or the N.W.T. Food Guide), puts food together into four food groups, based on the leader nutrients they provide. By selecting foods from EACH group daily we can be sure of getting all the nutrients we need.

Here's a summary of what each group provides us with:

Milk and milk substitutes group (includes soft bones)	Calcium, riboflavin, vitamins A and D, protein, fat, carbohydrate
Meat, fish, birds and eggs Group	Protein, iron, fat, vitamin A, thiamin, riboflavin, niacin
Bannock, bread and cereal group	Carbohydrate, thiamin, riboflavin, niacin, iron, fibre, protein
Fruit and vegetables group (includes intestines and stomach contents)	Vitamins A and C, carbohydrate, fibre, iron.

The food groups are colour coded to help people plan a healthy diet

- Blue Milk and milk substitutes
- Red Meat, fish, bird, eggs and all edible parts
- Green Fruit and vegetables
- Orange Bannock, bread and cereal

This allows people to quickly identify a food with its food group, e.g., "Milk belongs to the blue group."

THE FOUR FOOD GROUPS

The following foods belong to the four food groups of the N.W.T. Food Guide. Each food belongs to a particular food group because it is a good source of the group's leader nutrient(s). Foods marked with an asterisk are illustrated in the Guide.

Milk and Milk Substitutes

almonds (3/a cup)
 breast milk
 broccoli
 (2 med. stalks)
 canned fish with
 bones (salmon)
 cheese *
 natural *
 processed *
 cottage cheese
 cream soup
 custard
 fish bones
 & head *
 ice cream
 milk *
 evaporated *
 homogenized
 powdered *
 2% UHT *
 milk pudding
 sardines
 seaweed *
 soft animal
 bones *
 yogurt *

Meat, Fish, Bird, Eggs and all edible parts

baked beans *
 bear
 beef
 canned fish
 caribou *
 chicken *
 dried beans
 & peas
 dried meat/fish *
 duck *
 fish
 fish eggs
 hamburger
 heart
 kidney
 liver
 moose
 muskox
 muskrat *
 nuts
 peanut butter
 porcupine
 pork/ham
 ptarmigan
 rabbit *
 seal *
 tongue
 turkey
 walrus
 whale

Fruit and Vegetables

animal fat *
 animal stomach
 & intestine
 contents
 bananas *
 berries *
 broccoli
 brussel sprouts
 cabbage
 carrots *
 cauliflower
 cherries
 dandelion greens
 dried fruit
 fiddlehead greens
 fireweed
 oranges *
 peaches
 pears
 plums
 potatoes *
 tomatoes
 turnip
 unsweetened fruit
 juice *
 vegetables
 canned *
 frozen *
 wild greens *
 wild rhubarb
 willow buds

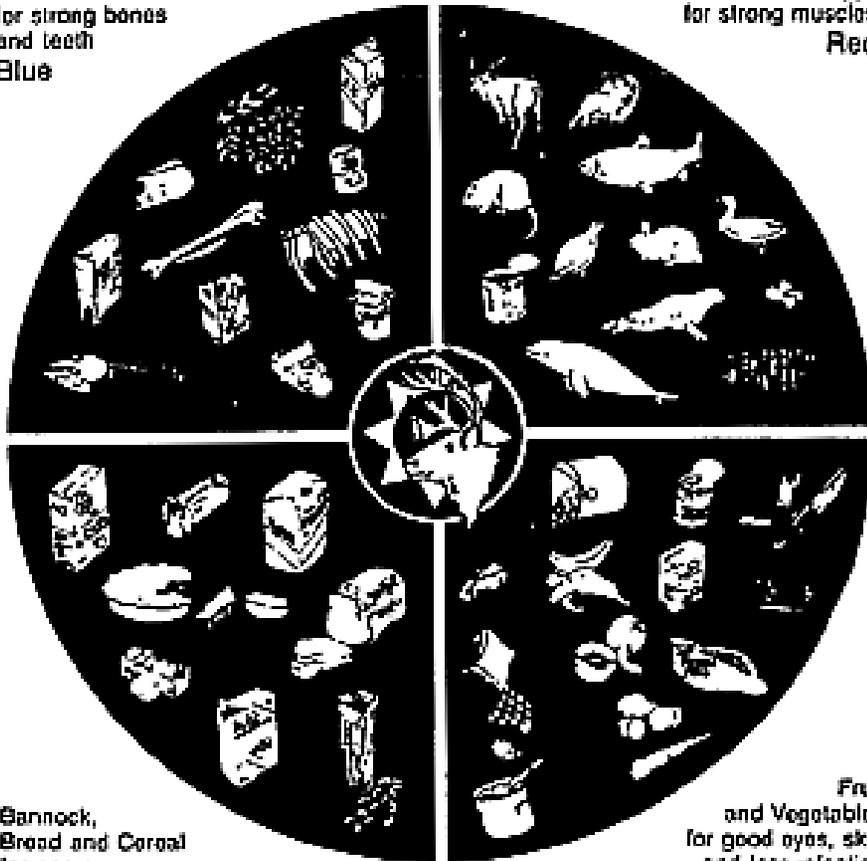
Bannock, Bread and Cereal

animal brains
 bannock*
 bone marrow
 bread *
 flour *
 liver
 macaroni *
 muffins
 muktuk
 oatmeal *
 pancakes
 pilot biscuits *
 rice *
 soda crackers *
 spaghetti *
 whole wheat
 wild rice

N.W.T. FOOD GUIDE

Eat foods from each group every day for health.

Milk and milk substitutes
for strong bones
and teeth
Blue



Meat, Fish, Birds and Eggs
for strong muscles
Red



Bannock,
Bread and Cereal
for energy
Orange

Fruit
and Vegetables
for good eyes, skin
and less infection
Green

SERVING SIZE:

Specific serving sizes are applied to foods within each food group to ensure a certain amount of nutrient is provided by each serving, for example:

Milk and Milk Substitutes:

Each of the following serving examples yields approximately 300mg of calcium:

- 250 ml (1 cup) of milk
- 175 ml (3/4 cup) of yogurt

- 45 gm (1 1/2 oz.) of cheese
- 200 ml of almonds
- 2 medium stalks of broccoli

Meat, Fish, Bird, Egg and All Edible Parts:

Each of the following serving examples yields approximately 12 to 22 gm of protein:

- 60 to 90 gm (2 - 3 oz.) cooked meat, fish, poultry
- 60 ml (4 tablespoons) peanut butter
- 250 ml (1 cup) cooked dried peas, beans or lentils
- 125 ml (1/2 cup) nuts or seeds
- 60 gm (2 oz.) cheddar cheese
- 125 ml (1/2 cup) cottage cheese
- 2 eggs

Fruits and Vegetables:

Each of the following serving examples yields approximately 200 to 400 RE of vitamin A or 20 to 40 mg of vitamin C:

- 125 ml (1/2 cup) vegetables, berries or fruits (fresh, frozen, or canned)
- 125 ml (1/2 cup) juice (fresh, frozen or canned)

Bannock, Bread and Cereals:

Each of the following serving examples yields approximately 15 gm of carbohydrates:

- 1 slice of bread
- 1 piece of bannock
- 125 ml (1/2 cup) cooked cereal
- 175 ml (3/4 cup) ready to eat cereal
- 1 roll or muffin
- 125 to 175 ml (1/2 - 3/4 cup) cooked rice, macaroni, spaghetti or noodles
- 1/2 hamburger bun

Note: Preschooler and child serving sizes are smaller.

NUMBER OF SERVINGS:

Nutrient requirements are influenced particularly by age, sex, growth rate and activity. For this reason the number of recommended servings varies, e.g.:

Milk and Milk Substitutes: children: two - three servings adolescent: three - four servings adult: two servings pregnant or lactating woman: three - four servings To ensure the development of strong bones and teeth a growing child requires two - three servings of milk a day, whereas an adult requires two servings for body maintenance.

Meat, Fish, Bird, Eggs and All Edible Parts:
all ages: two servings

Fruit and Vegetables:
all ages: four - five servings

Bannock, Bread and Cereal:
three - five servings or more, depending on levels of physical activity

It is not necessary to have all servings of a food at any one time. It is the day's total intake from each food group that is important. A child may prefer to have two servings of milk in four half cup portions throughout the day.

The N.W.T. Food Guide recommends types and amounts of foods to eat to be healthy. Eating the recommended number and size of servings from each food group ensures a balanced diet. The range in the number of servings represents the change in nutrient requirements that occurs throughout the lifecycle. The recommended serving size for each food within a group may vary as each item contains different amounts of leader nutrients.

PRINCIPLES OF HEALTHY EATING

In addition to indicating what to eat, the N.W.T. Food Guide promotes three principles for healthy eating: variety, balance and limit.

Variety: A variety of foods ensures that all nutrients will be obtained. Variety also makes meals more appealing and stimulates eating. No one food or food group provides all the necessary nutrients needed for health. To obtain all the required nutrients, the N.W.T. Food Guide recommends eating a variety of foods from each food group. Variety can be achieved by selecting different foods within each food group at meal and snack times.

Balance: Many of today's illnesses stem from an imbalance between how much we eat and how much we exercise. To maintain a healthy weight, we should eat a diet containing a moderate amount of energy, and exercise regularly. Energy is used daily for body maintenance, repair, growth and physical activity. The amount of energy needed varies with age, sex, level of physical activity and body size. An active person needs more food energy than someone who sits most of the day. If you eat more than the body needs, you could gain weight. Obesity is a major problem in the N.W.T. and is associated with health problems such as diabetes and heart disease.

Limit: Not all food contributes to the maintenance of our health. Foods that contain a lot of sugar, salt and fat should be eaten only occasionally. Foods which are high in energy are those which are high in sugar and fat content. Alcohol is also very high in calories.

Low energy foods are usually more nutritious, contain fewer calories and provide many of the important nutrients our bodies need for daily functioning. High energy foods contain large amounts of sugar, and/or fat and usually salt, with few of the required nutrients our bodies need. It is important to choose foods wisely - choose nutritious low energy foods.

MAKE ENERGY-WISE CHOICES

Food Group	Nutritious - Low Energy Foods	High Energy Foods
Milk and milk products (Blue Group)	Skim milk, 2% milk, plain yogurt, lowfat cheese, cottage cheese.	Whole milk, ice cream, flavoured yogurt, cream, cheese.
Meat, fish, birds and eggs (Red Group)	Caribou, moose, chicken, fish, eggs, dried beans and peas, lean meats, organ meats.	Canned luncheon meats, sausages, bologna, peanut butter, nuts, wieners.
Fruits and vegetables (Green Group)	Unsweetened fruit juice, fresh berries, fruits, vegetables, plain frozen fruits . and vegetables, fruits canned in "own juice".	Fruits canned in "heavy syrup", frozen vegetables in sauces, dried fruit, sweetened fruit juice.
Bannock, bread and cereal (Orange Group)	Bannock, whole grain muffins, bread, (unsweetened) cereals, pilot biscuit, plain popcorn.	Sweetened cereals, cake, doughnuts, cookies, pastries.
Foods that do not belong to a food group.	Water, clear soups.	Soft drinks, chips, chocolate bars, candies, sugar, butter or margarine, cream, cream cheese, sour cream, buttered popcorn.

MEAL NAMES AND TIMES

Canada's Food Guide does not state a specific number of meals a day. For good nutrition and vigour, food intake should be spread throughout the day. "Three meals a day" is perfectly acceptable, but there is no scientific reason to make it a rigid rule. The number and timing of meals and snacks depends on personal preference - meal frequency is a lifestyle decision.

Students may eat at different times depending on the circumstances within the home.

In homes where one or more adults work (in the wage economy), and where there are school age children it is likely that students will eat at:

- morning meal - or breakfast
- noon meal - or lunch
- evening meal - or supper/dinner
- snacks

(The terms morning meal, noon meal and evening meal are English translations of the corresponding terms in Inuinaktun, and are similar in other native languages.)

However some students may eat at other times. In some homes, food is always available and people eat continuously throughout the day, without having main meals. Not everyone eats main meals before school, at noon hour and after school/work.

What is important is that people follow the N.W.T. Food Guide, in terms of recommended numbers of daily servings and sizes of these servings. If people snack continuously, it is important that these snacks be nutritious, and include varied food items from each food group. It is also important that students start the day with nutritious food. This gives them the energy they need for work and play and aids their concentration.

WHY IT IS IMPORTANT TO START THE DAY WITH NUTRITIOUS FOOD

Many reasons are often given for skipping a morning meal. However, this is the most important food of the day. It ensures quick energy to start the day and lasting energy to carry out morning activities.

It can be any combination of foods, either solid or liquid, that supplies the nutrients needed by our bodies.

People who do not start the day with nutritious food usually fall victim to hunger pangs around coffee break time and opt for nutritionally-poor snacks such as doughnuts. They may soon get into the habit of eating high-calorie snacks, a practice which can lead to being overweight. Children who do not start the day with nutritious food have poor listening skills and are unable to concentrate on their work for long periods of time.

Nutritionally adequate food has the staying power to prevent hunger until the next meal, thus discouraging midmorning snacks and lunchtime extras. A nutritious morning meal consists of food from at least three of the four food groups.

Ref.: Nutrition Communications, Kellogg Salada Canada Inc.

NON-NUTRITIOUS FOODS

Not all available foods can be classified into the four food groups. Such foods contain too few nutrients and/or too much sugar, salt and fat which can contribute to poor health. Other than providing energy (calories or joules), these foods have very few nutrients to help our bodies grow and be healthy.

The following two types of food do not belong in any group of the N.W.T. Food Guide:

1. Foods with very few nutrients, e.g., ordinary and diet soft drinks and gum, which are usually fabricated, i.e., they do not come directly from nature and often contain unnecessary additives; these foods do little to build a strong body.

2. Foods such as potato chips, processed meats and chocolate bars which suffer nutritionally because processing removes many useful nutrients and leaves only those nutrients, e.g., sugar, fat and salt, which can be unhealthy when consumed in excess; they do little to build or maintain a strong body, and often contribute to tooth decay, obesity or high blood pressure.

The following foods in particular are often considered healthy when in fact they contain large amounts of sugar, fat or salt. They do not belong to any food group:

- whipping cream, cereal cream and sour cream, although they are dairy products, they do not belong to the Milk Group because they contain very little calcium or protein and are high in fat; - non-dairy beverage whiteners, e.g., Coffeemate, even though they look like milk in coffee and tea, do not belong to the Milk Group because they contain no milk, but mostly sugar and oils; - canned meats, e.g., Kwik, Spam, bologna, side bacon and wieners do not belong to the Meat Group because they contain very little protein and Iron and are high in salt and fat; - fruit drinks, fruit pop, Fruit Roll-ups, fruit jam, jelly and Jello do not belong to the Fruits and Vegetables Group because they are all high in sugar and contain very few vitamins; - doughnuts, sweet buns, cookies and cakes have all the nutrients of the flour or cereal used in their baking, however they also contain extra fat and sugar. Sweetened cereals are sometimes enriched, and therefore contain nutrients, however they have a high sugar content. ,

These foods are sometimes referred to as "extras". The

N.W.T. School Health Program has avoided use of this term and instead labelled them as foods which do not belong to any food group.

SNACKS

In the **N.W.T. School Health Program** "snacks" refer to foods eaten between main meals. They may be either nutritious (belonging to one of the four food groups) or non-nutritious (not belonging to a food group), depending on the food eaten. Snacking habits vary greatly among families and cultures. In some families food may be more or less continuously available for eating between meals. In others, eating between meals may be discouraged. The teacher should be sensitive to this and try to determine what snacking habits his/her students have.

It is important, however, that all snacks are nutritious and are included as part of the recommended daily servings.

IMPACT OF SNACKING ON NUTRITIOUS MEALS

Nutritious meals are defined as those where there is at least one serving from each of the four food groups. The exception is breakfast which requires servings from only three food groups.

This concept of nutritious meals is based on the practice of very little snacking. If, in fact, students snack a lot (on nutritious foods) then they would not eat servings from each food group at each meal. Students should look at their daily food intake to determine if they are eating nutritiously.

Recommended daily servings are:

Milk and milk substitutes - 4 servings

Meat, fish, birds and eggs - 2 servings

Bannock, bread and cereal - 3 - 5 servings

Fruit and vegetables - 4 - 5 servings

Again, it is important to emphasize the need for nutritious food to start the day.

SNACK GUIDE

Food Group	Eat Anytime!	Eat Only With Meals and Brush Teeth Afterwards	Don't Snack on Regularly	Avoid These Snacks!
Milk and milk substitutes (Blue Group)	Plain milk, plain yogurt, cheese, soft ends of bones, soft fish bones	Milk puddings, ice cream, milkshakes, sweetened yogurt, strawberry milk, chocolate milk		
Meat, fish, birds and eggs (Red Group)	Country meats, store meats, dried meat, fish, wild birds, fish eggs, nuts and seeds, hardcooked eggs, peanut butter			
Fruits and vegetables (Green Group)	Raw berries, fruits, vegetables, salads, vegetable soup, seaweed, unsweetened fruit and vegetable juice, animal stomach contents	Raisins, dried fruit, sweetened fruit, sweetened fruit juice, unsweetened fruit leather		
Bannock, bread and cereal (Orange Group)	Bannock, enriched and whole grain breads and muffins, crackers, unsweetened cereals, plain popcorn	Granola bars, home-made; low sugar, granola, whole grain cookies		Presweetened cereal
Other foods (foods in more than one group and foods not in the Food Guide)	Pizza, clear soups, sandwiches (meat, cheese, eggs or peanut butter) hamburgers		Pretzels, buttered/ salted popcorn, potato chips, cheesies, sugar-free soft drinks, sugar-free gum	Regular soft drinks (pop), honey, jam, jellies, chocolate bars, cookies, candies, regular gum, breath mints, popsicles, sweet buns, doughnuts. "Drink" crystals (Tang), fruit roll-ups

A VARIETY OF HEALTHY SNACK FOODS

FRUITS AND VEGETABLES

Unsweetened fruit or vegetable juice (the word "juice" must be on the label); raw fruit and vegetable pieces; canned fruits that are unsweetened or packed in their own juices; fruit juice popsicles; wild berries; wild vegetables.



