



YSISTE

ASSESSMENT OF SCIENCE AND TECHNOLOGY ACHIEVEMENT PROJECT (ASAP)

Science and Technology Exemplars

Grade 1: Life Systems – Characteristics and Needs of Living Things

Exemplar Task (1LSPT01/Feb 2002)

My Body



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Preface

This task is one of a series developed by the Assessment of Science and Technology Achievement Project (ASAP) which is being used for the ASAP Science and Technology Exemplars Project.

This task is organised in three parts:

- A. Task Overview
- B. Student task sheet – designed to be photocopied for the students
- C. Teacher Information – providing essential information relating specifically to this task

For further information, contact the ASAP office at 416-736-5006 or email: asap@edu.yorku.ca

Task Overview

Description of the Task:



This is a culminating activity designed to assess a cluster of expectations for this grade and strand. Students should have been taught the concepts and skills required to perform this task prior to attempting it.

In this task, students will label the main parts of their body, and state the function of each part. Students will also construct a healthy meal using the four food groups.



Recommended Materials and Equipment:

pencils	mural paper/large sheets of paper
pencil crayons	marker pens
crayons	selection of magazines (including food magazines)
rulers	scissors
glue sticks	



Suggested Timeline:

- 2-3 sessions of about 40 minutes each



Suggested Grouping:

- task activities to be completed individually or in groups of 2



Safety Considerations:

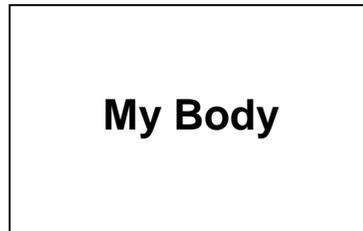
- use of scissors and glue sticks
- extra care should be taken when using scissors or anything that might be considered dangerous to children

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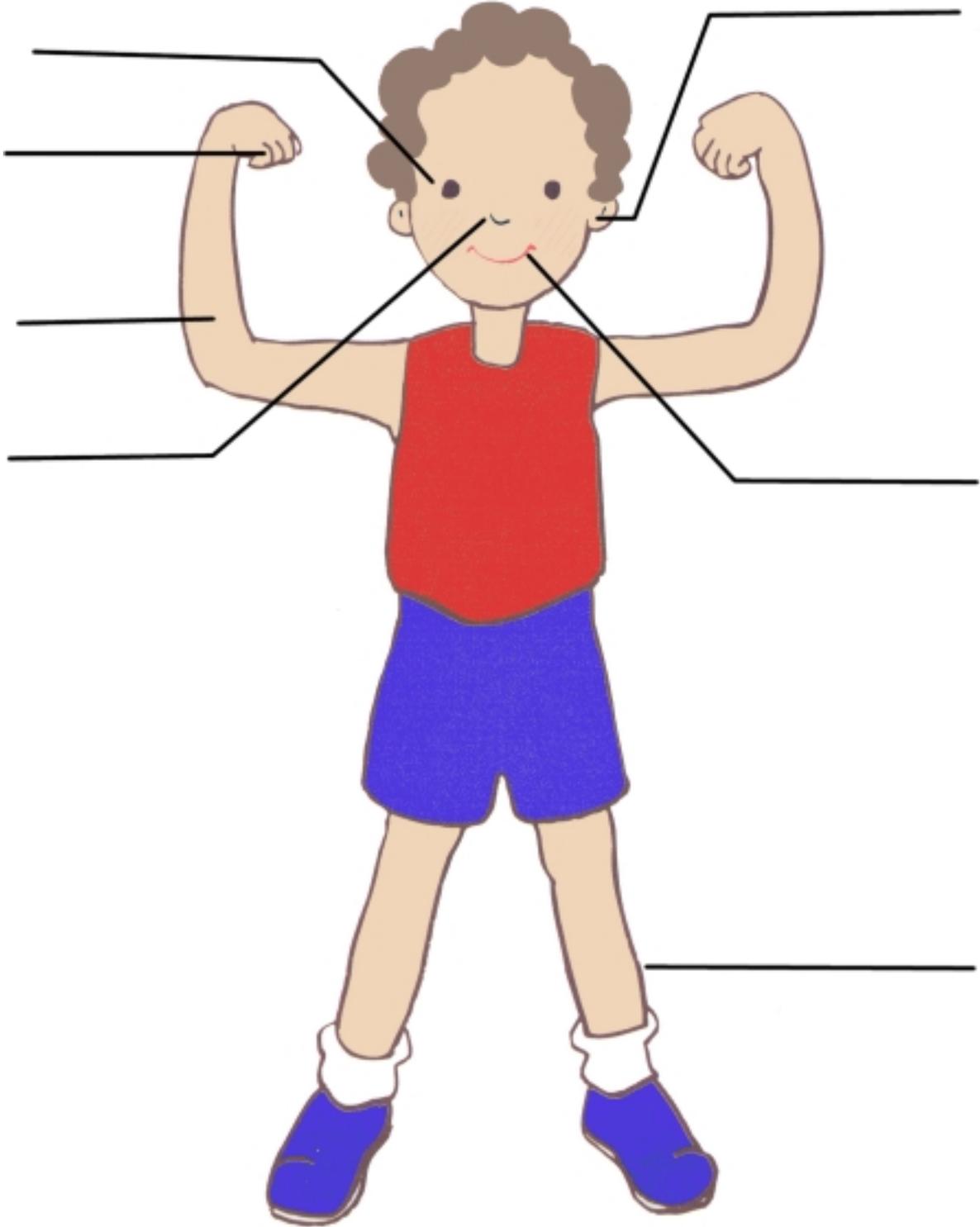
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Student Task Sheets

