

ALBERTA ENVIRONMENT

Our World, A Special Place



Alberta
ENVIRONMENT

Kananaskis Country

This publication is part of a series of field study programs produced by the Environmental Education Program of Natural Resources Service in Kananaskis Country and Fish Creek Provincial Park. The publications have been written to address the mission of Alberta Environment and increase students' environmental awareness, understanding, interaction and responsibility for the natural world in which they live.

The publications are developed in a close working relationship with teachers, community educators and program writers. Programs focus on the areas of environmental education, science, social studies and language arts. They are also developed to emphasize elements of environmental literacy, lifestyle, and citizenship.

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Our World, A Special Place

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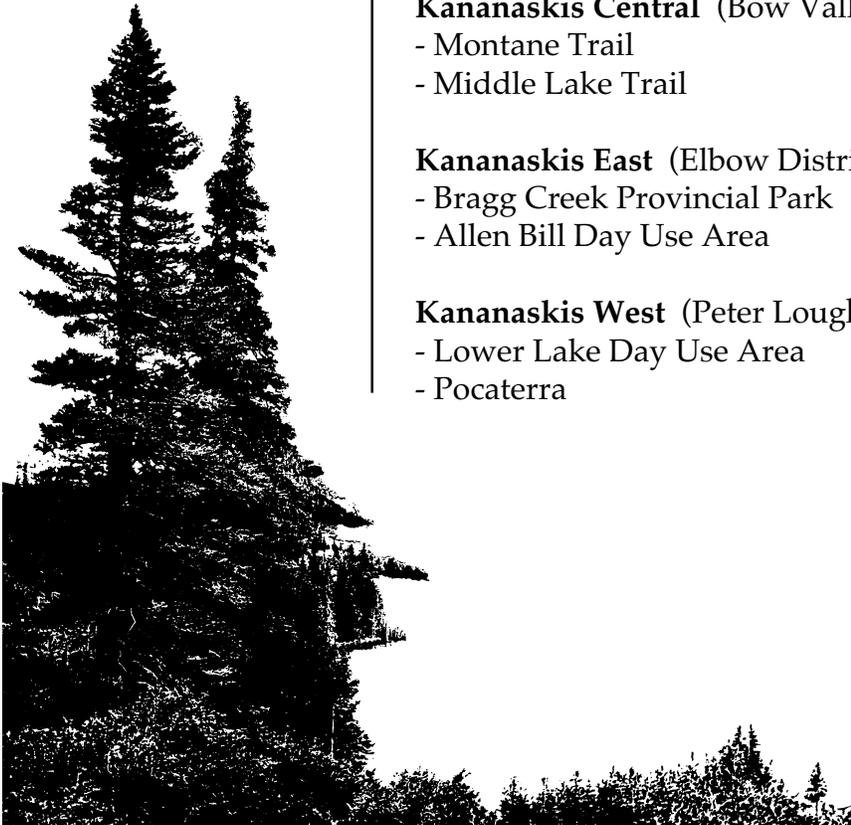
Appendices

- I Volunteer Letter
- II How to Make a Pooter
- III *Our World - A Special Place* : Volunteer Exploration Logbook
- IV *Our World - A Special Place* : Student Exploration Logbook

1.0 OVERVIEW

1.1 AT A GLANCE

TOPIC	Exploration of the environment using all five senses.
PROGRAM LEVEL	E.C.S. and Grade One/ages 4 - 7
TIME REQUIRED	<ul style="list-style-type: none">- Pre-Field Study Activity: 1 -2 hours- Field Study Activities: 1.5 hours- Post-Field Study Activities: varies
STAFF REQUIRED	One teacher with parent volunteers. Recommended ratio 1 adult: 5 students
BEST SEASON	Spring or fall
SUGGESTED LOCATIONS	<p>Any location with a forested or semi-open area containing a variety of vegetation types would be suitable. Suggested areas in Kananaskis Country include:</p> <p>Kananaskis Central (Bow Valley Provincial Park)</p> <ul style="list-style-type: none">- Montane Trail- Middle Lake Trail <p>Kananaskis East (Elbow District)</p> <ul style="list-style-type: none">- Bragg Creek Provincial Park- Allen Bill Day Use Area <p>Kananaskis West (Peter Lougheed Provincial Park)</p> <ul style="list-style-type: none">- Lower Lake Day Use Area- Pocaterra



1.2 PROGRAM SUMMARY

The program *Our World - A Special Place* has been designed to allow students to use their senses in an exploration of the natural environment.

In the classroom, students discover how useful their five senses are by listening to a story about the senses. Students then focus on a special place of their own and use their sensory recollection of the place to describe it either verbally or by drawing a picture.

The in-class exploration is followed by a field study of Planet "E", where the students use their senses and observation skills to explore an outdoor setting. As observation skills are sharpened, the participants have an opportunity to gain a greater awareness of how interesting the world is.



Back in the classroom, activities such as **The Smelling Song**, **Favourite Colour**, **Follow the Odour** and **Making Discoveries** provide follow-up to the field study activities. Additional ideas on the use of sense centres are also provided as post-field study suggestions.

Throughout the program, space has been set aside under the heading **Teacher's Notes** for you to add your own thoughts, ideas and variations for the activities.

This program supports selected themes and objectives outlined in the Alberta Curriculum for Early Childhood Services. Selected themes and objectives are covered using the natural environment as the focus. Such a focus allows students, **at their own level**, to explore the concept that we are **a part of** rather than **apart from** the world in which we live.

1.3 PROGRAM OBJECTIVES

1. Students will gain a greater awareness of their five senses.
2. Students will have the opportunity to use their senses in an exploration of an outdoor environment.
3. Students will have an opportunity to interact with adults in an area of mutual interest, the natural environment.
4. Students will have an opportunity to learn in a cooperative and creative environment.