MILK AND MILK PRODUCTS

Homo milk, evaporated, UHT; 2% of skim milk, or reconstituted skim milk powder or a combination; low fat cheese; cheese or cottage cheese; plain yogurt; plain yogurt with fresh fruit or juice added; soft ends of bones to chew on.



BREAD AND CEREALS

Bannock; crackers, pilot biscuits, etc.; unsweetened dried cereals; cooked cereals; whole wheat bread or toast; enriched white bread or toast; fruit or whole grain muffins or loaf; homemade cookies - oatmeal, peanut butter.



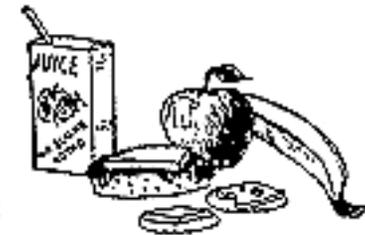
MEAT AND ALTERNATIVES

Wild game - raw, fresh, frozen, cooked or smoked; fish -canned, fried, frozen or smoked; hard cooked egg; peanut butter; nuts and seeds - sunflower and pumpkin; cheese; meat - sliced, cold, cooked, canned, dried, smoked.



COMBINATION SNACKS

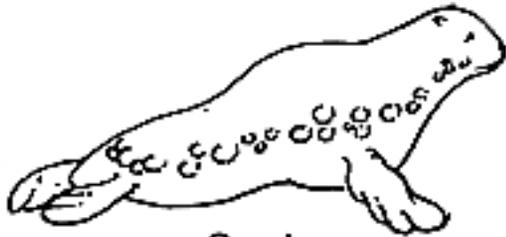
Bannock with peanut butter, cheese, berries, raisins, etc.; celery sticks with peanut butter or cheese; mini pizza (English muffin or roll with tomato or spaghetti sauce and cheese); peanut butter on toast or bread; cheese on toast or bread; cheese and crackers; cheese and fruit; raw fruits or vegetables with a yogurt dip; cereal with milk and fruit.



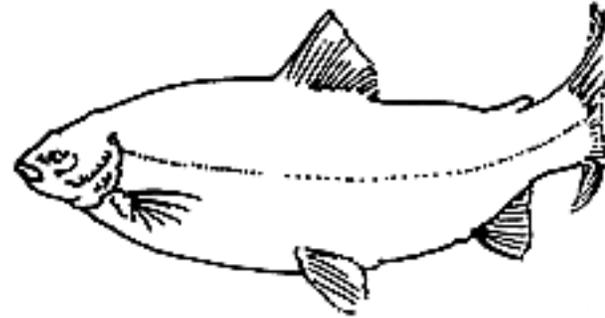
Snacks can be served with unsweetened fruit juice or milk as a beverage. To quench thirst, water is the best!

COUNTRY FOODS FROM THE MEAT, FISH, BIRDS AND EGGS AND ALL EDIBLE PARTS GROUP

Leader Nutrients: Protein, Iron



Seal



Fish



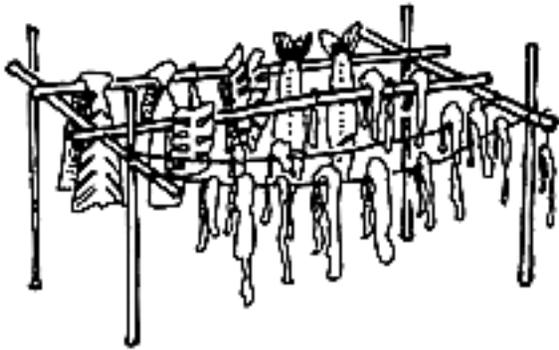
Rabbit



Whale

COUNTRY FOODS FROM THE MEAT, FISH, BIRDS AND EGGS AND ALL EDIBLE PARTS GROUP

Leader Nutrients: Protein, Iron



Dried Meat and Fish



Caribou



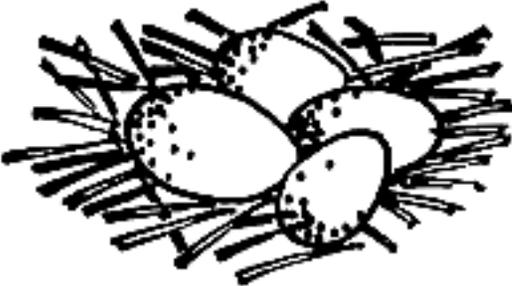
Muskrat

COUNTRY FOODS FROM THE MEAT, FISH, BIRDS AND EGGS AND ALL EDIBLE PARTS GROUP

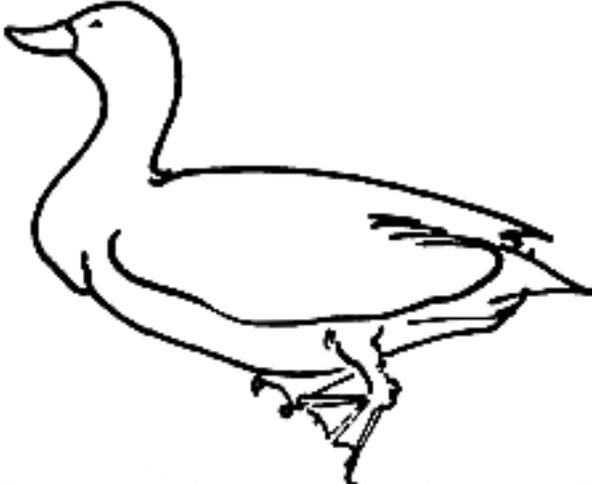
Leader Nutrients: Protein, Iron



Ptarmigan



Eggs



Duck

COUNTRY FOODS FROM THE FRUIT AND VEGETABLES GROUP

Leader Nutrients: Vitamin A, Vitamin C



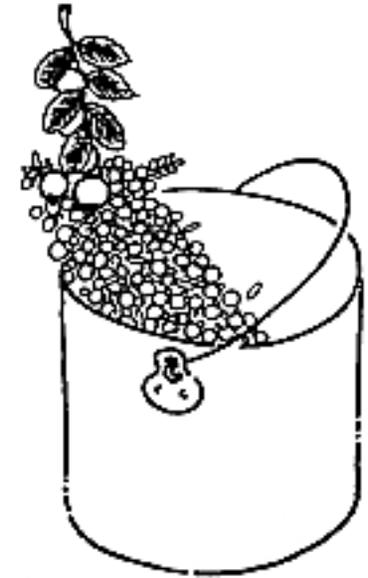
Seaweed



Clover



Dock



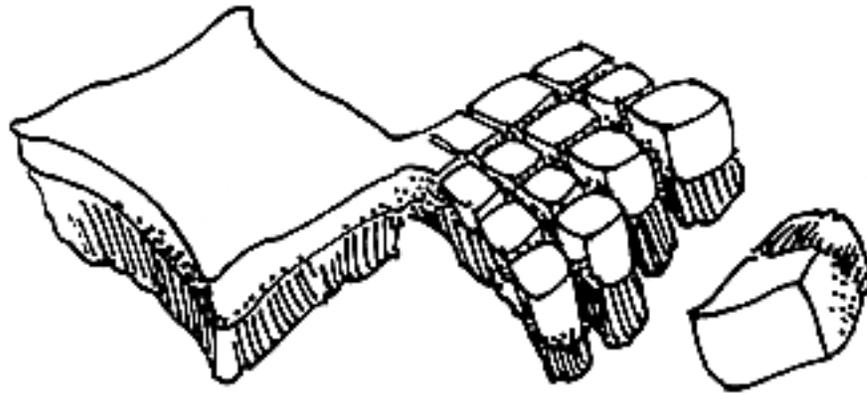
Berries

COUNTRY FOODS FROM THE FRUIT AND VEGETABLES GROUP

Leader Nutrients: Vitamin A, Vitamin C



Seal Fat

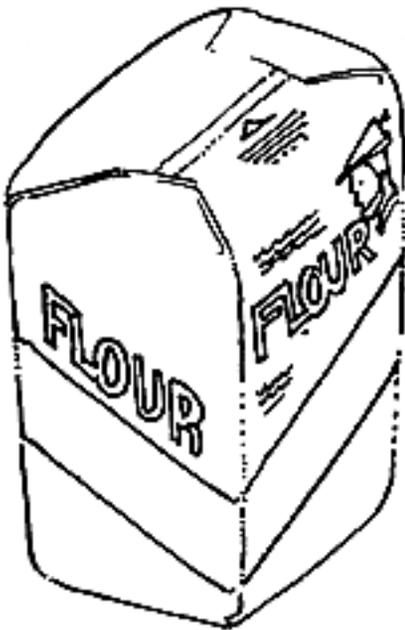


Muktuk

Even though these foods come from animals they are part of the Fruit and Vegetables Group because of their high vitamin content.

COUNTRY FOODS FROM THE BANNOCK, BREAD AND CEREAL GROUP

Leader Nutrient: Carbohydrates for Energy



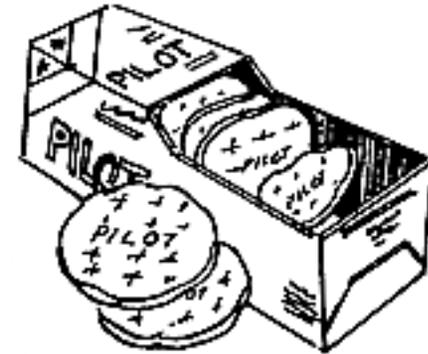
Flour



Oats



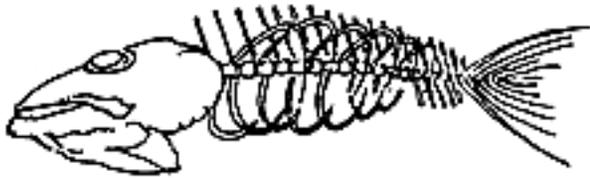
Bannock



Pilot Biscuits

COUNTRY FOODS FROM THE MILK AND MILK SUBSTITUTES GROUP

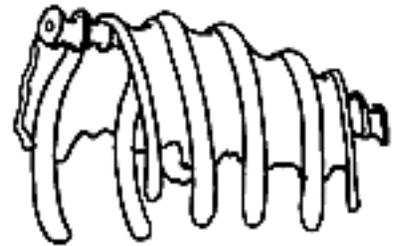
Leader Nutrient: Calcium



Fish Head and Bones



Leg Bone



Rib Bones

Even though these foods may seem like meat sources, they are part of the Milk and Milk Substitute Group because of their high calcium content.

TIPS ON NUTRITIOUS PURCHASES IN ISOLATED COMMUNITIES

How to remain healthy without fresh foods.

FRUIT AND VEGETABLES

1. Frozen, canned or dried fruits and vegetables are good sources of vitamin A and C.
2. The following vegetables are rich in vitamin A and C: carrots, broccoli, brussel sprouts, cauliflower, cabbage, potatoes, tomatoes, tomato juice, spinach, sweet potatoes, green peppers, strawberries, apricots, apple and orange juices.
3. Cost. Most canned vegetables and fruits cost the same price per serving as frozen ones. Food price comparisons should always be done per serving i.e., approximately 100 gm or 1/2 cup (125 ml). It is worthwhile to calculate, compare and save.
4. Frozen vegetables. Most frozen vegetables are very rich in vitamin C, e.g., a serving (1/2 cup) of frozen broccoli, cauliflower, brussel sprouts, or green pepper contains more vitamin C than an orange.
5. Frozen french fries. Frozen have the highest vitamin C content of all the frozen, canned or dried potato products. To avoid too many calories, french fries should be baked instead of deep fried; any additions such as gravy should be avoided.
6. Frozen vegetables are economical. Frozen vegetables are often more economical than fresh because there are no inedible parts or food lost during preparation.
7. Plain frozen vegetables are economical. Frozen vegetables with sauce or other additions are usually twice as expensive as plain, frozen vegetables.
8. Carrots. The prices and nutrition per serving of frozen carrots are comparable with canned carrots.
9. Unsweetened frozen strawberries and frozen fruit juices are the most nutritious buy and the most economical choice of all frozen fruits and fruit juices.
10. Canned and dried fruits are good sources of vitamin A. The best choices are apricots, peaches, tangerines, prunes and raisins.

11. Dried fruits can be eaten as such, or for variety, they can be rehydrated in water or fruit juices; e.g., prunes rehydrated in apple juice are excellent.

12. Wild berries usually abound in northern communities. Three rosehip berries have more vitamin C than one orange. Fresh, dried or frozen berries have a higher vitamin C content than berries in jam or jellies and are better for you.

13. Fresh produce. When fresh produce is available in isolated communities you get the most nutrition out of your food dollar by selecting cabbage, carrots, turnips, potatoes, tomatoes, oranges and bananas; e.g., have a coleslaw salad made with shredded cabbage and carrots; it is an excellent source of vitamin A and vitamin C.

14. Garden produce. Many vegetables can be successfully grown north of the 60th parallel either outdoors in greenhouses or in hydroponic gardens.

15. Decorate food with sprouts. Fresh sprouts can be an interesting alternative to canned or frozen vegetables. Growing sprouts is year-round, instant gardening with minimum equipment, space and effort.

MILK AND MILK SUBSTITUTES

16. Fresh milk and milk products are often rare in isolated communities but powdered and evaporated milk and processed cheese are usually available.

17. Milk and milk products are important food sources of calcium, protein and vitamins (riboflavin, vitamin A, vitamin 812 and vitamin D).

18. Add powdered milk to cooking. One simple and inexpensive way to increase the protein and calcium content of food is to use powdered milk in baked goods, meat loaves, casseroles, macaroni and cooked cereals. A 1/4 cup of dry powder is equivalent to one cup of milk.

19. Evaporated milk makes delicious chowder, home made yogurt, milk desserts (pudding), etc.

20. Reconstituted powdered milk. Powdered milk is acceptable to many people when reconstituted according to the directions and refrigerated for 24 hours.

N.B.: Dairy substitutes - Any dairy substitutes such as coffee whitener and whipped toppings are made from non-dairy foods and should not be used to replace milk.

MEAT, FISH, BIRDS AND EGGS

21. Alternates. Alternates are foods that are rich in protein and iron and can replace meat e.g., eggs, cheese, peanut butter, nuts, seeds, dry peas, beans.
22. Meat, fish, birds and eggs are good sources of protein, iron, niacin, thiamin, riboflavin, vitamin A, vitamin B12 and fat.
23. Frozen meat and fish. Plain frozen meat and fish are much cheaper than prepared items e.g., frozen fish in sauce or TV dinners are twice or three times the price of the equivalent plain items.
24. Canned fish and meat are often less expensive than frozen fish and meat. The best buy for nutrition and cost is canned fish, especially mackerel and sardines. Canned fish can be served in sandwiches,, chowders, casseroles, pies, etc.
25. Processed meat can be prepared in many ways. Shop carefully for processed meats. They can be very expensive when bought pre-sliced. Buy them in bulk and slice the meat yourself.
26. Canned beans and canned meat stews contain less protein than canned fish or meat, but lower prices and practicality made them popular items among consumers. Canned stews and beans can be used occasionally in the family's diet.
27. Canned noodles and dinners and ravioli, spaghetti provide very little protein on their own and must be supplemented by either meat, eggs or cheese if they are to be served as a main dish.
28. Use dry peas and beans in cooking. Dry peas and beans are economical sources of protein and can extend soups and stews.

BANNOCK, BREAD AND CEREAL

29. Dry goods are usually well stocked in food stores in isolated communities.
30. Flour, cereals, rice and noodles provide energy, vitamins B

and some protein.

31. Enriched flour. In Canada white flour must be enriched with iron, thiamin, riboflavin and niacin. Therefore, all baked goods contain these nutrients whether homemade or commercially prepared.
32. Home baking. Selecting enriched or whole grain flour will make homemade baked goods very nutritious. Many wholesome products can be added to home baked products to increase their nutritional value; e.g., powdered milk, wild berries, dried fruits, peanut butter, cheese or fish eggs in bannock.
33. Calcium enriched flour. Flour can also be enriched with calcium. Flour packaged by the Hudson Bay Co. is enriched with calcium and is therefore available to northern communities which have a Bay store.
34. Whole grain cereals, cooked, without sugar. Whole grained cereals are better than refined cereals. Cereals which require cooking are better than ready to eat; e.g., oatmeal is better than Corn Flakes. If choosing ready-to-eat cereals, avoid the sugar coated ones. If in doubt, read the label e.g., Corn Flakes are better than Sugar. Frosted Flakes.
35. Noodles, e.g., macaroni, spaghetti. Most of these products are enriched with B vitamins and iron. The label will tell you which ones are enriched. Enriched noodles, provide better nutrition for your food dollar. Noodles keep indefinitely when stored in the original packages in a dry place.
36. Noodles alone are not a meal. To make a nutritious meal, noodles need to be accompanied by other foods; e.g., macaroni and cheese should be served with meat, fish, hard boiled eggs, or additional cheese.
37. Brown or converted rice. The best rice for price and nutrition is brown rice or parboiled or converted rice. Plain rice, e.g., Uncle Ben's Converted, is cheaper and contains less salt than seasoned rice (Spanish Rice).
38. Bread, bannock, cereals, noodles, rice are good and less expensive than many other foods. Eat them instead of junk food.
39. Other foods. Commercial snack foods like chips, chocolate, pop are high in sugar, oil, salt and calories and are not nutritious. They should be avoided.