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1. Use the words (mouth, finger, nose, leg, ear, arm, eye) to label the drawing of the body.



2. Use the words below to tell what the parts of the body do.

(Hint: one word does not fit)

Smell

Taste

Touch

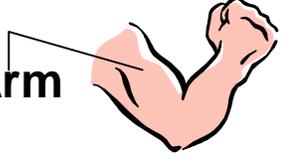
Lift

See

Think

Walk

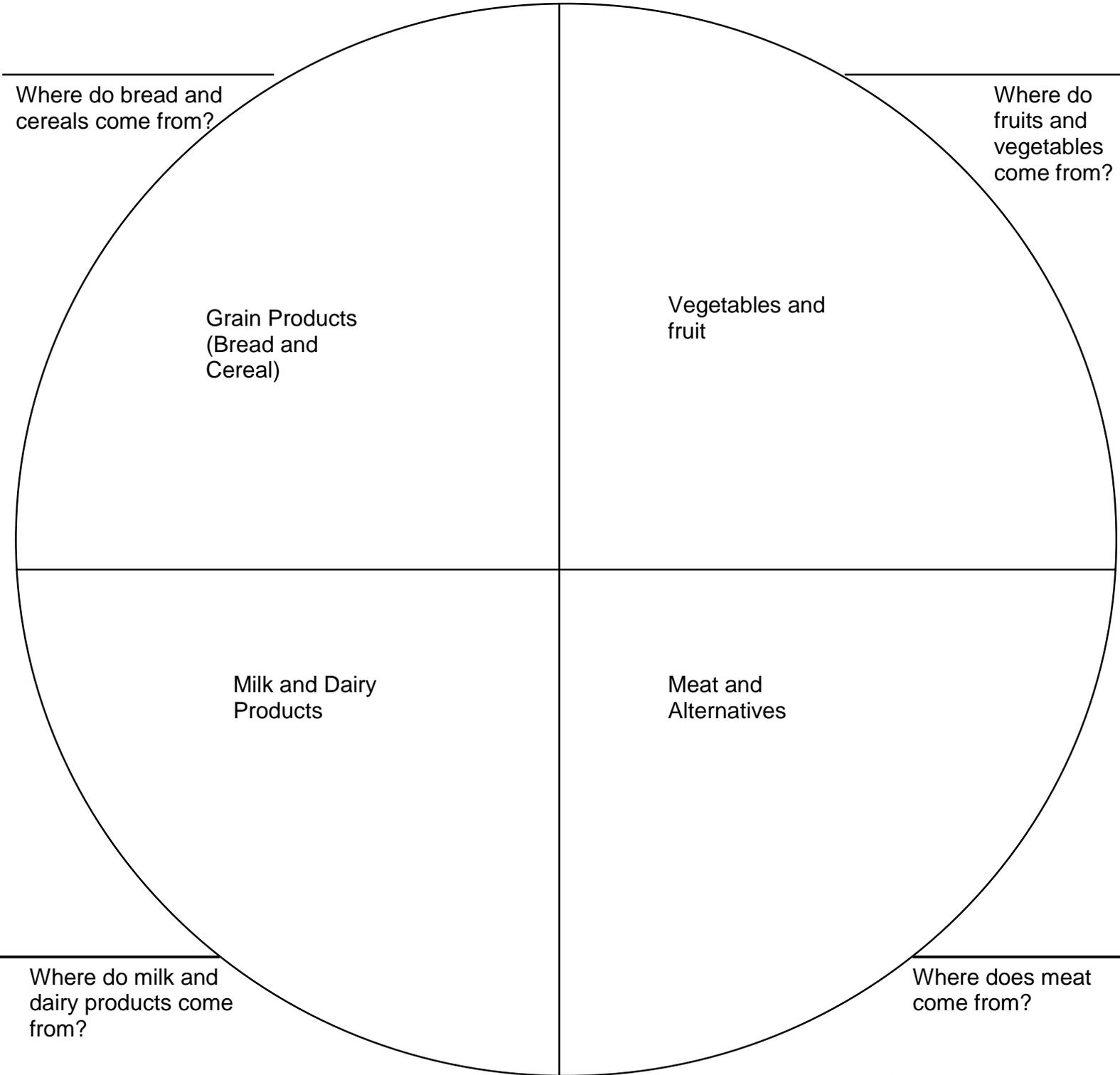
Hear

Mouth 	
Eye 	
Nose 	
Leg 	
Finger 	
Arm 	
Ear 	

Healthy Meal Activity

3. One of the things you need to keep your body healthy is food.

The next two pages have pictures of food. Cut them out and paste them in the right place on the “plate” to make a healthy meal. Tell where each type of food comes from.





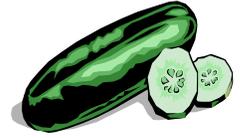
carrots



green peas



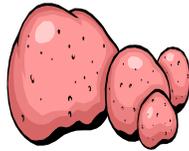
cheese



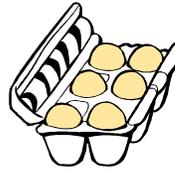
cucumber



steak



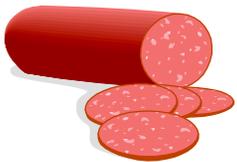
potatoes



eggs



bread



pepperoni



salmon



bananas



milk



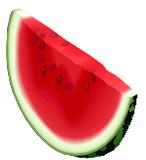
corn



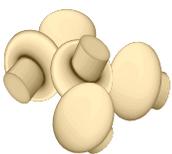
sausages



pineapple



melon



mushroom



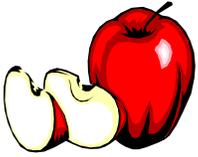
fish



muffin



scrimp



apple



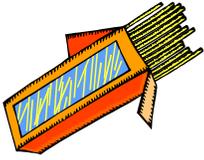
kiwi



eggplant



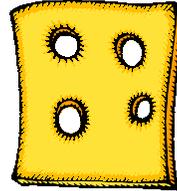
yogurt



macaroni



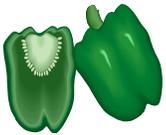
grapes



cheese



ham



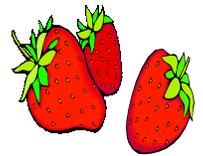
green peppers



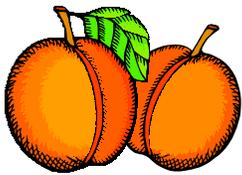