1.4 CURRICULUM TIE-INS

The activities in this program will encourage and/or enhance the students':

1. physical development: by providing activities involving fine and perceptual motor skills, (particularly sensory awareness).
2. social development: through activities requiring positive relationships, cooperation and sharing.
3. emotional development: by providing opportunities for thinking and working independently, for making decisions and for becoming involved in self-directed activities.
4. intellectual development: through activities emphasizing:
 - observation skills (with which information about objects and events is obtained and organized through the use of the five senses);
 - processing skills (with which knowledge and understanding of the properties of objects and events is acquired, for example, by comparing objects according to shape, colour and texture);
 - language and listening skills; and
 - awareness of print and non-print as vehicles for storing and communicating information.
5. creative development: by providing opportunities for:
 - increasing sensitivity and selectivity of the senses
 - using imagination and fantasy.
6. parent involvement: by offering the opportunity for them to volunteer and thereby to share the children's learning experience.

2.0 PRE-FIELD STUDY

2.1 MATERIALS

Pre-Field Study

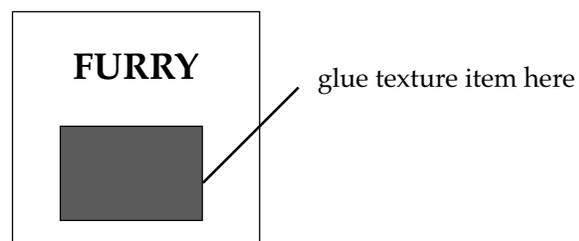
- ❑ **one (1) volunteer letter** (see Appendix I) to be sent out to each volunteer, two weeks prior to the field study. A copy of the *Volunteer Exploration Logbook* (see Appendix III) should be sent with the letter.
- ❑ one of the following books or a book of your choice which deals with the use of senses:
 - Aliko. My Five Senses. New York: Thomas Y. Crowell, 1962.
 - Pluckrose, Henry: Think About Touching. Toronto: Franklin Watts, 1986. (Other sensory based titles are available in the Thinkabout series)
 - Simon, Seymour: Finding Out With Your Senses. New York: McGraw-Hill, 1971.

The book selected will be used in Section 2.2. Other suggested texts are listed in Section 5.0.

Field Study

Put together one Exploration Pack for each group of 5 students and 1 volunteer. **Each pack should include:**

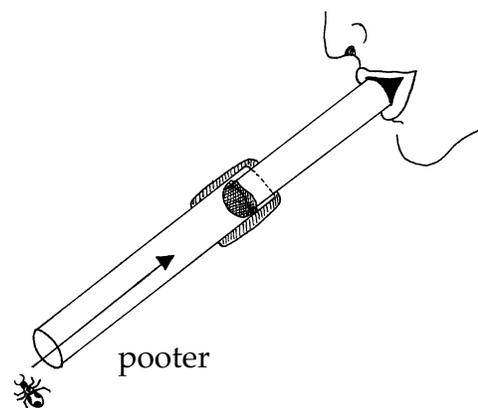
- ❑ A set of 5 texture cards. To make texture cards, cut five 12 cm x 12 cm cards out of Bristol board. Label them: bumpy, smooth, prickly, furry and rough. Laminate the cards and attach the following items to the appropriate card (see sample card below):
 - bumpy - pebbles under wide masking tape
 - smooth - laminated paper or acetate
 - prickly - piece of old scrub brush or hair brush
 - furry - piece of fun fur
 - rough - piece of sandpaper



- ❑ A set of 5 - 10 rainbow chips in an envelope. Rainbow chips are coloured pieces of paper. They can be made from construction or origami paper or they can be made from pieces cut out of a paint company's sample brochure. Place the envelopes into the pack.
- ❑ A set of 5 shape cards. Cut rectangles, squares, circles, ovals and triangles from bristol board. Laminate them if desired.
- ❑ A set of 5 blindfolds. These can be made from strips of cloth or from old Halloween masks with the eyes taped over.
- ❑ 5 pieces of sponge or 5 cotton balls.
- ❑ 1 bottle of "Magic Liquid". To make up the magic liquid fill a bottle (e.g. a small pop bottle) with water and add a few drops of food colouring. Close the lid of the bottle and make sure it is leak proof. Label the bottle.
- ❑ 5 Crayons.
- ❑ 5 pieces of natural food such as dried fruit or nuts wrapped in a small bag.
- ❑ ***Our World - A Special Place Student Exploration Logbooks*** (see Appendix IV).
- ❑ 1 ***Our World - A Special Place Volunteer Exploration Logbook*** (see Appendix III).
- ❑ 5 frames. These can be made from cardboard or from plastic rings and are used to focus the students' attention.
- ❑ 5 magnifying glasses.
- ❑ 5 looking tubes. Paper towel rolls can serve as looking tubes.
- ❑ 5 pooters. Pooters are used to collect insects. They are made with drinking straws and nylon stockings. See Appendix II for instructions.
- ❑ 5 collecting jars, e.g. baby food jars.
- ❑ 1 box to hold all the materials.

Elective Materials for Field Study

- ❑ 1 pair of binoculars.



Post-Field Study Activities

Un-Natural Walk

- 10 - 15 man-made objects such as a pencil, pen, ruler, toy shovel, fork, spool of thread, large button, etc.
- short strings to hang individual objects

Favourite Colour

- 1 piece of paper per student
- 1 set of crayons per student

Follow the Odour

- 1 large onion

Making Discoveries

- 1 list of items to find per student (see activity for details)

Centres

- See individual activities for suggested materials

Teacher's Notes

2.2 PREPARATION

Instructions for the Teacher

1. Choose an area for the field study and visit it before the day of your class's arrival. The area should be forested with a variety of vegetation, and large enough for all the groups to do their discoveries separately.
2. Arrange for program assistance by enlisting the help of parents, school volunteers or high school students. This program is designed for small groups. A ratio of 1 volunteer to 5 students is recommended. It is also recommended that the teacher be free to circulate among the groups and provide assistance when needed. The volunteers' roles are to keep their groups on task, to direct questioning and offer assistance when needed.
3. Each volunteer should receive a Volunteer Letter (see sample copy in Appendix I) and a copy of the *Volunteer Exploration Logbook* at least two weeks prior to the field study to allow time for review and program familiarization.
4. Closer to the day of the field study, send a letter and consent form to the children's parents. Children will need a warm jacket, a hat and a packed lunch or snack.
5. Collect the materials from the field study list in section 2.1 for the Exploration Packs. Make copies of the Student and Volunteer Exploration Logbooks.