HOW TO READ FOOD LABELS

1. An extremely important part of wise food shopping is reading and understanding the information given on food labels.
2. By doing so you can compare foods for quality, price, ingredients, and nutritive values and buy the ones that suit your needs.
3. All food labels must have the name of the food, the net quantity, and the name and address of the manufacturer, packer, or distributor, should the consumer want to contact him.
4. If the food is sold in different forms (for example, green beans can be sold whole or cut), the label must specify what form is in the container.
5. If there is a picture of the food as well, it must depict the food either as it is or as it could look when served.
6. The net quantity is given as a weight or a count if the food is solid. It is given by volume if the food is liquid. If the food is packed in a liquid, the net weight includes the liquid (the weight of the food without the liquid is the drained weight).
7. The list of ingredients must be on all pre-packaged food products.
8. The list of ingredients is one of the most important pieces of information provided by the food label.
9. The ingredients are listed in descending order. The one which weighs the most comes first and so on. It can also be given in percentages, again in descending order. This helps tell you if canned "meat stew" actually has more vegetables than meat or which cereal has the most sugar.
10. While reading the list of ingredients be especially concerned with the amounts of sugar, salt (sodium), and fats. Most nutritionists recommend limited intake of these three ingredients. Unfortunately, most processed foods contain them.
11. How to store the product. Food labels include information on how and where to store the product (if it should not be kept at room temperature).
12. There are two types of Dating systems - coded and open. Coded dates are numbers and letters that, because they are part of a code, can be read only by those who understand the code. These coded dates are often used by supermarkets for rotating their stock. Open dating, on the other hand, is an easily

- understood statement of a date that indicates the age of the product to the consumer. The date is accompanied by an explanation of what it means, such as "packaged on" or "best before" this date. If you are unsure of what the date means, ask the store manager. Although a date can appear on any type of food product, they are most often found on perishable foods such as dairy products, baked goods and meats.
13. Best before date. After that date, the product may still be edible, but is not in top form. The Best Before date is not an expiry date. Most products don't have to be thrown away after the best before date except for baby food and infant formula.
 14. Artificial flavour. If there is artificial flavouring in the product, the food label will tell you. A picture of a peach or some other natural food on the label does not necessarily mean that the product contains that natural food.
 15. Fortified products. Fortification with added vitamins or minerals (nutrients) means that vitamins or minerals are added to a food product that does not normally contain them, or contains it in a relatively small quantity. This is legislated by Health and Welfare Canada - Health Protection Branch; e.g., milk is usually fortified with Vitamin D.
 16. Enriched with vitamins and minerals. This means that some of the nutrients that were lost during the processing of a food have been put back into it. Nutrients are added to staple foods that supplied significant amounts of these substances before processing. For example, B vitamins and iron are added to white flour.
 17. Substitute foods, such as simulated meat or poultry products, must be nutritionally similar to the foods they are intended to replace.
 18. Meal replacements, such as instant breakfasts or weight reduction diet products, must supply essential nutrients in amounts similar to those provided by a meal.
 19. Calorie-reduced means that the food has half as many calories as the food it replaces.
 20. Carbohydrate-reduced means that the food product has no more than half the normal carbohydrate content.
 21. Sugar-free or sugarless means that a carbohydrate-reduced food contains no more than one calorie per 100 grams or 100 millilitres.

22. Caffeine-free means that the product has no caffeine; e.g., caffeine-free coffee, caffeine-free cola.

23. Natural. A term to be especially wary of is "natural". It is used liberally in food advertising, and the tendency is for the price of the food to increase with the use of this particular designation. In Canada, the term has not been officially defined and regulated as to its use. Therefore, natural has no specific meaning on a food label.

24. With the advent of computerized checkout systems, many labels have the universal price code symbol printed on them. This symbol is a pattern formed by numbers and lines of varying weights and lengths that, when passed over the machine, identifies the products to the computer. The computer then registers the price of the food and updates the inventory of the stock of that item. The customer in turn receives a register tape on which all of the items are printed out with their names and prices. Because the prices are stored in the computer, the main worry among consumers is that the stores, hoping to cut costs and workloads, will do away with the practice of pricing individual packages. This would make it difficult, if not impossible, for the consumer to compare prices while shopping.

Material for Teacher Background Information is adapted from NWT Food Guide (Teaching Guide): Regional Nutritionist, Medical Services Branch, NWT Region Nutrition Month Kits (1985 - 1988): Nutrition Liaison Committee of the NWT, Medical Services Branch, NWT Region.

GRADE 6

DENTAL HEALTH

DENTAL HEALTH

GRADE: 6

LESSON: 1

THEME: STRUCTURE AND FUNCTION

CONCEPT: THE STRUCTURE OF A TOOTH IS RELATED TO ITS FUNCTION

- PREPARATION:
1. Prepare an overhead transparency of Parts of a Tooth (Activity Sheet D40)
 2. Prepare a class set of Parts of a Tooth (Activity Sheet D41)
 3. Prepare a class set of Tooth Parts (Activity Sheet D42)
 4. Enough hand mirrors for one between two students
 5. Prepare a class set of The Tooth Groups (Activity Sheet D43)
-

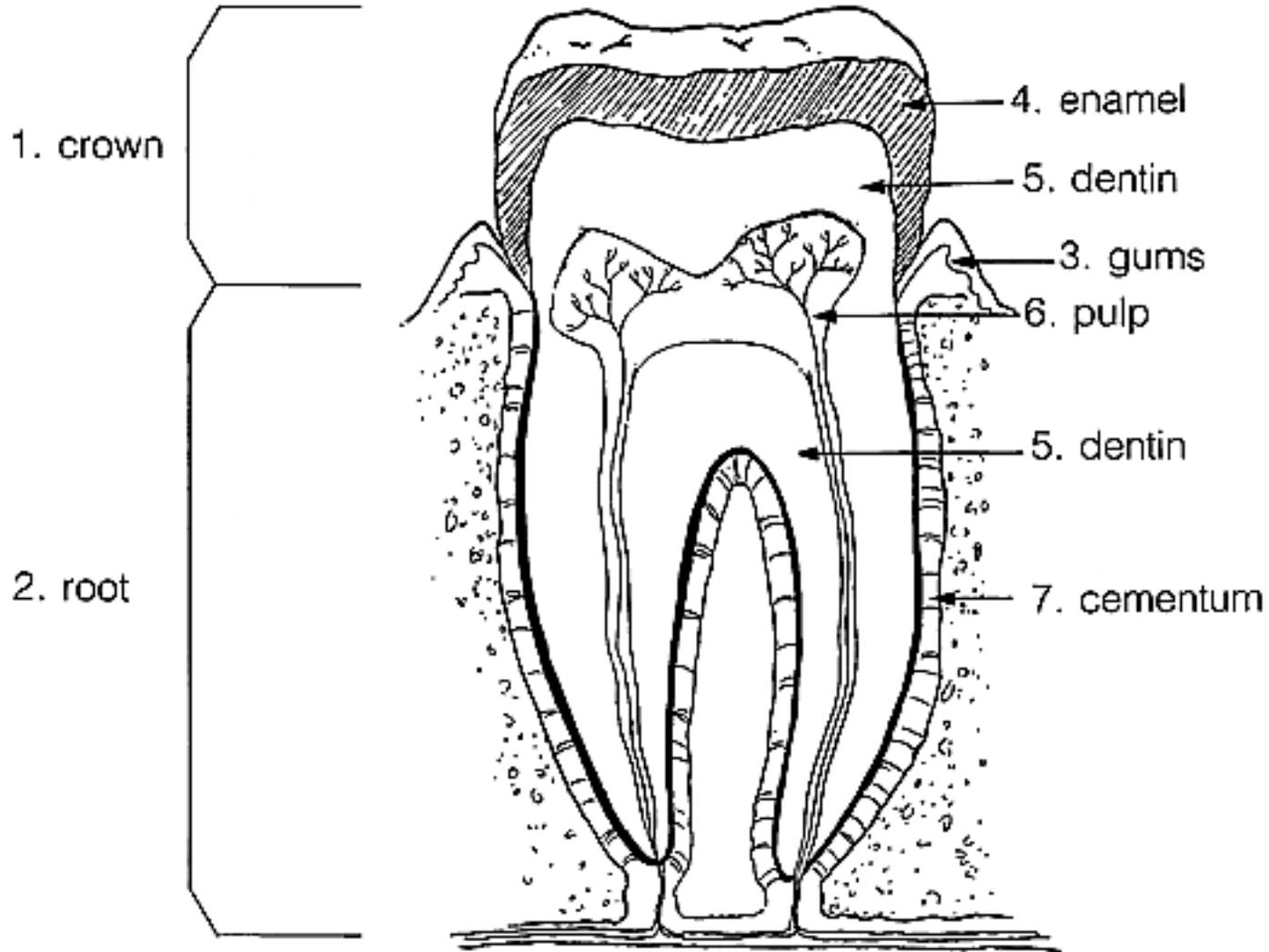
VOCABULARY: dentin, pulp, cementum, enamel, calcified, incisor, cuspid, premolar, molar, function, location

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES		
Students will be able to: i) identify the structure and functions of a tooth	Students: 1. Name the parts of a tooth and their functions.	Background Information Page - D56 to D58, D62 Refer to Activity Sheet D40. Using the overhead transparency name and locate the parts of a tooth. Use an experience chart as follows:		
		part	brief description	function
		1 . crown	- the part of the tooth you can see above the gums	- appearance - maintains proper tooth spacing - biting, chewing food

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES		
ii) identify the four tooth groups and their functions	2. Complete Parts of a Tooth worksheet. 3. Complete Tooth Parts worksheet. 4. Name the four tooth groups and their functions.	2. root	- the part of the tooth anchored in the jaw bone	- carries the nerves - anchors the tooth
		3. gums	- soft tissue	- support the base of the tooth - nourish the tooth
		4. enamel	- the glossy outer surface of the tooth - hardest substance in the body	- covers and protects dentin
		5. dentin	- hard calcified tissue	- makes up the body of the tooth - surrounds pulp
		6. pulp	- soft tissue in the centre of the tooth	- contains blood vessels and nerves
		7. cementum	- layer of calcified tissue	- covers and protects the roots
		Refer to Activity Sheet D41.		
		Refer to Activity Sheet D42.		
		This is a review of Grade 4, Lesson 1.		
		Have students work in pairs to observe their teeth in a hand mirror. Review tooth group names and functions by developing the following chart as students locate the tooth groups in their own mouths.		

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES		
	<p>5. Complete The Tooth Groups worksheet.</p>	Tooth Group	Function	Location
		incisors cuspids premolar* molar	cut tear, grasp crush, grind crush, grind	front side back back
		<p>* This term is interchangeable with "bicuspid".</p> <p>Refer to Activity Sheet D43.</p> <p>Have students use the hand mirrors to complete Activity Sheet D43 with their partners.</p>		

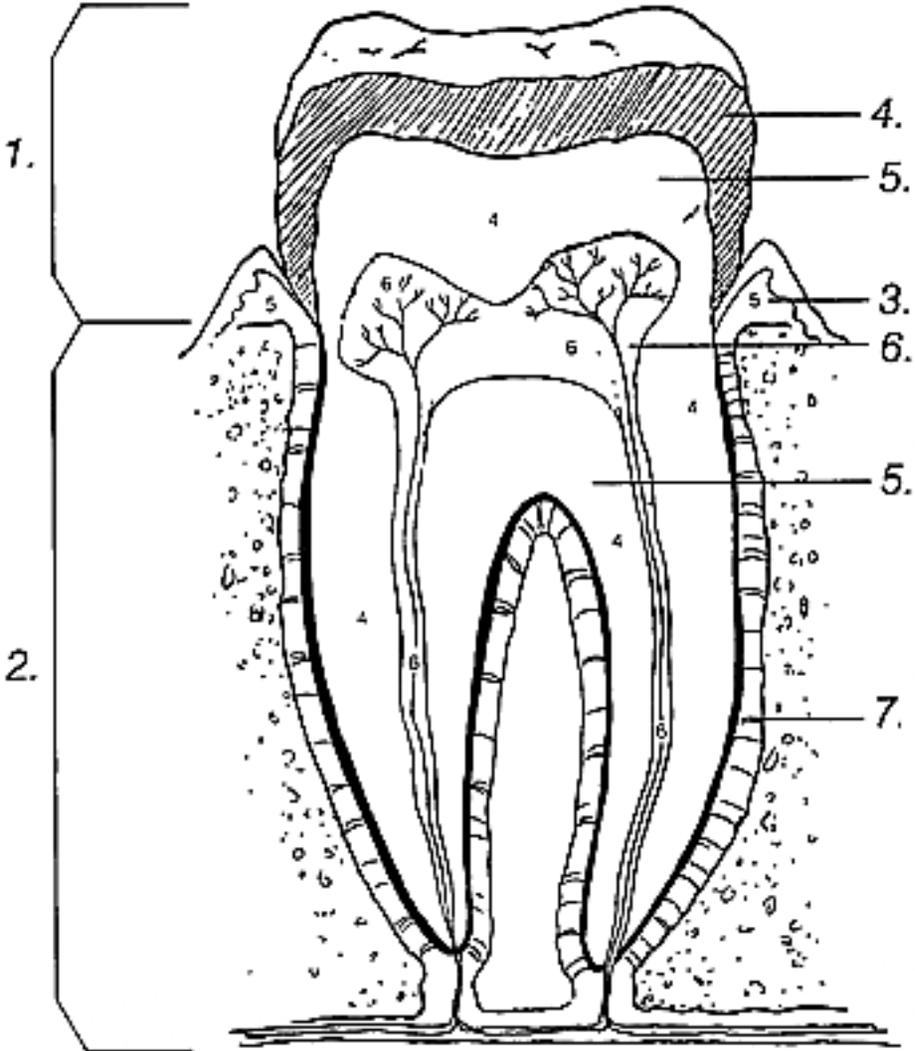
PARTS OF A TOOTH



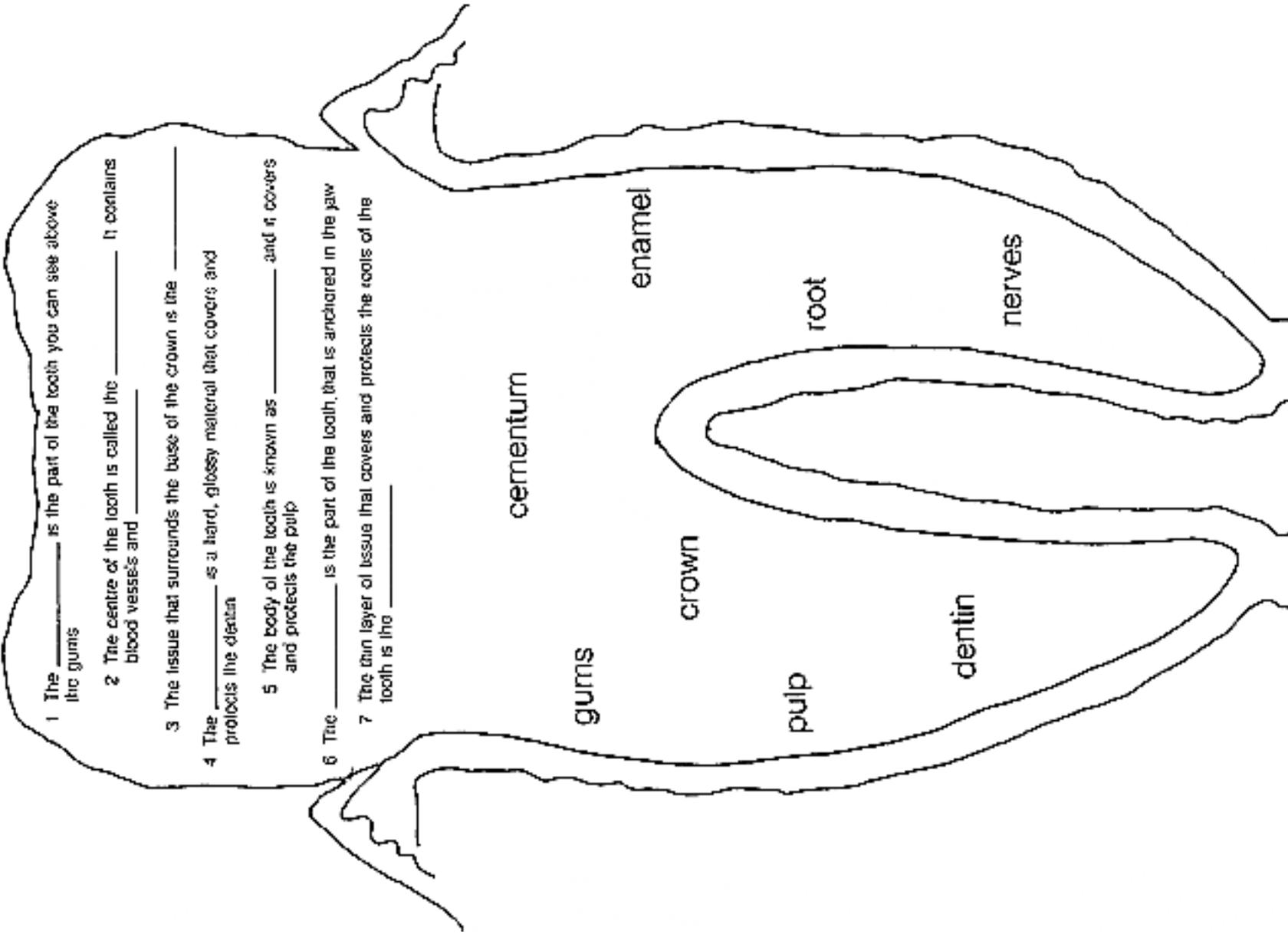
PARTS OF A TOOTH

Directions:

- 1. Colour section 4 blue
- 2. Colour section 5 pink
- 3. Colour section 6 red
- 4. Fill in the names of parts 1-7



TOOTH PARTS Instructions Fill in the blanks with the words listed below



- 1 The _____ is the part of the tooth you can see above the gums
- 2 The centre of the tooth is called the _____ It contains blood vessels and _____
- 3 The tissue that surrounds the base of the crown is the _____
- 4 The _____ is a hard, glossy material that covers and protects the dentin
- 5 The body of the tooth is known as _____ and it covers and protects the pulp
- 6 The _____ is the part of the tooth that is anchored in the jaw
- 7 The thin layer of tissue that covers and protects the roots of the tooth is the _____

gums
enamel
crown
pulp
dentin
root
cementum
nerves

DENTAL HEALTH

GRADE: 6

LESSON: 2

THEME: ORAL HYGIENE

CONCEPT: REGULAR PRACTICE OF EFFECTIVE ORAL HYGIENE SKILLS PROMOTES DENTAL HEALTH

PREPARATION: 1. A class set of toothbrushes, hand mirrors, or oral hand mirrors, toothpaste, toothbrushes, floss and disclosing tablets
2. Questions for Hollywood Squares

VOCABULARY:

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>Students will be able to:</p> <p>i) identify behaviours that promote healthy teeth for a lifetime</p>	<p>Students:</p> <p>1. List behaviours that promote healthy teeth for a lifetime.</p>	<p>Background Information Page - D60 to D61</p> <p>This is a review of Grade 4, Lesson 2.</p> <p>Brainstorm ways to keep teeth healthy for a lifetime and record student responses on an experience chart.</p> <p>Ways include:</p> <ul style="list-style-type: none">- thorough daily brushing and flossing of teeth- selecting dentally safe and nutritious foods- visiting the dental health worker regularly- visiting a dental health worker after any tooth or mouth injury- using products approved by Canadian Dental Association (bearing the CDA seal) 

OBJECTIVES

STUDENT ACTIVITIES

TEACHER NOTES

2. Play Hollywood Squares.

- practising dentally safe behaviours around hazards
- wearing protective equipment when playing sports
- replacing worn toothbrushes

Retain this chart for use in Lesson 4.