cabbage



pear



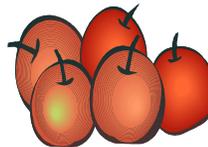
strawberries



peaches



avocado



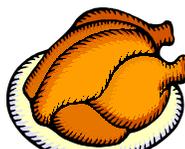
oranges



lettuce



cereal



chicken



butter



ice-cream

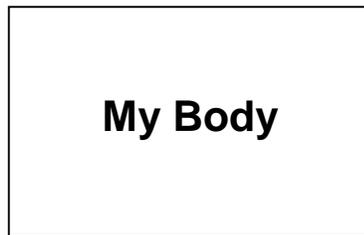
3. What do you think the difference is between a “healthy” meal and an “unhealthy” meal?

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Teacher Information Sheets

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This task addresses the following cluster of expectations. Expectations assessed by the rubric are highlighted in bold.



Understanding Basic Concepts

- **identify major parts of the human body and describe their functions (e.g., arms and legs for movement; lungs and nose for breathing)**
- **identify the location and function of each sense organ**



Developing Skills of Inquiry, Design and Communication

- **use appropriate vocabulary in describing their investigations, explorations, and observations (e.g., use body, legs, wings and feelers in describing an insect)**



Relating Science and Technology to the World Outside the School

- **describe a balanced diet using the four basic food groups outlined in the Canada's Food Guide to Healthy Eating, and demonstrate awareness of the natural sources of items in the food groups (e.g., bread is made from plant products; meat and milk come from animals)**



Prior Knowledge Required:

Before attempting this task students should have been taught the following:

- major parts of the body and their functions
- the four food groups of Canada's Food Guide (Grain Products, Vegetables and Fruit, Milk Products, Meat and Alternatives)
- the natural sources of the four food groups, (i.e., bread is made from plant products, meat comes from animals)



Prior Skills Required:

Before attempting this task students should have experience of the following:

- labeling diagrams
- cutting and pasting
- use of secondary sources e.g., magazines/pictures provided



Suggested Introductory Activities:

The following activities are suggested to introduce this task to the students:

- review the prior knowledge required for the task
- discuss and clarify the tasks
- the two activities could be broken up into two sessions
- before The Healthy Meal Activity, brainstorm on chart paper the types of food in each group

Teaching Tip:

In the Healthy Meal Activity, encourage the children to paste up to a specified number of pictures into the four sections of their plate (e.g., perhaps up to 5 pictures).

Otherwise, children will likely take an exhaustive amount of time pasting **all** of the pictures from the two pages.



Cross-strand Links:

Links can be made to Grade 1 Matter and Materials. The specific expectation that can be assessed with this task is:

- identify each of the senses and demonstrate understanding of how they help us recognize and use a variety of materials

A link can also be made to Grade 1 Energy and Control, specific expectation:

- identify food as a source of energy for themselves and living things



Cross-curricular Links:

This activity provides a cross-curricular link with:

- *The Ontario Curriculum Grades 1-8 Language, Grade 1: Oral and Visual Communication – Group Skills.*
- *The Ontario Curriculum Grades 1-8 Health and Physical Education; Grade 1: Healthy Living*



Reading and Writing Skills:

This task has been constructed to take into account the possible limited reading and writing skills of some students at this grade level. At the end of Grade One students are expected to be able to write a simple sentence (see MET Writing Exemplars 1999). Depending on the achievement level of the children in the class and the time in the school year that this task is administered, teachers will need to take into account the diverse abilities in their classes. The task could be presented orally and evaluated through teacher/student conferences. Teachers could use the questions on the student task sheet to guide their conferences. Students could make oral presentations to the class. Their presentation could be based upon the questions outlined in the student task sheet. Grade 5/6 students could act as reading/writing buddies to read out questions and transcribe answers



Considerations for Combined Grade Classes:

Appropriate strategies are as follows:

- Teach one grade while the other grade completes the task which does not require active teacher guidance
- Create separate learning centers for student investigation specific to each grade topic and strand. The methods of science and technology (inquiry and communication) would provide the whole class focus
- Introduce self-directed student activities connected to specific expectations
- Reorganize students into grade groupings for the purpose of teaching a given topic
- Teach specific grade expectations when part of them class is working with another teacher

- Teach the common topics in a strand between the combined grades (e.g., Life Systems in Grade 1-2: Characteristics and Needs of Living Things and Growth and Changes in Animals)
- Make connections by clustering the overall expectations around a theme
- Invite students from other classes (or schools) to present connecting work from their own program to a class (or part of a class) studying a similar topic (e.g., Grade 5, Human Organ Systems present to Grade 1, Characteristics and Needs of Living Things)

RUBRIC FOR GRADE 1: My Body

Category/Criteria	Level 1 The student:	Level 2 The student:	Level 3 The student:	Level 4 The student:
Understanding of basic concepts <ul style="list-style-type: none"> identifies the main body parts and sense organs, including their functions 	shows understanding of few of the main body parts and sense organs, including their functions	<ul style="list-style-type: none"> shows understanding of some of the main body parts and sense organs, including their functions 	shows understanding of most of the main body parts and sense organs, including their functions	shows understanding of all of the main body parts and sense organs, including their functions
Communication of required knowledge <ul style="list-style-type: none"> uses appropriate science and technology words 	<ul style="list-style-type: none"> rarely uses science and technology words correctly 	<ul style="list-style-type: none"> uses few science and technology words correctly 	<ul style="list-style-type: none"> uses many science and technology words correctly 	<ul style="list-style-type: none"> uses many science and technology words correctly and with clear and precise language.
Relating of science and technology to each other and the world outside the school <ul style="list-style-type: none"> describes a healthy meal using Canada's Food Guide 	<ul style="list-style-type: none"> shows little understanding of connections between a healthy meal and Canada's Food Guide 	<ul style="list-style-type: none"> shows some understanding of connections between a healthy meal and Canada's Food Guide 	<ul style="list-style-type: none"> shows reasonable understanding of connections between a healthy meal and Canada's Food Guide 	<ul style="list-style-type: none"> shows thorough understanding of connections between healthy meal and Canada's Food Guide