6. Talk to the children about the field study. (To add to the mystery and to avoid preconceived notions, just hint at where they will be going, that it will be outdoors and that they should dress warmly and comfortably). Explain to the students that they will be visiting and exploring a special place. Discuss the word **explore** with the children to ensure that they have an understanding of what it means.
7. Read one of the stories listed in the pre-field (Section 2.1) or a story of your choice. Ask the children to recall a place they have been and think is special. Explain that the story to be read is about **how** they can explore and learn more about their special place.
8. If time and attention spans allow, have the children close their eyes and imagine they are at their special place. Trigger their sense memories by asking questions such as: What does the place smell like? What does it feel like? Encourage the children to talk about their special places.

Alternative: Instead of having the children talk about their special place verbally, have them draw a picture of it. Later they may show their picture and recall sense memories. You may want to model this by sharing a special place of your own.

9. Before the field study, give the students the opportunity to use their discovery tools (pooters, frames, looking tubes, magnifying glasses) in the classroom.
10. Divide the students into groups of five and assign a volunteer to each group.

Teacher's Notes

3.0 FIELD STUDY: ACTIVITY GUIDE

This field study will give students the opportunity to use their senses in an exploration of the natural environment. Many students will have had little experience in a natural environment. The discovery activities included in this field study will allow them to feel safe in their explorations and enhance their awareness of the world in which they live.

1. Before departing on your field study, meet with volunteers to review any questions they may have about the field study and *Volunteer Exploration Logbook*. Remind the volunteers that the instructions in their logbooks are designed to help them direct the students' discoveries.
2. At the site, assemble your class in an open area. Establish boundaries for the activities. These boundaries could be delineated by rivers, creeks, pathways or distinctive trees. You can also establish a boundary by telling the students to always be where they can see you and you can see them.
3. For the first half hour each group may explore the area on their own. This will allow the children and the volunteers to become familiar with the location. It will also allow the children to examine the area and make their own discoveries before participating in more structured activities. The leaders should point out the study area boundaries during this time.



4. Volunteers can use the time to become acquainted with the children. While the groups are examining the site, the teacher can circulate and interact with the children to find out what they are discovering. You may also want to ask the volunteers if they have any questions or concerns at this time.

NOTE TO TEACHER: In Provincial Parks and Recreation Areas, plants and animals are protected. Please encourage the students to look, touch, smell and feel while **leaving all things as they found them** (i.e., no picking or collecting).

5. When the free time for exploring is over, reassemble the group and have them sit in a circle. Have a short discussion about what they discovered. Show and review the discovery tools you have brought along (e.g., magnifying glasses, looking tubes, etc.), and establish a place where the tools can be found and returned (a bag or day pack). Students may take the items one at a time. Only when the first item is returned can they take another.
6. Invite the children to now join you on an imaginary trip to a mysterious planet. Set the scene by having the children close their eyes. Use guided imagery to develop the setting. Guided imagery is best left to your imagination and experience. An example has been included using a fantasy space trip:

“Imagine you are sitting in a spaceship. You feel very light. You glance out of the window and see stars as they seem to whizz by. Finally, you see your destination, PLANET “E”. The lights are blinking on the panel in front of you. You reach for the controls and slowly, safely, you land your ship. When you hear the clap of hands, that is the door of the ship opening and you may open your eyes.”

7. Clap your hands and say:

"Welcome to Planet E. Today your assignment is to explore part of this planet, record what you discover, and then go back to your planet to report what you have found. You only have to explore this one small area. Establish boundaries as before. Please do not go past the boundaries as we will want to get back together in a little while to share what we have found."
8. Divide the children into their groups of five with their volunteer. (If you like, you may add to the fantasy by calling the volunteers “Commanders”.) Each Commander will receive a Volunteer Exploration Pack (brought from your planet) to assist each group in making their report. Each Explorer will receive a *Student Exploration Logbook* to record their discoveries and to take home.

Have the box of discovery tools (pooters, frames, magnifying glasses, etc.) available. Explain to the students that they will now spend some time in their Exploration Groups. Establish a time and place to meet at the end of the exploration. You may wish to blow a whistle to call the groups back.

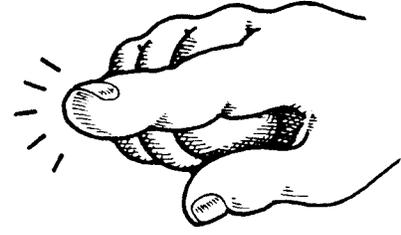
9. Send the groups off to do the activities outlined in their Logbooks. The groups should disperse themselves throughout the forested area so they have room to roam and explore. Have the students record the information they collect in their logbooks.
10. Once the groups have dispersed, the teacher's role is to circulate, answer questions and be an interested observer.



11. Students and volunteers will explore the natural environment together. The following is a list of the discoveries and a brief description of each one. A detailed description of each discovery activity can be found in the *Volunteer Exploration Booklet*.

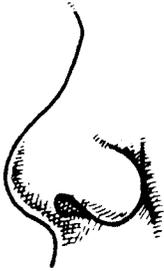
DISCOVERY 1 - TOUCH

In this discovery activity on touch, students will compare the textures of their texture cards with the textures they find in the forest. The students will draw a picture of or make a rubbing of the object they find.



DISCOVERY 2 - SIGHT

In this discovery activity on sight, students will describe some of their favourite sights. They will then look for objects in the natural environment which are the same colour as a colour chip they are given. Students will draw and colour a picture of the item they find. They will repeat the activity with shapes.

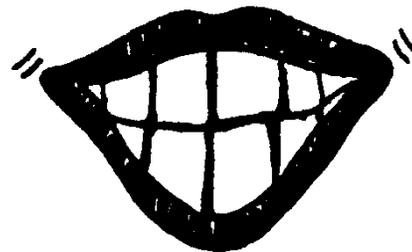


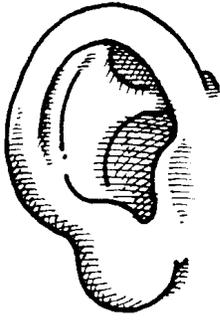
DISCOVERY 3 - SMELL

Students will describe their favourite smells. They will then go out into the forest and apply some Magic Liquid (coloured water) to objects in the forest and see if the Magic Liquid makes things smell stronger or weaker. Once the children have found an interesting or unusual odour, the source of the odour will be drawn in their Logbook.