1. Like the T V program "Hollywood Squares", arrange 9 students (stars) in TIC TAC TOE formation. (Involve more students by having two in each square.)

Two other students are the contestants, X and O.

Another student, or the teacher is the "host".



2. Make up a series of questions, or have students prepare questions to test knowledge of behaviours which promote healthy teeth for a lifetime. For example:

- Name two dentally unsafe foods.
- How do you know if dental products are good?
- Name one time when you should visit the dental health worker.
- Why should you use dental floss?

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>ii) demonstrate effective oral hygiene skills that promote dental health</p>	<p>3. Practise flossing and brushing at school.</p>	<p>3. Contestant X chooses a square and the host asks the star a question which s/he answers (truthfully or by bluffing). X must either agree or disagree with the star's answer. If X is correct, X gets the square. If not, O gets the square. The game is over when one contestant gets 3 squares vertically, horizontally, or diagonally.</p> <p>4. If questions are repeated, encourage a different response when possible.</p> <p>Review proper flossing and brushing techniques.</p> <p>Divide students into pairs. Have students floss and brush their teeth and then disclose their plaque with a disclosing tablet. Have partners use mirrors to locate areas stained red.</p> <p>Brush and floss again to remove remaining plaque.</p> <p>It is recommended that daily flossing and brushing occur at school to support the home in promoting positive dental health behaviours.</p>

DENTAL HEALTH

GRADE: 6

LESSON: 3

THEME: DENTAL DISEASE

CONCEPT: DENTAL HEALTH PROBLEMS AMONG CHILDREN AND YOUTH ARE TREATABLE AND PREVENTABLE

- PREPARATION:
1. Prior to class invite a dental health worker to talk about dental health problems of children and youth
 2. Prepare an over head transparency of Process of Tooth Decay (Activity Sheet D44)
 3. Prepare a class set of Progress of Tooth Decay (Activity Sheet D45A - Teacher Answer Guide D45B)
 4. Prepare an over head transparency of Gum Disease (Activity Sheet D46)
 5. Props or pictures for Student Activity 7
 6. Prepare a class set of Dental Disease Word Find (Activity Sheet D47A - Teacher Answer Guide D47B)
-

VOCABULARY: caries, alignment, orthodontic problems abscess

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) name some common dental health problems of children and youth	Students: 1. Name common dental health problems of children and youth.	Background Information Page - D69 to D71 If possible invite a dental health worker to discuss and show slides of common dental health problems of children and youth. They include: <ul style="list-style-type: none">- nursing bottle mouth- cavities (or cares)- gum diseases- orthodontic problems (alignment – e.g., crooked teeth and poor spacing grinding) Treatment may also be discussed (refer to lesson 4).
ii) define tooth decay, tooth decay process, gum disease and orthodontic problems	2. Define tooth decay. 3. Discuss the tooth decay process.	Use a dictionary and discussion to define the term tooth decay "Cavities", and "caries" are words commonly used to refer to tooth decay. Refer to Activity Sheet D44.

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
iii) list some signals of dental health problems	4. Discuss the progress of tooth decay. 5. Discuss gum disease. 6. Define the term orthodontic problems. 7. Discuss signals of dental health problems.	Use the overhead transparency to discuss. Refer to Activity Sheet D45A. Refer to Activity Sheet D45B for answers. Discuss with students how the tooth can be repaired and at what stage. Refer to Activity Sheet D46. Use the overhead transparency to discuss the progress of gum disease. Use a dictionary and discussion to define the term. Orthodontic problems include: <ul style="list-style-type: none"> - overcrowding, crooked teeth and teeth that are out of alignment with each other. This may lead to loss of teeth. - grinding of teeth. Use props, pictures or gestures to stimulate student thinking. Record their responses on an experience chart.
	<table border="1" style="width: 100%;"> <thead> <tr> <th style="text-align: center;">Signals of dental health problems</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> - toothache - sensitivity to heat and cold - plaque build up - bad breath - bleeding gums - crowded, crooked teeth that are poorly spaced - abscess - cavity </td> </tr> </tbody> </table>	Signals of dental health problems
Signals of dental health problems		
<ul style="list-style-type: none"> - toothache - sensitivity to heat and cold - plaque build up - bad breath - bleeding gums - crowded, crooked teeth that are poorly spaced - abscess - cavity 		

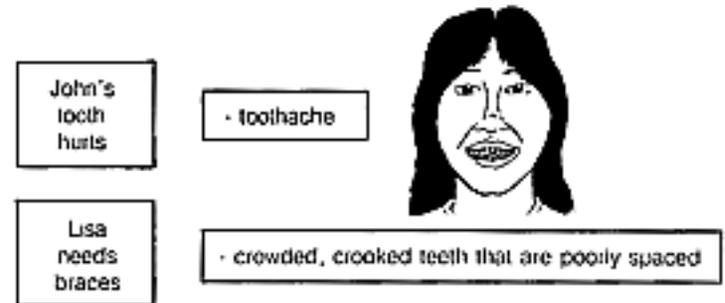
OBJECTIVES

STUDENT ACTIVITIES

TEACHER NOTES

8. Complete Dental Disease Word Find worksheet.

For each item on the chart, prepare an index card about a person who has that problem. For example:



Cut the experience chart into strips. Randomly distribute both the index cards and the strips. Students have to find their partner and make oral statements such as, "John's tooth hurts. He has a toothache ", or "Lena just got a filling She had a cavity."

Refer to Activity Sheet D47A.

Refer to Activity Sheet D47B for answers.

PROCESS OF TOOTH DECAY



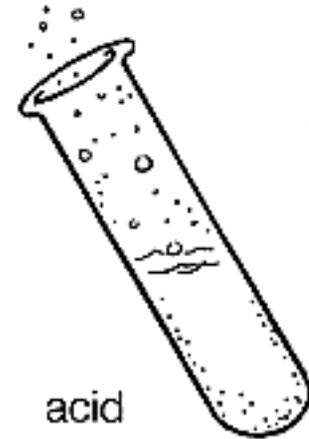
germs in plaque

+

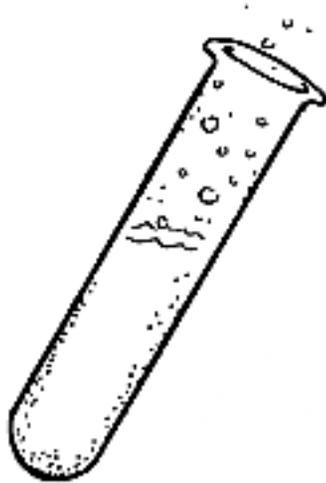


sugar

=

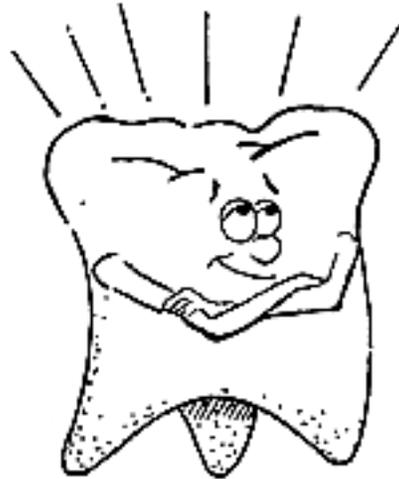


acid



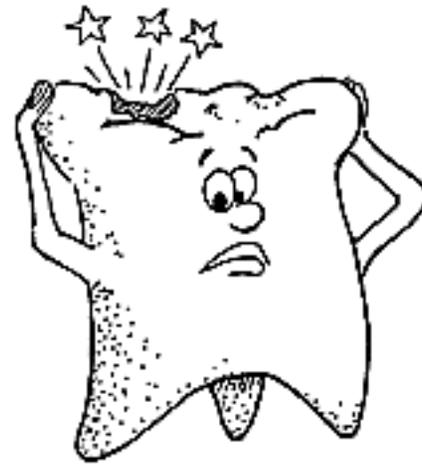
acid

+



tooth

=

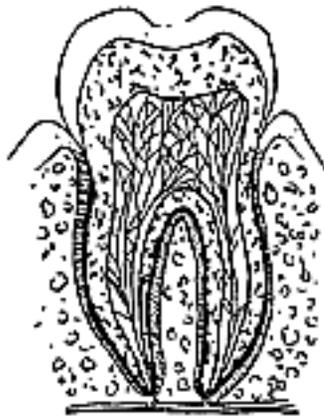


tooth decay

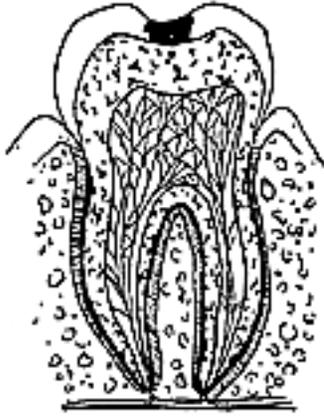
PROGRESS OF TOOTH DECAY

Directions:

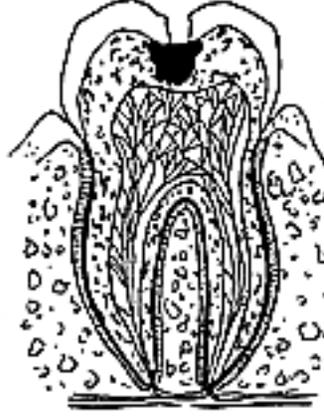
1. Label enamel, dentin and pulp on the good tooth (#1).
2. Briefly describe the progress of tooth decay.



1



2



3



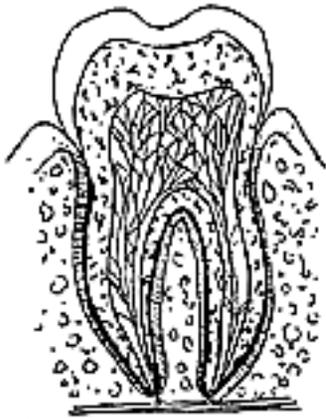
4



5

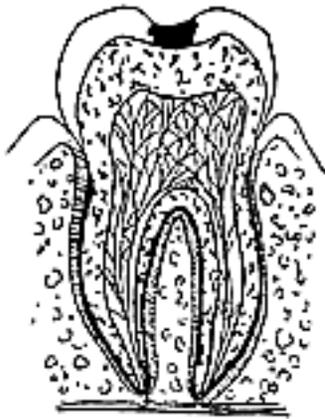
PROGRESS OF TOOTH DECAY

(Teacher Answer Guide)



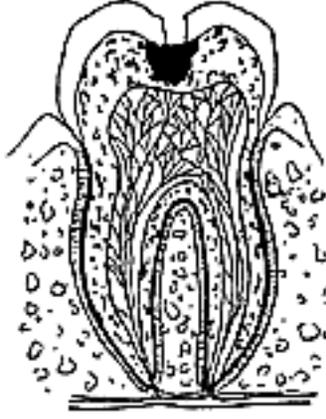
1

- good tooth



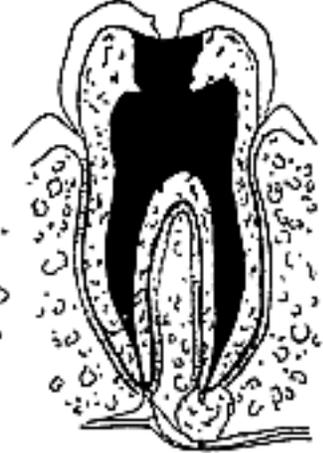
2

- germs in plaque
+ sugar
= cavity



3

- decay into dentin
- toothache



4

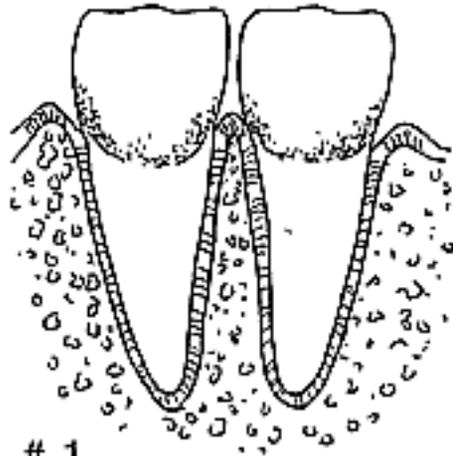
- severe toothache
- decay and abscess



5

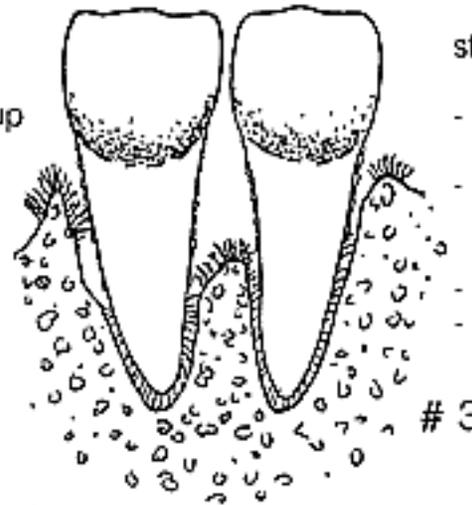
- loss of tooth

GUM DISEASE



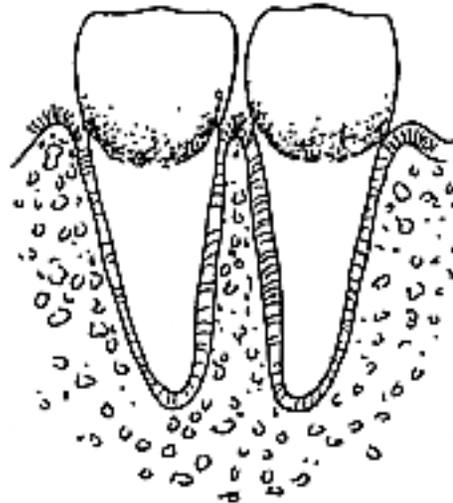
stage 1

- plaque starts to build up
- gums may be red and bleed when brushed



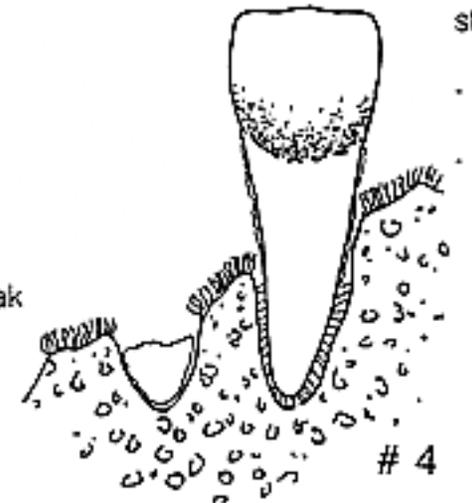
stage 3

- destruction of soft tissues continues
- bone is destroyed leaving pockets between teeth and bone sockets
- teeth are very sensitive
- root is exposed



stage 2

- plaque builds up and hardens
- germs in plaque attack gums
- gums become red and swollen
- the gums begin to break down



stage 4

- bone and gum completely destroyed
- loose teeth, may fall out

2

4

DENTAL DISEASE WORD FIND

Find these words and circle them:

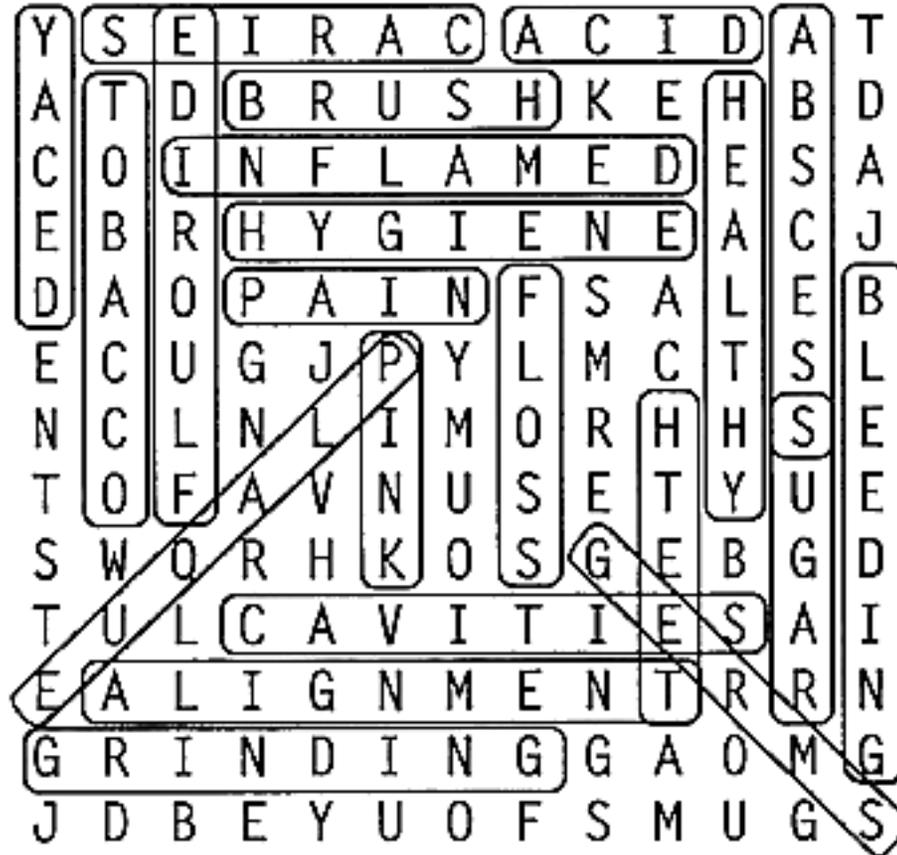
They may be found up ↑, down ↓, across ↔ or diagonally ✕

Y	S	E	I	R	A	C	A	C	I	D	A	T
A	I	D	B	R	U	S	H	K	E	H	B	D
C	O	I	N	F	L	A	M	E	D	E	S	A
E	B	R	H	Y	G	I	E	N	E	A	C	J
D	A	O	P	A	I	N	F	S	A	L	E	B
E	C	U	G	J	P	Y	L	M	C	T	S	L
N	C	L	N	L	I	M	O	R	H	H	S	E
T	O	F	A	V	N	U	S	E	T	Y	U	E
S	W	Q	R	H	K	O	S	G	E	B	G	D
T	U	L	C	A	V	I	T	I	E	S	A	I
E	A	L	I	G	N	M	E	N	T	R	R	N
G	R	I	N	D	I	N	G	G	A	O	M	G
J	D	B	E	Y	U	O	F	S	M	U	G	S

- abscess
- acid
- alignment
- bleeding
- brush
- caries
- cavities
- decay
- floss
- fluoride
- germs
- grinding
- healthy
- hygiene
- inflamed
- pain
- pink
- plaque
- sugar
- teeth
- tobacco

DENTAL DISEASE WORD FIND

(Teacher Answer Guide)



DENTAL HEALTH

GRADE: 6

LESSON: 4

THEME: DENTAL DISEASE

CONCEPT: DENTAL HEALTH PROBLEMS AMONG CHILDREN ARE TREATABLE AND PREVENTABLE

PREPARATION:

1. Prior to class invite a dental health worker to discuss treatments for dental health problems
2. Prepare a class set of Dental Disease worksheet (Activity Sheet D48A - Teacher Answer Guide D48B)
3. Prepare a class set of Healthy Teeth For A Lifetime worksheet (Activity Sheet D49A - Teacher Answer Guide D49B)

VOCABULARY:

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>Students will be able to:</p> <p>i) list some treatments for dental health problems of children and youth</p>	<p>Students:</p> <ol style="list-style-type: none">1. Discuss solutions to dental problems. 2. Explain treatments for dental health problems.	<p>Background Information Page -</p> <p>Brainstorm with students solutions to dental health problems.</p> <p>Solutions should include:</p> <ul style="list-style-type: none">- proper brushing and flossing techniques- regular dental checkups- fluoride treatments <p>Have the dental health worker discuss some treatments for dental health problems. Treatments include:</p> <ul style="list-style-type: none">- removal of plaque- fluoride treatments- space maintainers and braces

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
ii) list ways to prevent dental health problems	3. Complete Dental Disease worksheet. 4. List ways to prevent dental health problems. 5. Complete Healthy Teeth For A Lifetime worksheet.	<ul style="list-style-type: none"> - fillings - oral hygiene education Refer to Activity Sheet D48A. Refer to Activity Sheet D48B for answers. Discuss. Review behaviours brainstormed during Lesson 2, Student Activity 1. Refer to Activity Sheet D49A. Refer to Activity Sheet D49B for answers.

DENTAL DISEASE

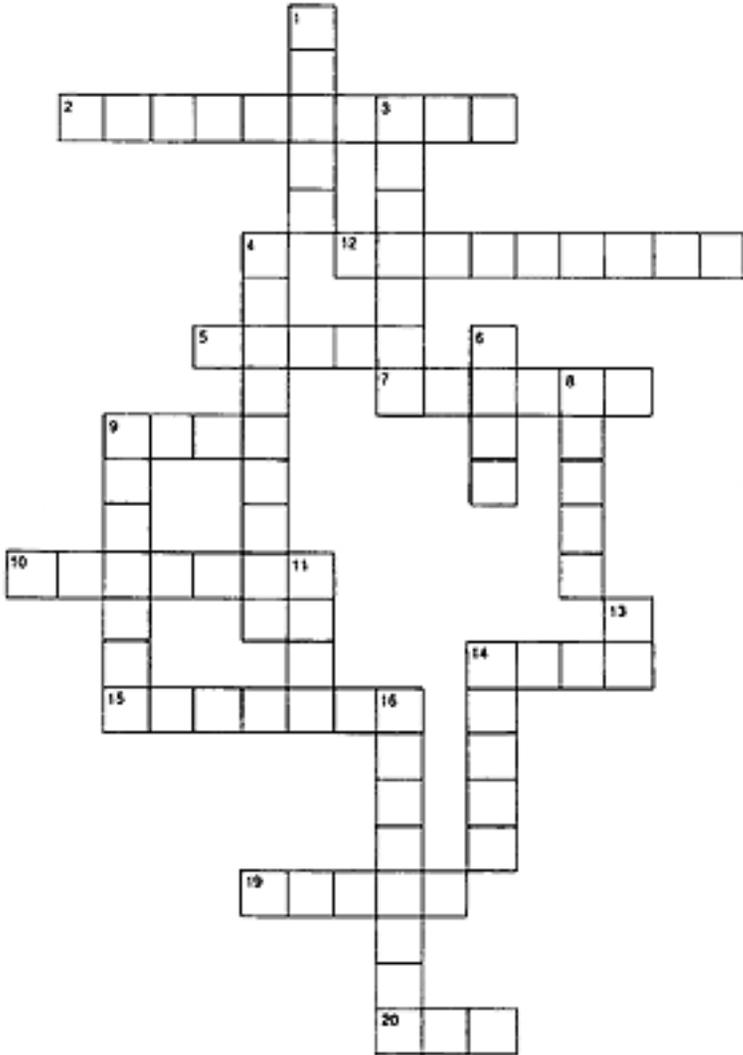
If the statement is TRUE circle T. If the statement is FALSE circle F.

1. Tooth decay is caused by sweets. T F
2. The body can repair decayed teeth. T F
3. The body can repair infected gums if helped with daily brushing and flossing. T F
4. plaque + sugar = acid acid + tooth = tooth decay T F
5. If a tooth is lost and not replaced soon after, other teeth begin to tilt onto the empty space. T F
6. The first part of the tooth to become decayed is the pulp. T F
7. Plaque causes gum infection. T F
8. You can have both tooth decay and gum infection at the same time. T F
9. Brushing and flossing on a daily basis is the best way to prevent dental disease. T F
10. Tooth decay, gum disease and orthodontic problems are common for children and youth. T F

DENTAL DISEASE (Teacher Answer Guide)

1. False Decay is a result of **plaque** combining with sugar to produce a strong acid which eats away at the tooth structure.
2. False Tooth decay cannot be repaired by the body itself, but requires treatment by a dental health worker.
3. True The body can repair infected gums, just as it can heal other bodily infections, if the person takes good care of himself/herself - by practising good oral hygiene, nutrition, etc.
4. True Decay is a result of **plaque** combining with sugar and producing a strong acid which eats away at the tooth structure.
5. True
6. False The enamel is the first part of the tooth to become decayed, then the dentin. The pulp is eventually exposed unless the process is stopped or the cavity is filled.
7. True Plaque causes both dental decay and gum infection.
8. True 9. True 10. True

HEALTHY TEETH FOR A LIFETIME



ACROSS

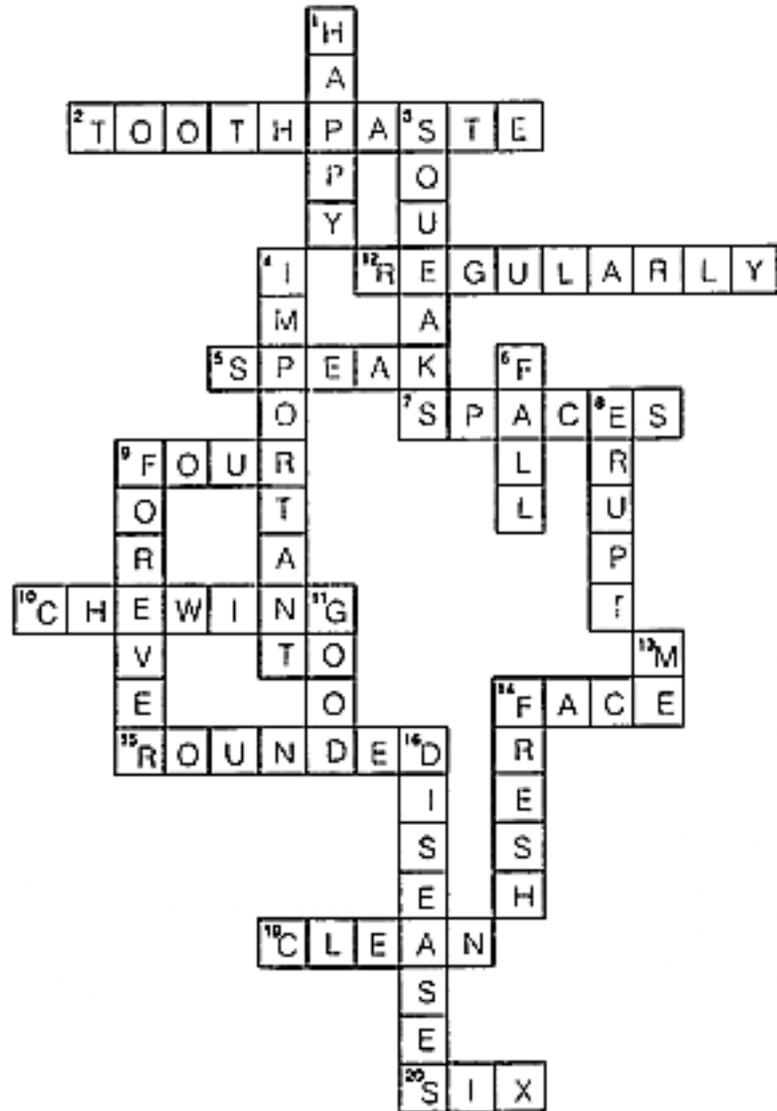
- 2 One way to protect my teeth is to use a fluoride _____
- 5 My teeth help me to _____ properly
- 7 My baby teeth keep _____ open for my permanent teeth
- 10 My teeth help me when I'm _____ my food
- 12 I need to go to the dental clinic _____ for check-ups
- 14 If I lost my teeth, it could change the shape of my _____
- 15 The bristles on my toothbrush should be soft and _____ at the tips
- 19. My teeth look and feel better when they are _____
- 20 My first permanent molar was the _____ year molar

DOWN

- 1 When I have clean and healthy teeth and gums, I feel _____
- 3 When I floss my teeth, I know they are clean when the floss _____ against them
- 4 My teeth are _____ to me.
- 6 I know if gum disease occurs, teeth can _____ out
- 8 It is best if I can keep my baby teeth until the permanent teeth are ready to _____.
- 9 If I brush and floss each day, I should have healthy teeth and gums _____
- 11 My teeth make me look _____
- 13 The only person who can keep my teeth clean every day is _____
- 14 Proper brushing and flossing keeps breath _____
- 16 Cavities and bleeding gums are dental _____ that I can help prevent

HEALTHY TEETH FOR A LIFETIME

(Teacher Answer Guide)



DENTAL HEALTH

GRADE: 6

LESSON: 5

THEME: LIFESTYLE

CONCEPT: THE PREVENTION OF DENTAL HEALTH PROBLEMS IS A PERSONAL RESPONSIBILITY

- PREPARATION:
1. Materials for a bulletin board display
 2. Prepare a class set of Personal Dental Health Habits (Activity Sheet D50)
 3. Prepare a class set of Promoting Positive Dental Health Habits (Activity Sheet D51)
 4. Prepare a class set of Progress (Activity Sheet D52)
-

VOCABULARY:

OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
Students will be able to: i) explain the importance of dental health to total well-being	Students: 1. Discuss the importance of dental health to a person's total wellbeing.	Background Information Page - Divide students into two groups to brainstorm reasons why dental health is important. Have each group report its answers using the sentence pattern: Dental health is important because it - helps teeth last for a lifetime - prevents dental problems and disease - prevents pain - freshens breath - maintains a person's appearance and facial shape - helps with food digestion - helps with proper speech

OBJECTIVES

STUDENT ACTIVITIES

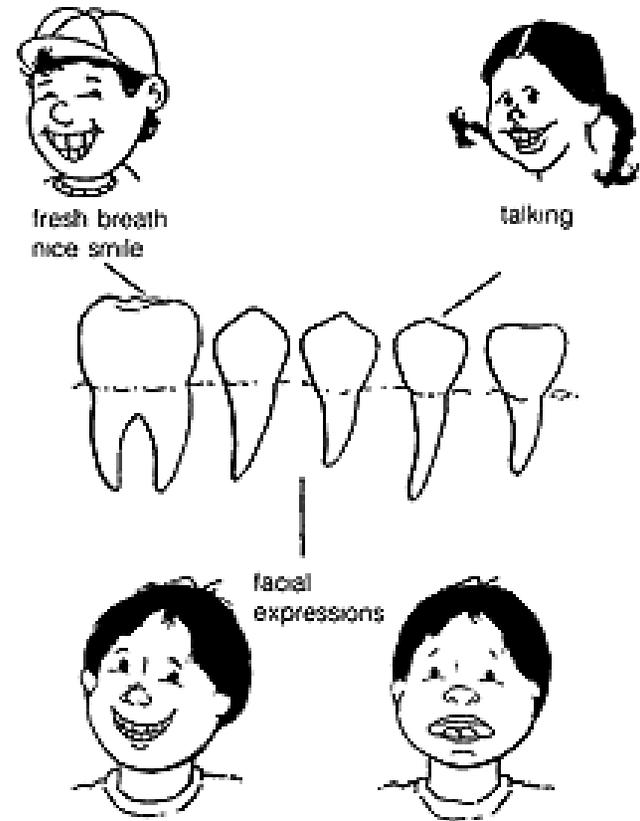
TEACHER NOTES

2. Prepare a bulletin board display to reflect the importance of healthy teeth.

The bulletin board should include points from the previous activity.

Divide students into groups and have each group prepare a collage for one section of the display.

Importance of Healthy Teeth



OBJECTIVES	STUDENT ACTIVITIES	TEACHER NOTES
<p>ii) assess personal dental health habits</p> <p>iii) design a personal dental health action plan to promote health</p> <p>v) evaluate the effectiveness of the program</p>	<p>3. Complete Personal Dental Health Habits worksheet.</p> <p>4. Select a behaviour that promotes positive dental health habits.</p> <p>5. Practise a personal dental health program for a given time period.</p> <p>6. Describe the degree of success of his/her program.</p>	<p>Display in the classroom, school, dental clinic or nursing station.</p> <p>Refer to Activity Sheet D50.</p> <p>Refer to Activity Sheets D50 and D51.</p> <p>Have students select a personal behaviour that should be improved.</p> <p>Refer to Activity Sheet D51.</p> <p>Help students to select realistic goals. For example, "I will stop eating sweets after school for one month," not "I will eat fewer sweets".</p> <p>Refer to Activity Sheet D52.</p>

PERSONAL DENTAL HEALTH HABITS

Instructions: Check ✓ the answer that most accurately describes your behaviours.

Yes	No
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

1. I brush and floss my teeth thoroughly each day.
2. I practise proper toothbrushing and flossing.
3. I usually eat snacks that are not sticky and sweet.
4. I wear a mouth guard or face mask if necessary when playing sports.
5. I do not put harmful objects in my mouth.
6. I use a fluoride product daily, or I drink fluoridated water.
7. I rinse my mouth with water after eating if I cannot brush.
8. I have regular dental check-ups.

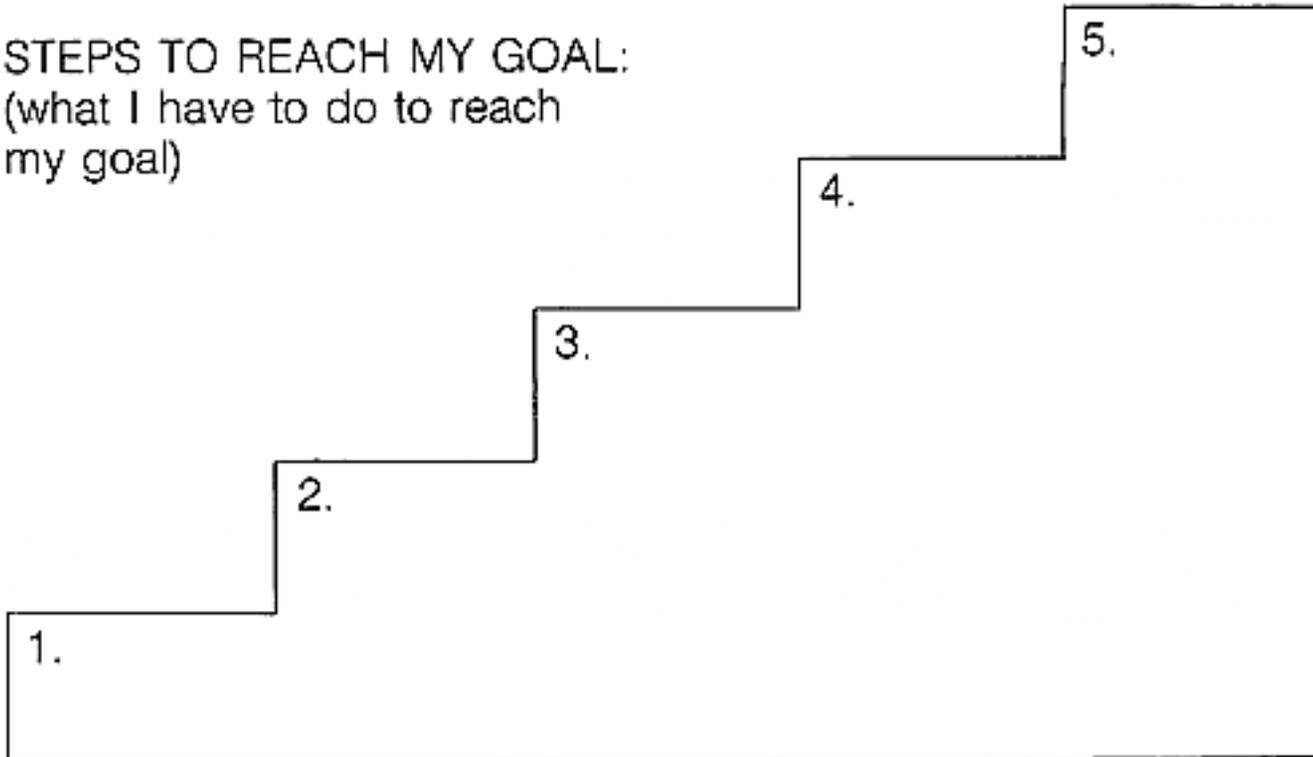
PROMOTING POSITIVE DENTAL HEALTH HABITS

Choose one thing that you can do personally to improve your dental health.