DISCOVERY 4 - TASTE

In this discovery activity on taste, students discover that they use their sense of taste every time they eat or drink something. They discover that they must be very careful tasting things in the natural world. They will have the opportunity to taste some familiar things such as nuts, raisins or fruit which are similar to things that are found in nature. Students then draw what they tasted or draw their favourite food in their Logbook.





DISCOVERY 5 - SOUND

In this discovery activity on sound, students compare sounds in the forest with sounds they hear in the schoolyard. They will discuss the various sounds and draw in their Logbook what they think they have heard during their field study.

CONCLUDING DISCOVERY - BLINDFOLD WALK

In this discovery activity, the students are blindfolded and taken to different trees where they use all their senses to find out as much as they can about the tree. They are then led away from the tree and their blindfolds are removed. Students will make a drawing or rubbing of their tree in their Logbooks.

12. When all the groups have completed the activities outlined in their logbooks, including the concluding activity, reassemble them and invite the children to close their eyes. As before, use guided imagery to lead the group back into their spaceships and home again.

"It is now time to return to your own planet Earth. You climb back into your spaceship and put on your seatbelt. You turn on all the switches. Every light on the control panel comes on. You push the start button. You can feel the force of the engines as they lift you and your ship into the air and away from Planet "E". Soon you are in space. Before long, you can see the blue and green shape of the planet Earth coming into view. You are bounced around when your ship enters the Earth's atmosphere but from then on the trip is smooth as you glide down to this beautiful planet you call home."

Discussion

Once back on Earth, ask the students the following questions:

- What interesting shapes, colours, textures, smells and tastes did they discover on the planet? Were there any they disliked?
- Which discovery tool did they like the best?
- What was one discovery they would like to share with their parents?
- Where do they think the planet "E" is? Did students realize that it was their own planet Earth?

Teacher's Notes

4.0 POST-FIELD STUDY

4.1 ACTIVITIES

Each of the following activities relates to one of the five senses. The activities give the students the opportunity to further explore their senses back in the classroom.

Un-Natural Walk

This activity is designed to increase the children's observation skills. Man-made objects are placed along a forest trail and students have to try to spot them.

Choose a section of trail about 25 metres long. Place man-made objects along the trail. Some of them may be easy to see such as light bulbs and toys and some, such as chopsticks and rulers, may blend in. You may place the objects on the ground, in branches or hang them from trees. Keep the identity of the objects a secret. Send the students along the trail at 20 second intervals. Ask them to look for as many of the objects as they can. They should count the objects in their head or on a piece of paper as they go along the trail. When they get to the end of the trail they should tell you how many they saw.

Some objects, such as pop cans and cigarette packets may be thought of as natural objects and part of the natural landscape. Discuss what a natural and un-natural object might be. What did they find and what did they miss? Go back over the trail and have the group work together to find all the objects. Collect the objects as they are discovered.

Favourite Colour

Ask the children to choose their favourite colour. Walk around the schoolyard and have the children search for natural objects that contain their favourite colour and count how many times they see it. Now search for the colour inside the school or classroom and count. Is their favourite colour found more often in man-made or in natural objects? Children can record their findings on a divided paper labelled natural and man-made. The children can draw or print the name of the object on the appropriate side.

Follow the Odour

Explain to the students that they are to follow their noses and use their sense of **smell** in this exercise. Rub a large onion on different items found in the schoolyard, such as trees, playground equipment, and buildings. Mark the Odour Trail a few minutes before class begins. Discuss how animals use odours to find food and to outline their territory. You may want to set up an "odorous reward" at the end of the trail, e.g. popcorn or "Rice Krispie Squares".



Making Discoveries

This activity is similar to a scavenger hunt but the students draw or list what they see rather than collecting it. If your class has a buddy program with older students, you can give each pair (an E.C.S. student and their older buddy) a photocopied list of items to find. If buddies are not available, announce the items one at a time and have the children search for and draw or list the item. Students should attempt to locate each of the following:

- Three simple shapes
- Something pleasant to look at
- Something sad to look at
- Things that feel different, i.e. smooth, rough, prickly, etc.
- A happy sound
- A funny scent

Items can be added or deleted as the teacher desires. Reassemble the class and explore their answers.

Art Centre

Texture Activities

1. Following the trip, the teacher may wish to extend the students' vocabulary related to texture and the sense of **touch**. Ask students to start collecting items from home and the environment which have interesting textures. Remind students that living things are not to be collected unless they can be returned unharmed to their place of discovery. Create categories to guide the collecting; categories such as natural or man-made objects, possessing one or many textures, and certain types of things (such as shells, seeds, buttons, string or fruits). Feeling boards or books with examples of different textures can be created by each Exploration group, by the class or individually.
2. Students can use crayons and paper to produce rubbings of different surfaces found within your classroom.
3. Have the students make collages and litter sculptures from various materials that often become schoolyard litter. Emphasize the variety of textures created by the different materials rather than the creation of specific pictures.
4. Encourage the children to explore different textured media for painting, such as fingerpaint, whipped soap, pudding and mud. Use various sizes and types of paper as materials.

Seed Mosaics

Using the following materials, have the children arrange seeds in free-form designs or pictures of their own choice.

- white glue and brushes for spreading it
- 1 sheet of heavy paper or cardboard per child
- a selection of outdoor garden seeds
- kitchen seeds such as popcorn, beans, split peas, barley, peppercorns, sesame seeds, squash seeds, pumpkin seeds, mustard seeds and orange lentils

Painting Centre

Painting with Colour and Texture

Using the materials listed below, encourage the students to experiment with different brush strokes and colours. Shape, line and colour will differ with each work as the child develops increasingly refined eye-hand coordination and large muscle movement. Once your students are familiar with the basic feel of paint on a brush, add different materials such as sawdust, flour and sand to change the paint's texture.

- paper
- liquid or powdered tempera paint
- easel brushes and sponges of various sizes and shapes
- additives which produce various textures such as flour, sand, sawdust, rice , sugar and salt.

Print Making

Using the materials listed below, make leaf prints. Press each leaf into the paint and then onto the paper to transfer the paint. Encourage the children to repeat the print in order to create a design or pattern. Choose different leaves to vary the design.