MY GOAL: _____

WHY I CHOSE THIS GOAL: _____

STEPS TO REACH MY GOAL:
(what I have to do to reach
my goal)



SUPPORT I NEED
TO REACH MY
GOAL

PROGRESS

(Chart your daily progress)

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
WEEK 1							
WEEK 2							
WEEK 3							
WEEK 4							

HOW DID I DO?

(Summarize your progress and assess how well you did.)

GRADE 6

TEACHER BACKGROUND INFORMATION

DENTAL HEALTH

DENTAL DECAY

The strange thing about dental decay is that it is so prevalent when so much is known about its causes and prevention.

There is no doubt that dental decay is a bacterial disease and is specifically related to the activity of dental or bacterial plaque which forms on teeth. If the teeth are thoroughly cleaned, this bacterial film or plaque will reform within 24-36 hours. The plaque progressively thickens if left undisturbed for several days, and in some areas of the mouth may become covered by food debris. Much of this food debris can be removed by rigorous mouth rinsing with water, but the plaque itself is only removed by brushing and flossing. The particularly damaging property of dental plaque is the ability of the bacteria to thrive on dietary sugar and to rapidly produce acids which can dissolve the tooth material.

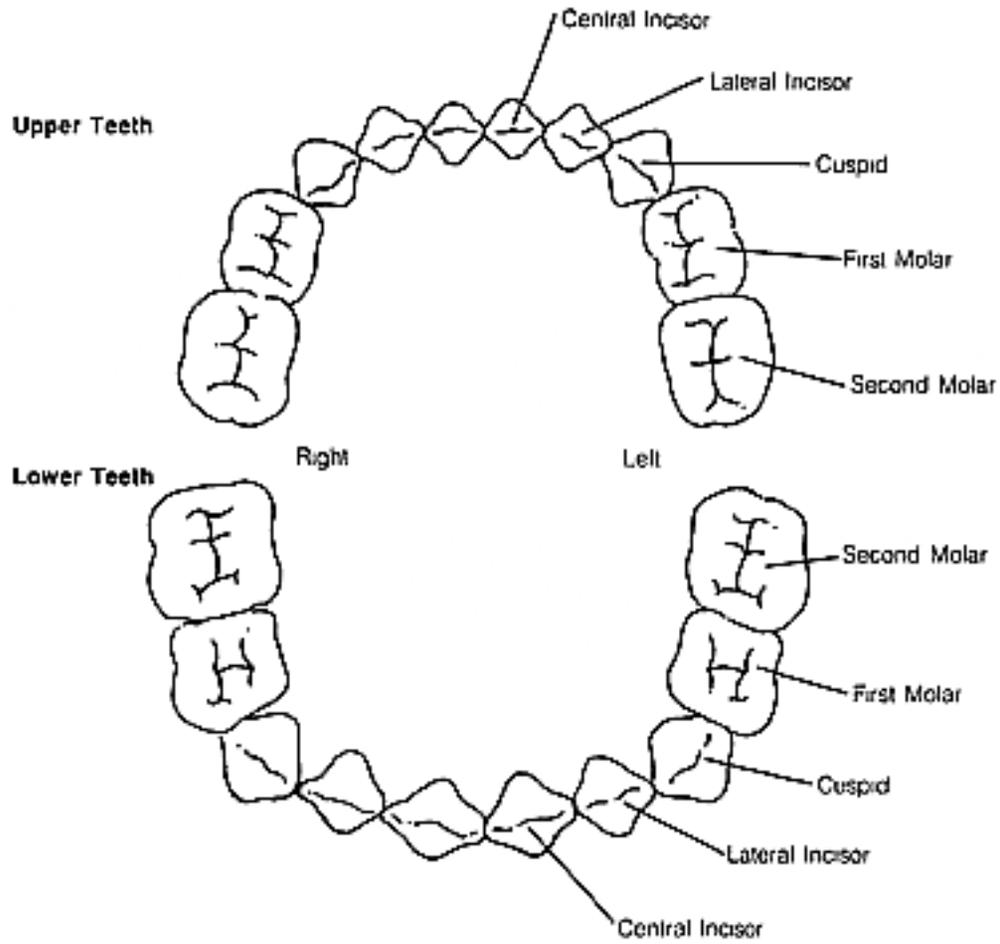
It is apparent that diet is an important factor in decay. The typical Canadian diet is high in refined carbohydrates, and is highly conducive to dental decay. Sticky candies or confections which adhere to the teeth or hard candies which are kept in the mouth for long periods of time are particularly damaging since they provide sugar to the plaque, and hence destructive acids, for a prolonged period of time. It is the food remaining in the mouth that is important to plaque activity. Hence, regular and thorough removal of food and plaque could theoretically eliminate the decay producing activity of the diet. In reality, it would be dangerous to rely completely on oral hygiene for the prevention of dental decay.

The role of heredity in dental disease is not well understood. Despite seemingly inherited bad gums or proneness to decay, personal neglect and poor quality dentistry are leading causes of poor teeth. Experience does indicate that some mouths are more prone to decay than others, but not because of so-called soft teeth. People who believe they have soft teeth often despair of their chances to keep their teeth. This despair is often associated with poor oral hygiene, dental neglect, faulty nutrition, or experience with poor-quality dentistry. With good home care, regular dental visits and the conscientious application of the principles of modern dentistry, most people should be able to enjoy a healthy mouth and retain their teeth for their lifetime.

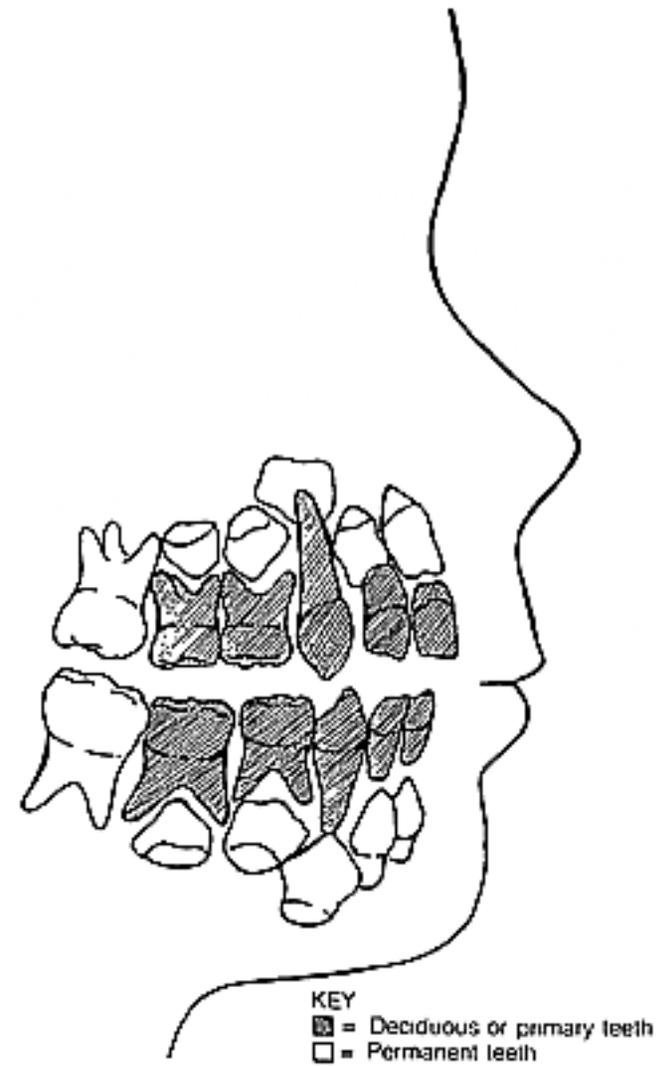
Good oral hygiene (proper brushing after each meal and brushing and flossing prior to going to bed) is difficult enough for adults to establish, for children, it is doubly difficult. Not only do young children lack the dexterity to brush and floss their teeth properly, but the benefits of such skills would be considerably reduced in the typical young "continuous eater". Parents should not only assist their young children in the brushing technique and floss their children's teeth up to about age 8, but should strive to keep the snack habit to the minimum, particularly of foods and drinks containing sugar. In lunches or at snack time children should not be given hard or sticky treats such as lollipops or toffee having sugar that remains in the saliva for a long time.

Adapted from 'Dental Health A Teacher's Guide K-12,' Health and Welfare Canada

PRIMARY (BABY) TEETH

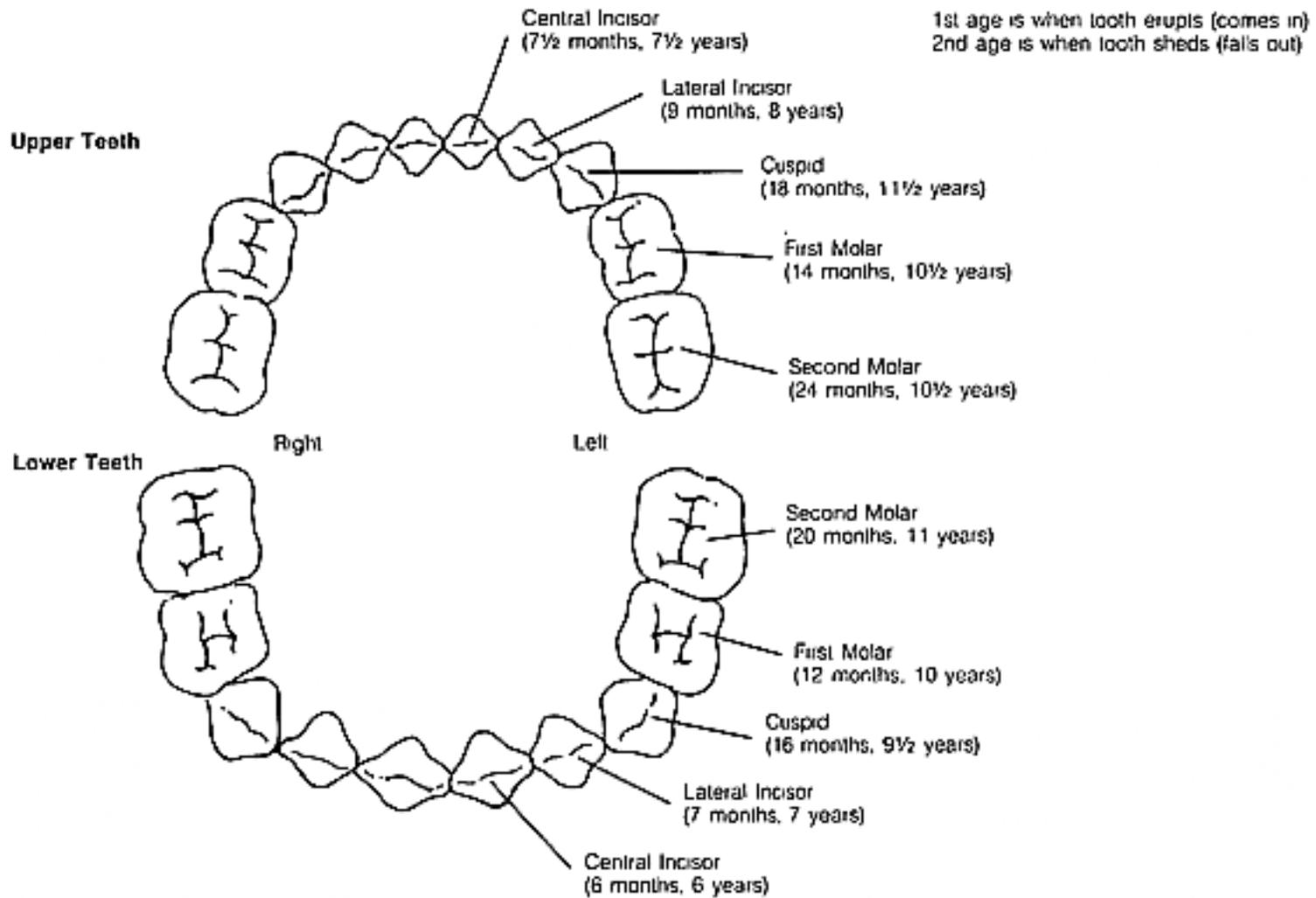


LOCATION OF TEETH AT 6 YEARS OF AGE



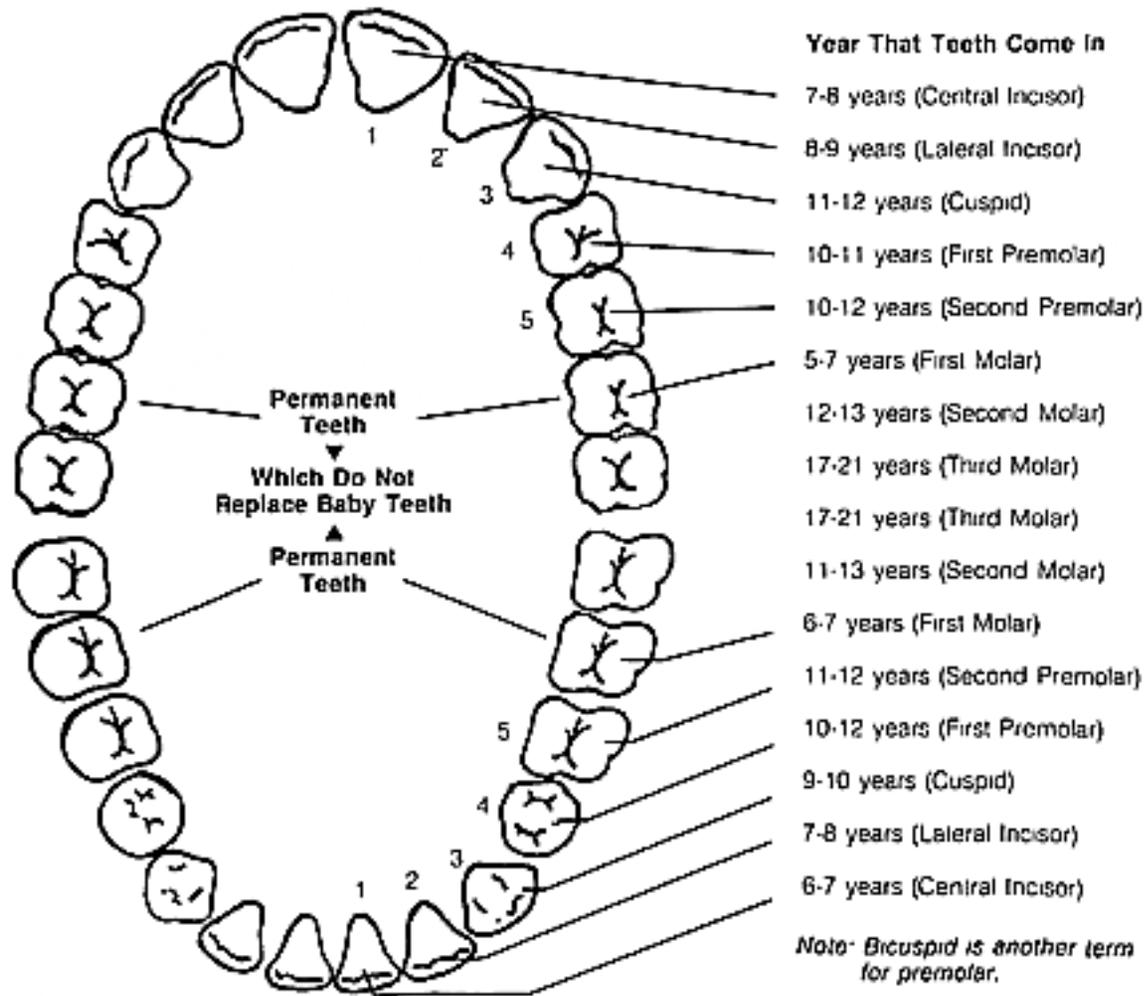
AGE SCHEDULE FOR PRIMARY TEETH

PRIMARY (BABY) TEETH



AGE SCHEDULE FOR PERMANENT TEETH

(Teeth numbered 1 to 5 replace baby teeth)



DENTALLY SAFE FOOD

and

DENTALLY UNSAFE FOOD



unsweetened fruit juice
unsweetened vegetable juice
raw vegetables and salads
raw fruits
nuts, seeds
cheese
plain milk
plain yogurt
enriched, whole wheat bread
and bannock
whole grain cereals
crackers
bran muffin
pizza
popcorn
meats



raisins, dried fruits
ice cream, milkshakes
sweetened juice and canned fruits
flavoured yogurt
chocolate milk
puddings
popsicles/fudgsicles/revelos
sugar lumps
cake
candy
jam
chocolate bars
cookies
jelly, jam, honey
soft drinks (sweetened)
fruit drinks
sweetened powdered drink mixes
gum
lozenges

*** Teeth should always be brushed after eating sticky food.**

TOOTHBRUSHING - REMOVAL OF PLAQUE

How to Brush

Toothbrushing disrupts and removes plaque from the inner, outer and top surfaces of the teeth.

Place the toothbrush inside the mouth with the bristles along the upper last two teeth pointing at a 45° angle toward the gum line. This ensures that the bristles cover both teeth and gum surfaces

Vibrate the brush in a slight back and forth or circular motion directing gentle pressure towards the gums. This movement keeps the brush alongside the same two teeth and allows some of the bristles to clean the surfaces under the edge of the gums. Do not scrub.

Count to ten and then, move to the next group of teeth.

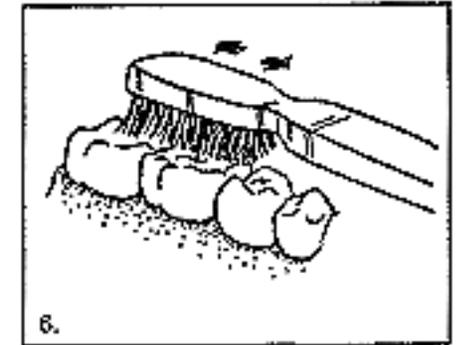
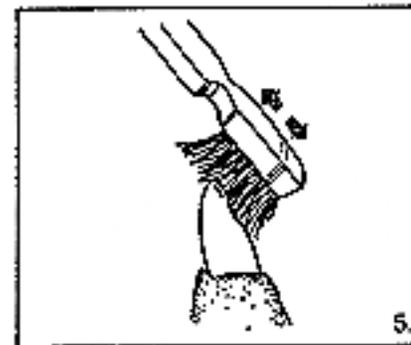
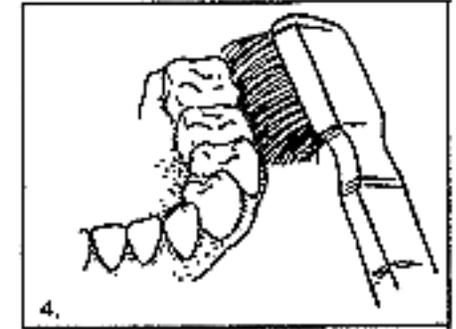
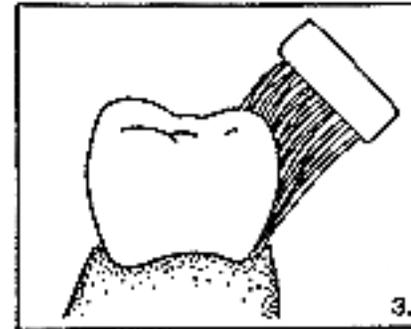
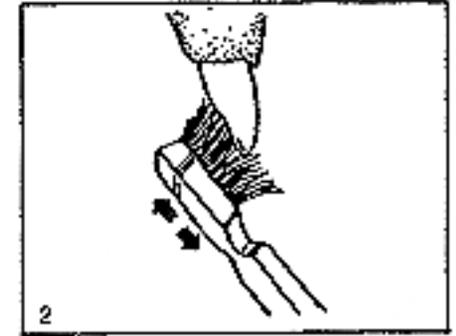
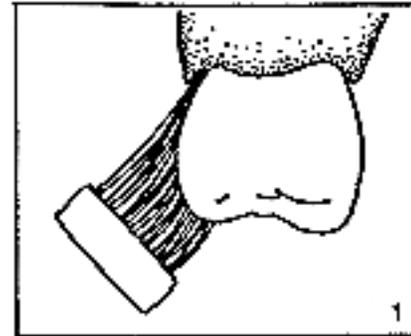
All inside and outside surfaces of teeth are cleaned in this way. The top surfaces of the back teeth are cleaned with a back and forth motion the bristles directly on top of the teeth.

To ensure all surfaces are brushed, the same circuit is followed every time.

This is where toothbrushing should begin.

1. Position of brush for brushing upper inside back teeth
2. Position of brush for brushing outside upper front teeth.
3. Position of brush for brushing lower inside back teeth
4. Position of brush for brushing lower outside middle teeth
5. Position of brush showing brushing of lower outside front teeth.
6. Position of brush showing brushing of top surface of back teeth.

From: CDA, "Do It Yourself Oral Hygiene", 1981



A BASIC TECHNIQUE FOR DAILY PLAQUE REMOVAL

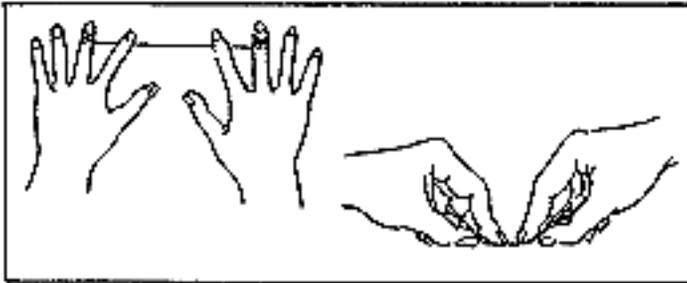
Flossing - Removal of Plaque

How to Floss

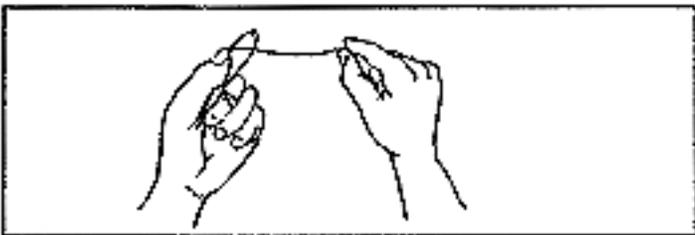
Flossing disrupts and removes plaque between the teeth and under the edges of the gums

To floss properly, use about 46 cm of dental floss. Wind most of the floss around the middle finger of one hand and the rest around the middle finger of the other hand. This leaves about 8 cm free

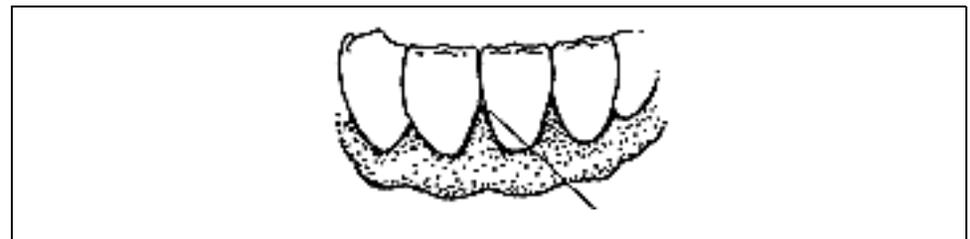
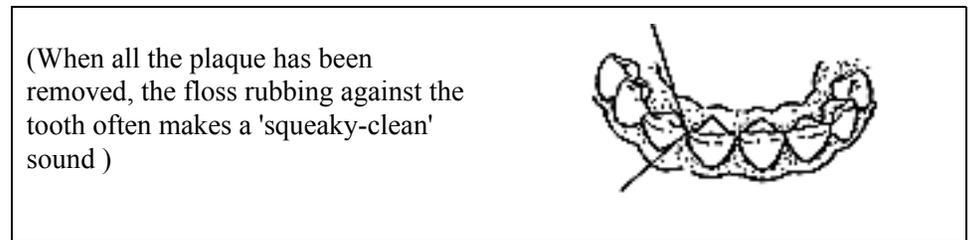
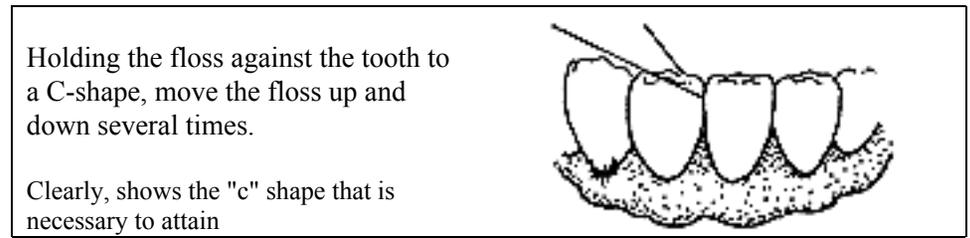
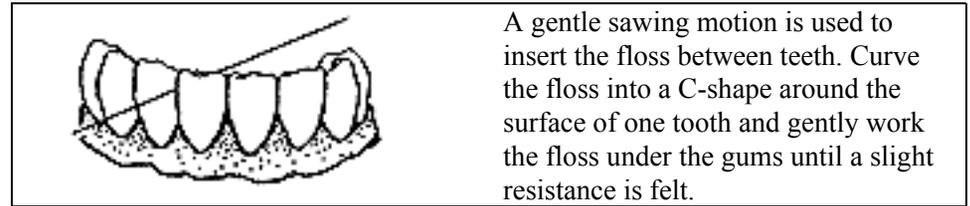
The free part of the floss is grasped with the thumbs and 1st fingers of each hand leaving about 2.5 cm as the 'working portion' of the floss



When flossing lower teeth the floss is guided mainly by the 1st finger of each hand



For upper teeth exert pressure with the thumb of one hand and the forefinger of the other hand.

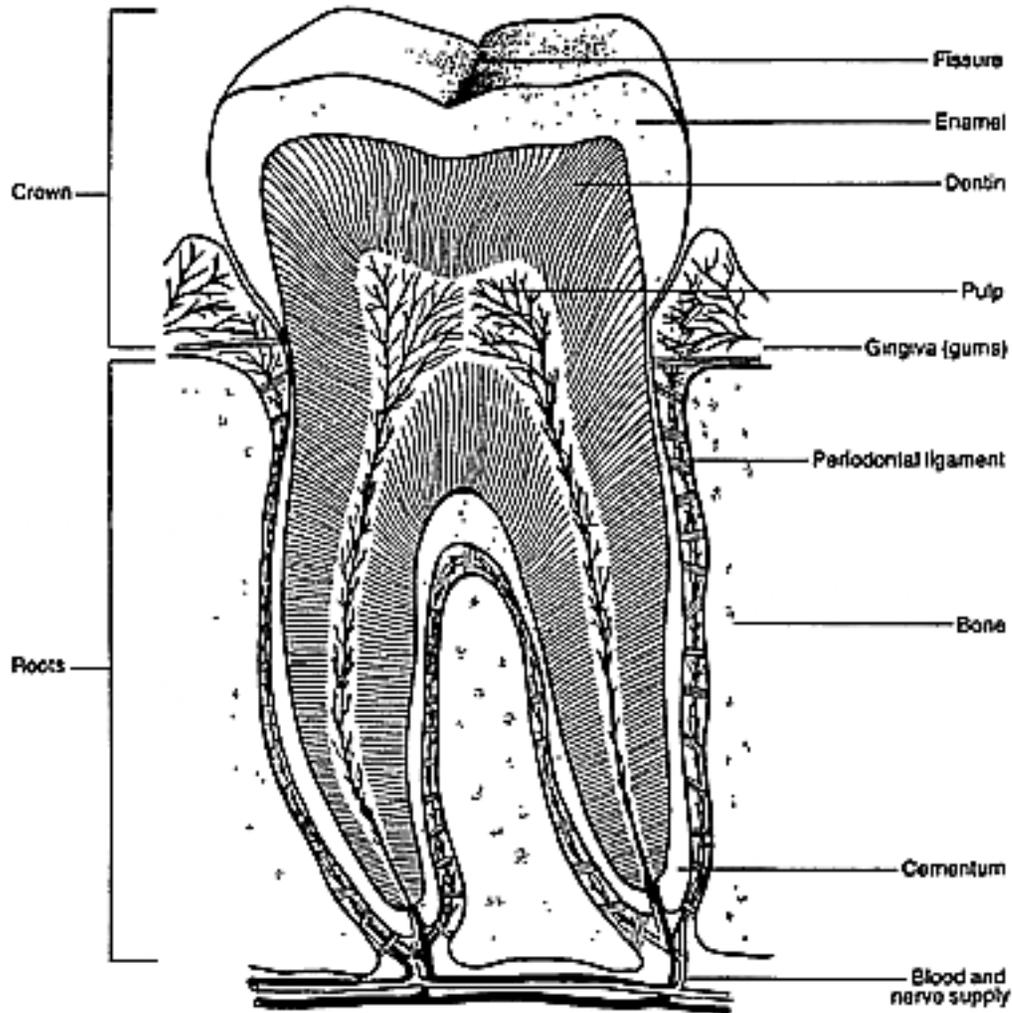


Repeat the procedure on the adjacent tooth surface at the same site.

This method is repeated on the remaining teeth starting on the upper right teeth and ending on the lower left teeth.

From CDA, "Do It Yourself Oral Hygiene", 1981

THE STRUCTURE OF A TOOTH



A tooth consists of two anatomical parts

Crown: usually appears above the gums and shows in the mouth

Root: anchors the tooth in the bony socket of the jawbone and is ordinarily not visible

Structures of the crown:

Enamel: the hard, glistening substance that forms the outer layer of the crown

Dentin: an ivory-like substance under the enamel, which forms the body of the tooth

Pulp Cavity: the hollow space in the centre of the tooth which contains nerves and blood vessels

Structures of the root:

Cementum: a thin layer of bone-like tissue covering the root.

Dentin: an ivory-like substance located under the cementum

Pulp canal: an inner cavity containing nerves and blood vessels, an extension of the pulp cavity to the tip of the root

Surrounding tissues:

Periodontal ligament: fastens the root of the tooth to the jawbone. It acts as a shock absorber as the teeth come together in the chewing process

Gingiva (gums): soft tissue that immediately surrounds the teeth and the bone.

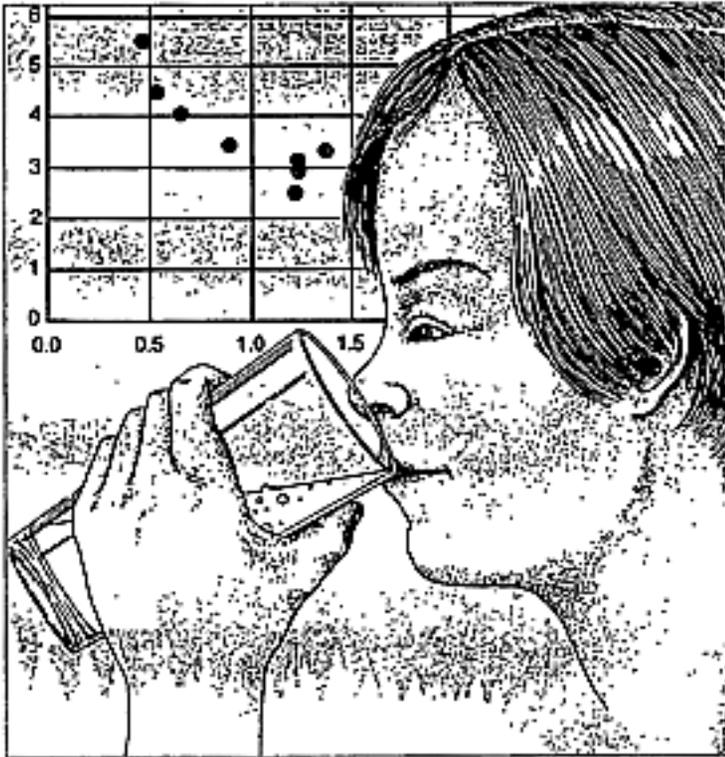
Jawbone: the bone surrounding and supporting the roots of the teeth

WATER FLUORIDATION IN THE NORTHWEST TERRITORIES

Many residents of the Northwest Territories suffer from tooth decay. The rate of tooth decay in the N.W.T is almost four times greater than in southern Canada.

Tooth decay is unusually high among native people, particularly children. The high rate of tooth decay results, in part, from the change of a high protein traditional diet to processed food and a high carbohydrate diet.

Water fluoridation, along with good nutrition, proper dental care and good dental hygiene practices, is an excellent way of reducing tooth decay.



What is fluoride?

Fluoride is a natural chemical which is produced by combining the natural element fluorine with other elements.

Low levels of fluoride are found naturally in most community water supplies. It also is found in some foods including spinach, fish and other seafoods. Tea also contains high levels of fluoride.

What does it do?

Fluoride prevents tooth decay by strengthening enamel during tooth formation and fighting tooth decay in formed teeth.

Studies conducted in North American cities over the past 20 years show that children raised in communities where fluoride has been added to the water, have 40% - 60% fewer cavities than children raised elsewhere.

Fluoride helps children grow stronger teeth. Adults who consume fluoride tend to keep their own teeth longer. It also strengthens bones and reduces bone fragility disease in elderly people.

The effects of fluorides can however be overwhelmed by the frequent consumption of foods and drinks containing sugar especially soft, sticky types of foods. Regular brushing of the teeth with a fluoride-containing toothpaste has the potential to reduce the incidence of dental decay.

What is water fluoridation?

Water fluoridation is the process of adding fluoride to water supplies. Fluoride does not change the taste of water.

Adding fluoride to drinking water usually does not cause health problems. However, high doses of fluoride taken while teeth are forming can permanently change the colour and texture of the teeth. The addition of fluoride to drinking water is controlled so high doses are not added. (The range of effective water fluoridation is between 7 and 12 parts per million.)

The method of adding fluoride to water supplies is determined by water supply and distribution systems. It is easier to add fluoride to water in treatment plants that serve piped water distribution systems. This method

is used in the Yellowknife, Inuvik, Iqaluit and Fort Smith water treatment plants.

It is more difficult to safely fluoridate community water supplies in communities served by trucked water distribution systems. Safe and properly controlled fluoridation is possible only where reservoirs designed for year round storage are used. Skilled personnel can add fluoride while the reservoir is being filled.

Water fluoridation generally is not recommended in communities with small water storage facilities or communities with no storage facilities as proper mixing and dilution of the fluoride may not be consistently achieved.

Fluorides have the effect of rendering the teeth less soluble (but not insoluble) in the acids derived from the action of certain oral bacteria on sugar. Teeth which have been completely formed under the influence of an adequate amount of fluoride are much more resistant to the initiation of dental decay and to its rate of progress.

Other alternatives

To be effective against dental decay, fluoride must be provided on a daily basis over the entire period of tooth formation - from birth to about age 14.

Fluoride added to milk has produced modest reductions in tooth decay. However, its effectiveness is limited because.