- liquid tempera paint (red, yellow, orange).
- leaves of various sizes and shapes collected in the schoolyard.
- newspaper for floors and table tops.
- individual sheets of 8-1/2" x 11", or 8-1/2" x 14" paper to be printed on
- container for paint (cottage cheese carton lids, ink pads, shallow dishes).

Math/Science Centre

Comparing/Ordering Objects

Collect a variety of dead twigs of varying lengths. Starting with two twigs of distinctly different lengths, have each student identify the shortest and longest twig. As the students become more proficient, increase the number of items involved and refine the differences between sizes. Vocabulary words can include:

- short, shorter, shortest
- small, smaller, smallest
- big, bigger, biggest
- tall, taller, tallest
- wide, wider, widest
- long, longer, longest

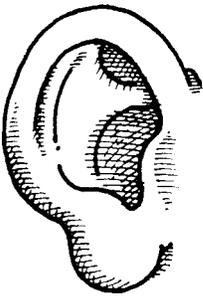
This activity may be extended to other natural objects such as cones, leaves, seeds or rocks.

Classifying Objects

Collect a variety of dead leaves of various shapes, colours, textures and sizes. Sort the leaves into categories. The number of categories to be used for sorting can be as broad and individual as the number of children in the class. Categories could include:

- colours: reds, yellows, greens, browns
- textures: smooth, waxy, bumpy, rough, velvety
- sizes: long/short, wide/narrow, fat/thin
- smells: pleasant/unpleasant
- similarities: like any other leaf in the pile?
- shapes: round, oval, square, rectangle, triangle

Listening Centre



Collect matching pairs of objects such as pine cones, rocks, twigs and seeds. To hide the objects, place them in plastic containers with lids.

Individually, or in pairs, have the students shake one container, describe the sound being made, and attempt to find a second container with a matching sound. The students can offer guesses as to the mystery contents, and then may open the jars to confirm predictions.

To extend this activity, the students may find new objects with which to create new sounds.

Smelling Centre

Make up matching pairs of film canisters containing pungent smelling materials such as cinnamon, pine, vanilla, cloves or basil. Place a picture or symbol on the bottom of the matching pairs of canisters.

Individually, or in pairs, have the students smell the contents of one container, describe the odour and attempt to find a second container with a matching smell. The students can offer guesses as to the mystery contents, and then may look at the picture on the bottom of the canisters to confirm their predictions.

To extend this activity, the students may find new herbs and spices from home with new smells.

Teacher's Notes

5.0 REFERENCES AND FURTHER READING

There are many books available on the topics of nature and the senses. The list below is only a sample of what is available.

For the Student

Aliki. My Five Senses. New York: Thomas Y. Crowell, 1962.

Carle, Eric. My Very First Book of Shapes. New York, Harper & Row, 1974.

Day, Shirley. Ruthie's Big Tree. Toronto: Annick Press, Ltd., 1982.

Heller, Ruth. The Reason for a Flower. New York: Grosset & Dunlap, 1983.

Hoban, Tana. Circles, Triangles and Squares. New York: MacMillan, 1974.

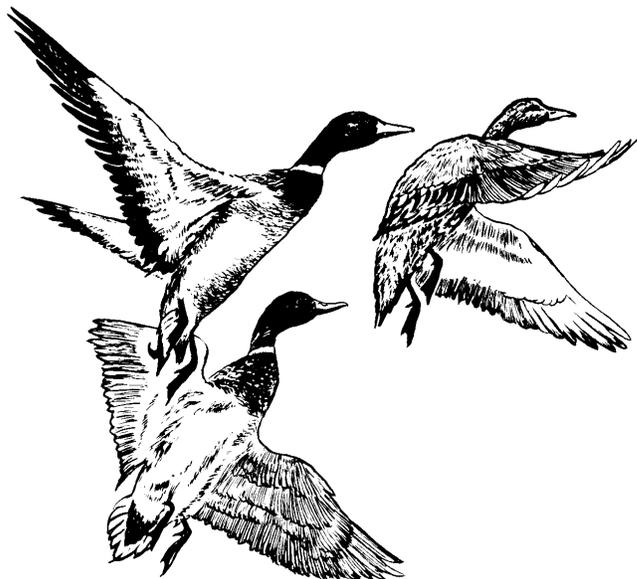
Schlein, Marian. Shapes. New York: Addison Wesley, 1952.

For the Teacher

Alberta Environment. Environmental Fact Finder Feely-Box Fun. Edmonton: Alberta Environment-Communications, date unavailable.

Alberta Environment. School Yard Seasonal Map. Edmonton: Alberta Environment-Communications, date unavailable.

Alberta Environment. A Sense-Able Study. Edmonton: Alberta Environment-Communications, date unavailable.



Cherry, Clare. Creative Art for the Developing Child. Blemot, CA.: Pitman Learning, Inc., 1972.

Fleming, B.M. & D.S. Hamilton. Resources in Creative Teaching in Early Childhood Education. New York: Harcourt Brace Jovanovich, Inc., 1977.

Levenson, E. Teaching Children about Science. Englewood Cliffs, N.J.: Prentice-Hall Inc., 1985.

McCarthy, Bernice. The 4Mat System: Teaching to Learning Styles with Right/Left Mode Techniques. Oak Brook, Ill.: Excel, Inc., 1980.

McIntyre, Margaret. Early Childhood and Science. Washington: National Science Teacher's Association, 1984.

Rockwell, R.E., E.A. Sherwood and R.A. Williams. Hug a Tree. Mt. Rainier, Maryland: Gryphon House, Inc, 1983.

Suzuki, David. Looking at Senses. Toronto: Stoddart Publishing Co. Ltd., 1987.

Tennessee Valley Authority. Land Between the Lakes. Golden Pond, KY.: Interpretation and Education Section, no publishing date available.

Western Regional Environmental Education Council. Project WILD: Elementary Activity Guide. Boulder, Colorado: Western Regional Environmental Education Council, 1983.

6.0 OUR WORLD - A SPECIAL PLACE PROGRAM EVALUATION

Kananaskis Country Environmental Education materials have been developed to provide you with teacher-directed units of study. These are *living documents* that undergo changes on a continual basis.