- there are wide variations in the amount of milk people drink
- some families may not be able to afford a lot of milk
- teenagers often do not drink much milk

Fluoride tablets and drops are effective when used on a daily basis for the first 14 or more years of life. However, when such programs have been instituted in Canada and the United States, users tended to "get lazy" after a year or two and stop taking the tablets or drops.

Fluoride treatment of teeth by a dental health worker, and the daily use of fluoride toothpaste or mouthwash combined with proper brushing and flossing are recommended for individuals who live in communities which do not have fluoridated water supplies.

For more information on fluorides and fluoridated water systems, contact:

Community Works and Capital Planning
Municipal and Community Affairs
Government of the Northwest Territories
Yellowknife, N W T
X 1 A 2L9
Telephone (403) 873-7644

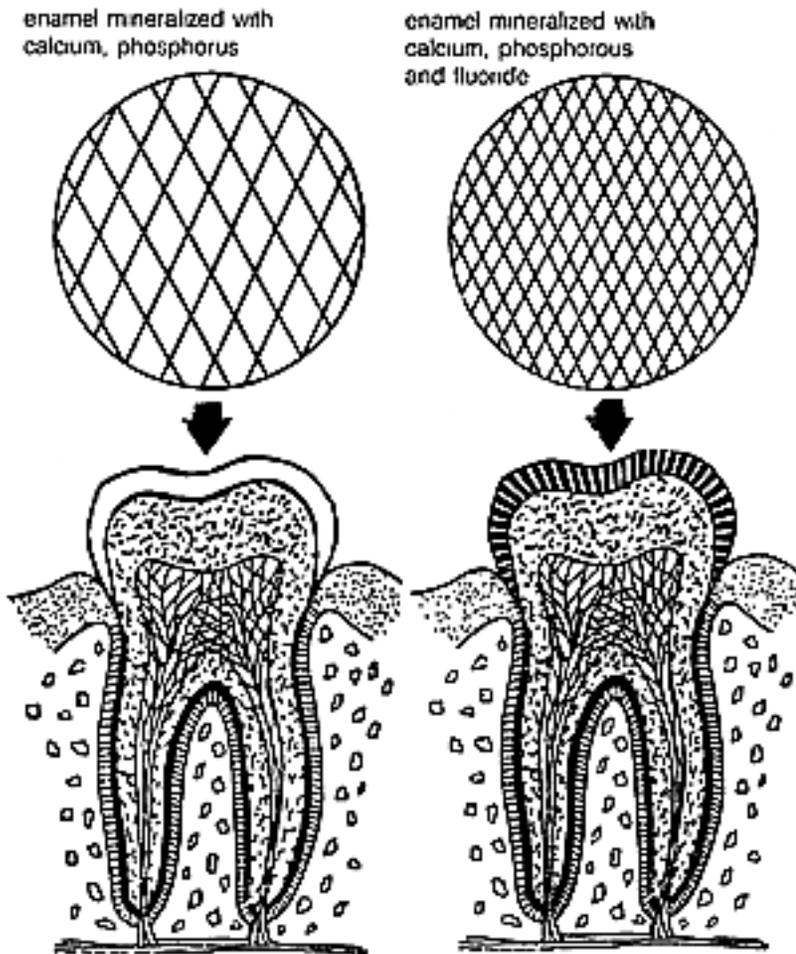
Fluorides in the form of water fluoridation, a good diet with sugar consumption kept to a minimum, especially for between-meal snacks, brushing and flossing thoroughly each day and brushing after meals if possible (fluoride toothpaste) will prevent most dental decay and gum disease. These four preventive measures constitute a dental health program that can be carried out by the individual at a very low cost. Prevention of dental disease is relatively inexpensive but neglect is costly.

Reprinted from 'Water Fluoridation in the Northwest Territories', N. W. T. Municipal and Corporate Affairs, May 1988, and Fact Favour Fluoridation, Canadian Dental Association, 1979.

ROLES OF FLUORIDES

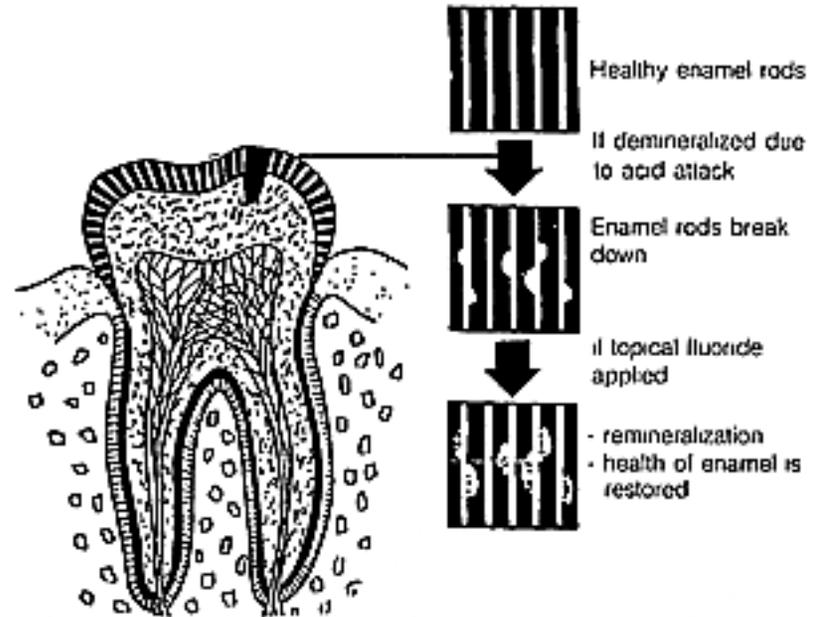
Systemic Fluoride

- ingested fluoride is deposited into developing teeth
- makes the enamel and dentin crystals harder and more densely packed
- leads to more decay resistant tissue
- most beneficial means of preventing tooth decay



Topical Fluoride

- applied fluoride provides benefits to the surface layer of enamel
- strengthens enamel rods (remineralization)



FLUORIDE PRODUCTS

There are many ways to ensure adequate levels of fluoride necessary to strengthen teeth and "fight cavities" Products containing fluoride are approved by the Canadian Dental Association and bear the C.D.A. Seal.

Systemic Fluoride Treatments

- drinking fluoridated water
- fluoride tablets (e.g. Peditabs)
- fluoride drops (e.g. Pedidrops)
- baby vitamins with fluoride (e.g. Fluor-vi-sol)

Residents of communities with fluoridated drinking water do not need other systemic fluoride treatments.

Topical Fluoride Treatments

- a) professional treatments by a dental health worker
- b) self treatments
 - fluoride rinses (e.g. Fluorinse by Oral B)
 - mouthwashes with fluoride (e.g. Listermint)
 - fluoride gels

DENTAL HYGIENE AIDS

There are many products designed to clean the surfaces of the teeth as well as the area between the teeth and under the gum lines In addition to the toothbrush these include

Dental floss

- unwaxed
- waxed
- flavoured

Dental tape

- used to clean spaces between widely spaced teeth

Super floss

- a special floss designed to clean under bridgework

Stimulents

- an interdental cleaner, similar to a toothpick

Proxabrush

- a small brush used to clean between widely spaced teeth

Water pik

- an irrigation device which can remove debris from around the teeth, gums, braces and other dental appliances

Most dental health products other than a soft bristle toothbrush, fluoridated toothpaste and dental floss, should only be used following recommendation and instruction from a dental health professional

EFFECTS OF TOBACCO

The tar in tobacco stains the teeth with an unattractive dark brown to black stain Meticulous cleaning will help to keep accumulations to a minimum Nevertheless, it may be necessary to have the stains removed regularly at a dental office A distinctive unpleasant mouth odour and taste develop with heavy smoking

The use of tobacco also causes a reduction in the sense of taste.

Prevention of Cancer of the Mouth

Tumours and other growths occur in both the soft and hard parts of the mouth more frequently than is generally recognized Not all of them are malignant, many of them are benign Nevertheless, these conditions should be of concern until diagnosed otherwise

Cancer of the mouth and pharynx (back of the throat) accounted for 591 of the 21,008 male cancer deaths in 1978 Among females 206 of the 16,490 cancer deaths were caused by cancer of the mouth and pharynx The higher male risk is obvious

Dentists and other dental health workers look for tumours and growths when they are examining the mouth. Other conditions in the head and neck region may also be found during the dental examination. Early detection of such abnormalities can save lives.

Although cancer is more frequent in those of mature years, no age group is immune. Cancer occurs in many forms in the mouth, with differing degrees of malignancy. The lips, mainly the lower lip, the tongue, gums, cheeks and bones of both upper and lower jaws may all develop cancerous growths.

Pain is not usually an early symptom. The following abnormalities of either the soft or the hard parts of the mouth should be examined by a dentist or physician at once.

- any swelling or hardness, however small, recently found, which is increasing in size.
- any sore spot, roughening or whitish discolourization which does not heal within two weeks.

It is better to take steps to prevent cancer from occurring than to rely on discovery and treatment after it appears. Probably the most important lesson about mouth cancer that young people can learn is that persons who drink heavily or smoke are at a greater risk of acquiring the condition. It appears also that smoking and alcohol use interact. The risk of mouth cancer among persons who both drink and smoke is greater than can be attributed to the independent effects of smoking and alcohol use. A similar relationship between smoking and drinking alcohol is found for cancers of the larynx (voice-box) and esophagus (gullet). It seems, therefore, that all tissues lining the upper respiratory and digestive systems, which can be most readily exposed to tobacco and alcohol, are susceptible to their effects.

Pipe, cigar and cigarette smoking are of similar importance in the development of cancers of these tissues. This is somewhat different from the situation for the lungs where cigarette smoking is a greater risk than pipe and cigar smoking. Use of chewing tobacco has also been found to be associated with mouth cancer. As would be expected, the risk of developing mouth cancer increases with the amount used.

Chronic irritation due to dental neglect, resulting in badly decayed, broken-down teeth and in open root abscesses and infections of the gums, may also be important.

Periodic dental examinations and regular dental care will reduce the risk of oral cancer by eliminating or reducing sources of chronic irritations of the mouth tissues. In addition to the possible saving of lives, the early treatment of tumours of either soft or hard parts of the mouth will reduce the possibility of disfigurement.

The potential for preventing mouth and other cancers is of paramount importance. The most effective preventive method is the avoidance of tobacco products, including second hand smoke.

DENTAL HEALTH WORKERS

Dental Assistant

The Dental Assistant aids the Dentist in providing care for the patient.

Duties of the Dental Assistant vary with the dental practice and may include:

- preparing the patients for dental treatment, - taking x-rays;
- assisting the Dentist at chairside;
- simple cleaning of teeth in small children;
- clerical and receptionist duties, such as making appointments for patients, filing charts, etc.

Location

Most Dentists in practice employ a Dental Assistant.

Education

There are two programs offered at some community colleges: (Both suggest grade 12 education.)

1. One year program at the college
2. 18 month Independent Correspondence Course for those having experience as a Dental Assistant .

Dental Assistants may be trained to a dental office but must sit examinations to be registered. Registration is not compulsory in most provinces and territories but is a great asset.

Dental Hygienist

The Dental Hygienist is primarily concerned with prevention of dental problems through education. The Hygienist's duties include:

- examining and charting the condition of mouth and teeth;
- taking x-rays of teeth;
- cleaning teeth;
- applying materials to teeth to prevent cavities;
- teaching adults and children how to take care of teeth and the importance of eating healthy food.

Location

In the north, the Dental Hygienist works in Dentists' offices. In some areas the Hygienist works for health centres or hospitals.

Education

Grade 12, Senior Matriculation with chemistry. Two year course at a university leading to a diploma in Dental Hygiene. Certain community/ vocational colleges offer programs in Dental Hygiene.

Dental Therapist

Dental Therapy, an exciting new career, provides dental care to those living in remote areas of Canada, particularly in the Canadian North, and native people on reserves. Dental therapists follow treatment prescribed by a supervisor dentist who visits the therapist regularly. The dentist examines patients and writes treatment plans which outline the specific work procedures to be completed after the dentist has gone.

This work includes:

- giving local anaesthetics;
- preparing teeth for and placing routine fillings in teeth;
- performing uncomplicated extractions of deciduous (baby) and permanent teeth;
- scaling (cleaning) teeth;
- taking and developing x-rays;

- conducting preventive dental health programs which include
 - supervised brushing,
 - topical fluoride application,
 - classroom teaching

Location

Dental therapists are employed by the Regional Health Boards of the N.W.T. to work in communities in the Northwest Territories. The work usually involves travel to many communities on a regular basis.

Education

Grade 12 with biology, or mature students who can demonstrate equivalent training may also be considered. Reading comprehension, writing and speaking skills are important. Two year Dental Therapy course at the School of Dental Therapy.

Dentist

The primary concern of the Dentist is to help people keep healthy teeth. They do this through treating problems of the teeth and mouth, and emphasizing prevention of dental problems. A healthy mouth and teeth are essential factors in achieving good general health.

Some of the duties of the Dentist include:

- filling, cleaning, extracting and replacing teeth,
- treatment of the gums and roots of the teeth,
- surgery of the mouth,
- straightening teeth,
- care of children's teeth;
- promoting dental health through education

Location

In the north, Dentists work in private practice or work for the Government travelling to certain parts of the N.W.T.

Education

Senior Matriculation with B standing or better. Several years university study with specific science courses such as chemistry, physics and biology. Four year university program to obtain the Doctor of Dental Surgery or Doctor of Dental Medicine.

COMMON PROBLEM CONDITIONS OF TEETH AND MOUTH OF CHILDREN AND YOUTH

Problem	Signals	Causes	Consequences	Treatment	Prevention
dental decay	<ul style="list-style-type: none"> - plaque build up - brown spots in grooves on surfaces or between teeth - bad breath - bad taste - some pain when hot, cold, sweet substances are eaten 	<ul style="list-style-type: none"> - improper brushing and flossing - lack of brushing and flossing - frequent eating of sweet sticky foods - dental neglect 	<p style="text-align: center;">plaque + sugar = acid tooth = tooth decay</p>	<ul style="list-style-type: none"> - drilling to remove disease - filling - crowns - root canal 	<ul style="list-style-type: none"> - fluorides - proper daily brushing and flossing - plaque control - careful selection of foods - sealants - health education - regular dental check-ups
gum disease -gingivitis, periodontitis	<ul style="list-style-type: none"> - soft, swollen, tender gums when brushed or flossed - loose permanent teeth - persistent bad breath or taste in mouth - a feeling of pressure between teeth after eating - gums shrink from teeth 	<ul style="list-style-type: none"> - bacteria in plaque irritates gums - plaque hardens and irritates gums - infection 	<ul style="list-style-type: none"> - bleeding gums - pockets of pus between gums and tooth - gums, ligaments, bones that support tooth are damaged - teeth loosen and fall out 	<ul style="list-style-type: none"> - removal of plaque and calculus - treatment of infection - Surgical removal of tooth 	<ul style="list-style-type: none"> - plaque control - proper daily brushing and flossing - health education - regular dental checkups
orthodontal	<ul style="list-style-type: none"> - crooked or poorly aligned permanent teeth - grinding of teeth - improper spacing of teeth 	<ul style="list-style-type: none"> - premature loss of primary teeth - late loss of primary teeth - thumb sucking beyond 5 years 	<ul style="list-style-type: none"> - plaque control problems - appearance problems - biting, chewing, speaking problems - grinding of teeth 	<ul style="list-style-type: none"> - space maintainers - exercises or appliances to move teeth to correct locations - prevention of thumb sucking 	<ul style="list-style-type: none"> - regular dental check-ups - health education

Problem	Signals	Causes	Consequences	Treatment	Prevention
		<ul style="list-style-type: none"> - teeth too large or too small for jaw - cleft palate 	<ul style="list-style-type: none"> - uneven wear of teeth - periodontal disease 	<ul style="list-style-type: none"> - prevention of grinding of teeth 	
nursing bottle mouth	<ul style="list-style-type: none"> - new teeth are decayed 	<ul style="list-style-type: none"> - frequent exposure of a child's teeth for long periods of time to liquids containing sugars e.g., milk, formula, fruit juice, pop, sweetened water or tea - usually caused when baby is allowed to sleep with the bottle in the mouth - teeth are bathed in liquid. 	<ul style="list-style-type: none"> - bacteria + sugar = acid - acid + tooth = decay 	<ul style="list-style-type: none"> - fillings - tooth removal - caps 	<ul style="list-style-type: none"> - teach parents/ caregivers proper feeding techniques - babies should not be put down to sleep with a bottle, or bottle should contain only water - give bottle when baby is awake in a sitting position to stimulate natural swallowing and tongue positioning - don't let baby or young child fall asleep with sweet liquids in mouth - don't "prop" bottle

DENTAL EMERGENCY PROCEDURES

Knocked-out Tooth

Rinse the tooth. Do not scrub. Place the tooth in a glass of water or milk, or wrap in a wet towel or cloth. Go to the dental health worker immediately with the tooth.



Bitten Tongue or Lip

Apply direct pressure to bleeding area with a clean cloth. If swelling occurs, apply cold compresses. If bleeding persists, go to the hospital or nursing station.



Possible Fractured Jaw

Immobilize the jaw using a handkerchief, scarf or towel. If swelling persists, apply a cold compress. Call the dental health worker immediately and go to the hospital or nursing station.



Broken Tooth

Gently rinse the area with warm water. If swelling occurs, place cool compresses on outside of cheek. Go to the dental health worker immediately.



Orthodontic Problems

If a wire is causing irritation, cover the end of the wire with wax or cotton. Go to the dental health worker immediately. If a wire is embedded in the cheek, tongue or gums, do not attempt to remove. Go to the dental health worker immediately. If an appliance becomes loose or breaks, take the appliance to the dental health worker immediately.



Toothache

Remove any debris around tooth by rinsing with warm water and flossing on either side of the tooth. If swelling is present, place cool compresses on the outside of the cheek. Do not use heat. See the dental health worker as soon as possible.



Object Wedged Between Teeth

Try to remove objects with dental floss. Do not snap the floss in between the teeth. If flossing does not remove the object, go to the dental health worker. Do not try to remove the object with sharp or pointed instruments.



Adapted from: Health Education, Dental Health Teaching Supports, Grade 5, Manitoba Education, 1986.