The purpose of this questionnaire is to find out if these materials are meeting your teaching needs. Your comments are valuable to us. Please take a few minutes to complete this evaluation so that we may continue to improve your materials.

School name	Grade level taught	Your name <small>(optional)</small>
_____	_____	_____

- ★ How did you hear about the program?
 workshop administration in-service newsletter fellow teacher
 other (please specify) _____

- ★ Did you use all of the program? yes no
 If you answered **no**, which part did you **not** use and why?

- ★ On the bar line below how would you rate the program in the following categories:

	YES	NO
• appropriate for grade level (✓)	-----	-----
• clear instructions	-----	-----
• text easy to follow	-----	-----
• relevant to curriculum	-----	-----
• materials easy to use	-----	-----
• did you enjoy the material	-----	-----
• did your students like the material	-----	-----
• program of appropriate length	-----	-----

- ★ Approximately how long did it take you to complete these materials?
 1-2 weeks 3-4 weeks 5-6 weeks longer than one month
 program was spread over the year

- ★ Were you satisfied with how these materials fulfilled the curriculum objectives?
 yes no
If you **were not** satisfied, please elaborate: _____

- ★ Did you use the Kananaskis Country Library to obtain information on Kananaskis Country? yes no
Comments about the Kananaskis Environmental Education Library.

- ★ Did you require any additional information to complete any part of the program?
 yes no
If **yes** please tell us what was required:

- ★ Would you use these materials next year?
 yes no
If you answered **no** please tell us why: _____

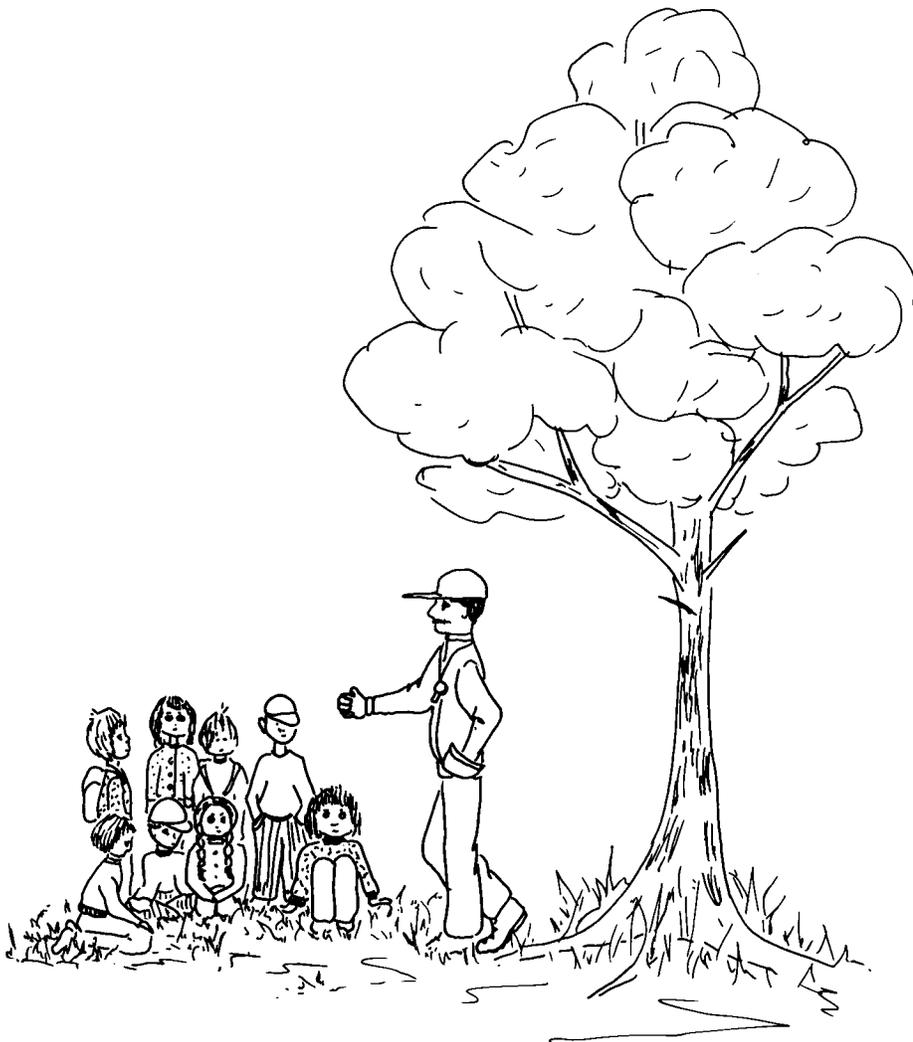
- ★ Any additional comments about the program in general? _____

Thank you for completing this questionnaire. Please place the completed questionnaire in an envelope and mail to:

Environmental Education Coordinator
Alberta Environment, Natural Resources Service
Kananaskis Country
Suite 201 - Provincial Building
800 Railway Avenue
Canmore, AB T1W 1P1
Phone: 403-678-5508 Fax: 403-678-5505

APPENDICES

- I VOLUNTEER LETTER
- II HOW TO MAKE A POOTER
- III *OUR WORLD - A SPECIAL PLACE* - VOLUNTEER EXPLORATION BOOKLET
- IV *OUR WORLD - A SPECIAL PLACE* - STUDENT EXPLORATION BOOKLET



APPENDIX I: VOLUNTEER LETTER

Date

Dear

On _____, 19__ you will have the special opportunity to share with children the excitement and the wonder of investigating the natural environment - by experiencing it with them, listening to them and talking with them about what they observe and what they think about the world in which they live.



The activities which the children will be doing are outlined in the enclosed **Volunteer Exploration Logbook**. Please read over the activities to familiarize yourself with them and bring the logbook along for reference. Feel free to participate in the activities with the children so you too can experience the exploration and share your observations.

Please try to complete all the activities during the field study. However, if the children are intrigued with one aspect, it is better to give them time to examine it than to rush on to the next activity. The children will be given their own Logbooks in which to record their observations.

Children should avoid trampling vegetation and removing things from the environment, so encourage them to come and get you if they find something exciting, rather than having the children bringing things to you.

Thank you for volunteering your time. I am looking forward to an enjoyable day!

Sincerely,

Teacher

"If a child is to keep alive his inborn sense of wonder... he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in."

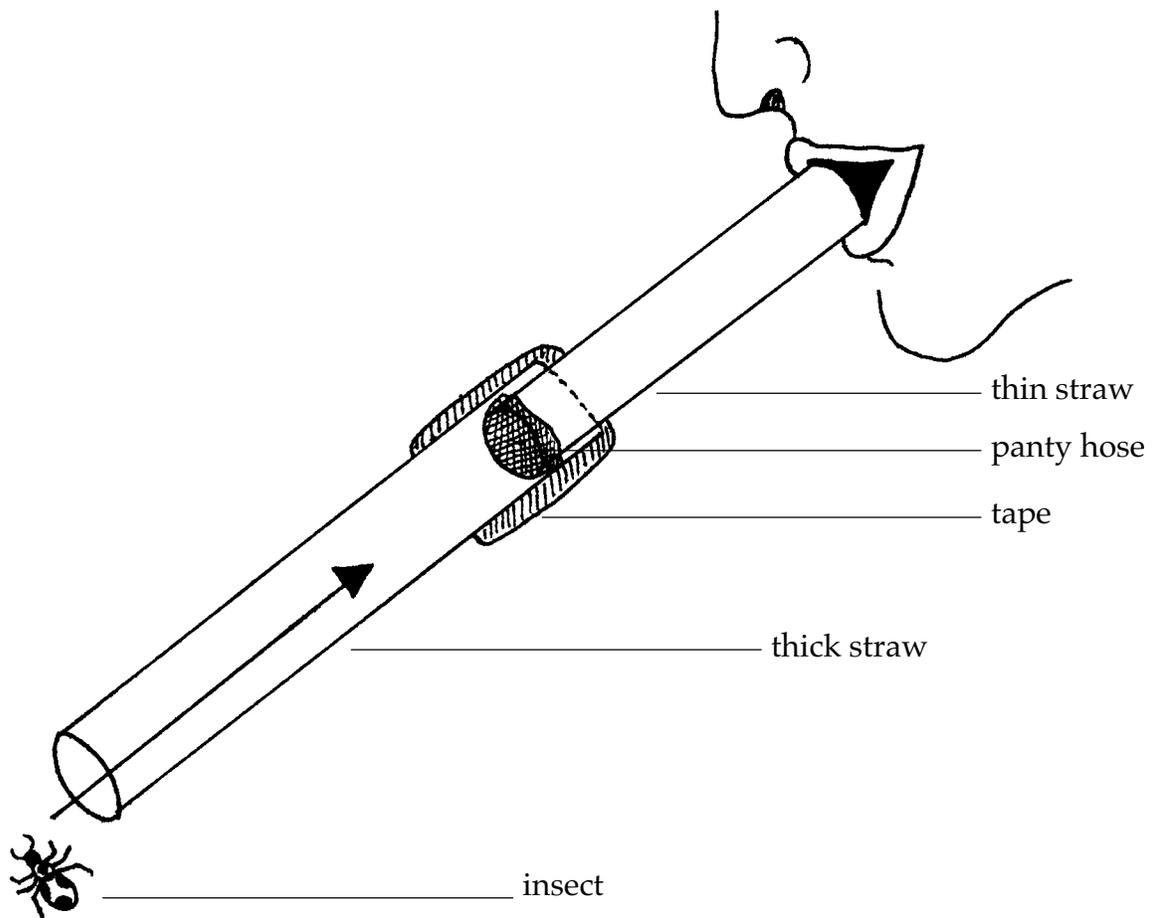
(Rachel Carson, 1965)

APPENDIX II: HOW TO MAKE A POOTER

Insects that are small and fast are difficult to observe. A Pooter is a device for collecting these small organisms. All you have to do is locate an insect and suck it up with the Pooter. Once you have captured an insect, drop it into a jar for study. Release the insect where you found it once you have completed your observations.

Materials

- ❑ 1 thick straw
- ❑ 1 thin straw
- ❑ 1 piece of nylon stocking material 3 cm x 3 cm
- ❑ 1 piece of tape



CONCLUDING DISCOVERY

1. Assemble the entire class.
2. Have the teacher get up and act as a conductor. On the teacher's signal all the groups will make their natural sounds together, the result will be a Nature Symphony.
3. To conclude the discovery activities, the teacher and volunteers can blindfold the children and lead each of them to a different tree.
4. Give the children a few minutes to find out as much as they can about their tree using all their senses except sight.
5. Once they have explored their trees the teacher and volunteers can take off the blindfolds, allowing the children to see and make a drawing or rubbing of their

OUR WORLD - A SPECIAL PLACE

VOLUNTEER EXPLORATION LOGBOOK



NOTE TO VOLUNTEERS:

The various activities outlined in this program direct the students to explore their environment using their senses. Your role is to help the students with their discovery activities. There are no right or wrong answers to these activities. They are meant to stimulate the students' natural curiosity for the world in which they live. **Exploration, rather than content, is the focus of this field study.**

Remind the students that they will be observing living things. Except for the temporary collection of small insects with the pooter, all living things should be left where they are found. Encourage the students who have found something that they wish to share to **take you to their discovery.**

Have an enjoyable adventure!!



DISCOVERY 5 - SOUND

1. In this discovery activity on **sound**, ask the students about different sounds. What is the difference between the sounds at this study area compared with the sounds in the schoolyard?
2. Pick a spot off the trail where the children can sit comfortably. Get them to sit in a circle facing each other. Then ask them to turn around so their backs are to each other and take two scoots forward.
3. Ask the children to sit as quietly as possible in order to hear as many natural sounds as they can.
4. After a couple of minutes repeat the procedure. This time have the children imagine they have big ears like a mule deer. Have them cup their hands behind their ears to make their ears bigger. When doing this they should notice an increase in the volume of the sounds.
5. Discuss the various sounds they hear and encourage the children to draw what they may have heard in their Logbook.
6. Nature's Symphony: Have your group decide on one natural sound they would like to reproduce (e.g. wind, birds, trees rustling). Practice the sound quietly. They will be making the sound in the concluding activity.

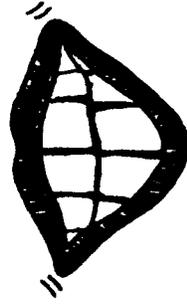


DISCOVERY 4 - TASTE

1. In this discovery activity on **taste**, remind students that every time they eat or drink something they use their sense of taste. In the natural world there are many objects to taste, but we have to be careful and taste only those things which we know are safe.
2. Discuss with the children items that we eat which are found in nature. Examples might include raspberries, strawberries, apples, grapes and peanuts.
3. If grapes, peanuts or other snacks have been brought along, children can be given the opportunity to have a taste of nature.
4. Have each child draw what they taste or draw their favourite food in their Logbook.

Elective:

5. Remind students that wild animals taste natural foods all the time and they know what foods are good for them. A very popular food for deer is the bud or branch from a willow bush.
6. If you can identify a willow bush in the study area, you may want to allow each child to choose a willow twig and chew on the end of it. What does it taste like? Would they want willow as part of their everyday diet? Some interesting responses might come from this new taste sensation.



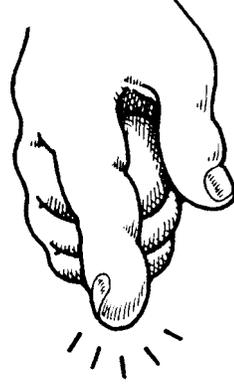
Willow

DISCOVERY 1 - TOUCH

1. In this discovery activity on touch, ask the students how things feel (e.g. smooth, rough, bumpy).
2. Hand out one texture card to each child.
3. Ask the children to first feel the card and then to find something in the forest that has a similar feel.
4. When the children have found something that feels similar to their texture card, they should make a drawing of it in their logbook.
5. Once their drawing is complete, they may trade their texture card in for another one.
6. Talk about what the children have found.

Good places for

- rough - bark, rocks, sawn off or broken branches...
- bumpy - bark, rocks, gravel trails...
- prickly - evergreen needles, dry grass, cones...
- smooth - leaves, grass, water, rocks...
- furry - moss, catkins, some leaves and flowers...



DISCOVERY 2 - SIGHT

1. In this discovery activity on **sight**, ask the children about their favourite sights. Share some of your own treasured sights.
2. Tell them you once saw a beautiful rainbow and suddenly the rainbow shattered into a million pieces and fell to the ground. You quickly gathered up a few of the pieces and put them into an envelope.
3. Bring out the envelope of **rainbow chips** with a flourish and hand one rainbow chip to each child.
4. Ask the children to go and see if they can find something the same colour and then draw it with the corresponding coloured crayons in their logbooks. Good places for colours are in moss, on rocks, in dirt, on bark and on leaves.
5. Discuss what the children find.
6. Repeat the procedure with the **shape cards**, stressing that the shape they find can differ in size and colour from the shape they are given.
7. Have the students circle their shape in their logbooks and draw the natural object that matched their shape.
Good places for shapes are:
 - Triangles - rocks, flowers, tops of leaves, grasses...
 - Circles - rocks, flowers, sawn off logs...
 - Squares - rocks, lengths of wood, shadows...
 - Rectangles - rocks, lengths of wood, shadows...
 - Ovals - pine / spruce cones, rocks, leaves...
8. Finally, call the children's attention to a natural object (e.g. bush, tree or large boulder).
9. Arrange the students around the object so that each child is looking at it from a different angle. One child could be on the ground looking up, one could be two centimetres away, one could be bending over looking through their legs.
10. Have the children take turns describing the object .

DISCOVERY 3 - SMELL

1. Introduce this discovery activity on the sense of **smell** by asking the children what their favourite or least favourite odor is.
 2. Allow them a few minutes to smell some objects in the designated area. Then tell the children that you have a Magic Liquid to help them really discover the odors of Planet 'E'!
 3. Have the children wet their sponges or cotton balls with the Magic Liquid, then apply the moistened sponges to the same objects and smell again. Does the Magic Liquid make the object's odor stronger or weaker?
 4. Children should find that the object's odor is enhanced by putting the Magic Liquid on it.
 5. Once the children have found an interesting or unusual odor, the item which it comes from can be drawn into their Logbook. After pictures of objects have been drawn, reveal the secret of the Magic liquid - water with food colouring. Water enhances an object's odor as evidenced by the strong odors in the air after a rainfall.
- Note:** If the weather is cold, the Magic Liquid may not enhance the odour of objects.



CONCLUDING DISCOVERY

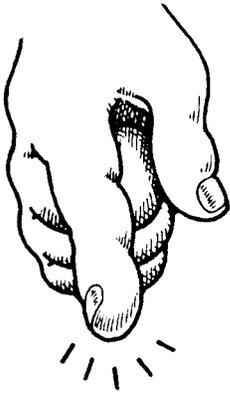
Draw a picture of your tree or make your bark rubbing here.

**OUR WORLD - A SPECIAL PLACE:
STUDENT EXPLORATION LOGBOOK**

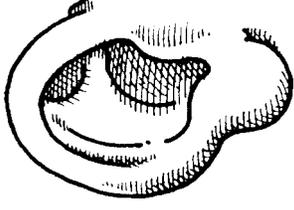


MY NAME IS: _____

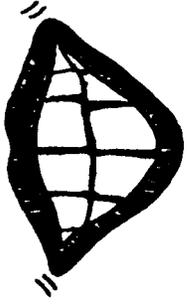
DISCOVERY 1 - TOUCH



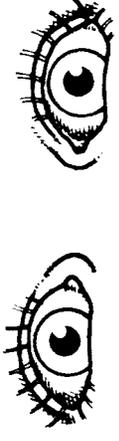
DISCOVERY 5 - SOUND



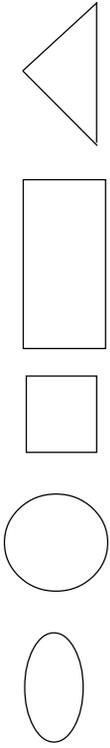
DISCOVERY 4 - TASTE



DISCOVERY 2 - SIGHT (COLOURS)



DISCOVERY 2 - SIGHT (SHAPES)



DISCOVERY 3 - SMELL

