



EDUCATION FOR SUSTAINABLE
DEVELOPMENT: KINDERGARTEN
TO GRADE 4 POSTER ACTIVITIES

Grade 2

GRADE 2 LEARNING EXPERIENCES

The lessons and activities presented in this website, and related links are to supplement existing curriculum guidelines.

Sustainable Development Themes Related to the K-4 ESD Poster Learning Experiences

Learning Experience	Subject	Cluster Section	SLO	Page
1. Taking Care of the Earth	Social Studies	1. Our Local Community (2.1.2: Natural Resources)	KI-017: Give examples of ways in which the natural environment influences their communities.	2-7
	Science	4. Air and Water in the Environment	2-4-11: Explain and appreciate the importance of clean air and water for humans, plants, and animals.	
2. Pass it On . . .	Social Studies	1. Our Local Community (2.1.8: Remembrance Day)	KP 035: Identify possible sources of conflict in groups and communities.	2-9
	Physical Education/ Health Education	4. Personal and Social Management	<p>K.4.2.B.2a: Identify positive communication skills (e.g., focus on speaker, repeat back information, use appropriate body language, ask relevant questions, include everyone, disagree politely, show self-control, take turns, work cooperatively . . .) for listening with attention in small group settings.</p> <p>K.4.2.C.1a: Identify appropriate ways for sharing and expressing feelings and emotions related to different situations (e.g., cooperative-type activities, competitive-type activities, at home, in public . . .).</p> <p>K.4.2.C.1b: Discuss ways (e.g., show empathy when others are suffering, help rather than hurt or neglect others, respect rather than belittle, support and protect rather than dominate or ignore . . .) to communicate with someone who is feeling different emotions (e.g., sad, happy, hurt, angry . . .).</p>	

continued

Learning Experience	Subject	Cluster Section	SLO	Page
3. Can This Be Done Here?	Social Studies	2. Communities in Canada (2.2.3: Natural Resources)	KL 021: Give examples of ways that the natural environment shapes daily life in the communities studied.	2-11
4. Wetland Metaphors	Social Studies	2. Communities in Canada (2.23: Natural Resources)	KL-022: Explain the importance of conserving or restoring natural resources.	2-13
5. The Important Natural Resource Book	Social Studies	2. Communities in Canada (2.24: Work, Goods, and Products)	VE-013: Appreciate that their quality of life is enhanced by the work and products of other Canadian communities. <i>Examples: West Coast lumber, Atlantic fish, Northern mines, Prairie grain . . .</i>	2-17
6. Everyday and Sometime Foods	Social Studies	3. The Canadian Community (2.3.5: Canadian Needs, Choices, and Decisions)	KE-039: Give examples of media influences on their choices and decisions.	2-19
	Physical Education/ Health Education	5. Healthy Lifestyle Practices	K.5.2.C.1a: Differentiate between "everyday" and "sometime" foods in <i>Canada's Food Guide to Healthy Eating</i> .	
7. Helping Animals	Science	1. Growth and Changes in Animals	2-1-17: Identify and describe ways in which humans help other animals. <i>Examples: protecting endangered animals, feeding birds . . .</i>	2-23
8. Cleaning Up Without "Voom"	Science	2. Properties of Solids, Liquids, and Gases	2-3-16: Describe ways humans dispose of solids and liquids to maintain a clean and healthy environment.	2-25
9. Wind Power	Science	4. Air and Water in the Environment	2-4-05: Use the design process to construct and test a device that shows evidence of air movement. <i>Examples: windsock, wind chime, pinwheel, sailboat, kite . . .</i>	2-29

continued

Learning Experience	Subject	Cluster Section	SLO	Page
10. The Plastics Challenge	Science	4. Air and Water in the Environment	2-4-11: Explain and appreciate the importance of clean air and water for humans, plants, and animals.	2-31
11. Precious Water	Science	4. Air and Water in the Environment	2-4-13: Recognize that clean water is an increasingly scarce resource in many parts of the world, and describe consequences of a shortage of clean water.	2-33
12. Water <i>Dos</i> and <i>Don'ts</i>	Science	4. Air and Water in the Environment	2-4-14: Record personal use of water, and identify ways in which they can reduce water usage. <i>Examples: rather than leaving water running while brushing teeth, turn off tap to reduce usage . . .</i>	2-35
13. Healthy Living Charades and Stories	Physical Education/ Health Education	5. Healthy Lifestyle Practices	K.5.2.A.1: Identify the daily habits and responsibilities for leading a physically active and healthy life (e.g., self-regulation relative to practising daily health routines for cleanliness, rest, healthy eating, good posture . . .).	2-37
14. Hand-Washing Horribles	Physical Education/ Health Education	5. Healthy Lifestyle Practices	K.5.2.A.2: Identify common communicable disease/illness conditions in the classroom and home, and ways to prevent the spread of disease/illness conditions (e.g., cover mouth when coughing, wash hands regularly, share food appropriately).	2-39

Notes

Targeted Outcome/Intended Learning:

Social Studies: Cluster 1: Our Local Community
(2.1.2: Natural Resources)

K1-017: Give examples of ways in which the natural environment influences their communities.

Science: Cluster 4: Air and Water in the Environment

2-4-11: Explain and appreciate the importance of clean air and water for humans, plants, and animals.

See Activity Centre #1 for an application activity for this theme.



Background:

Come to a consensus on the meaning of the term *natural resources*. See Social Studies BLM 2.1.2: Natural Resources at www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr2/blms/index.html for a definition and suggestions. Students list examples of natural items in the classroom or in their homes.

Students discuss resources that are used or needed by their community. Examine picture cards 1, 7, 12, 13, 21, 22, 23, 24, 28, and 31. What natural resources are being used in these pictures? What are they being used for?

Materials:

- map of Manitoba
- paper and writing materials
- various materials to create a diorama
- Suggested K-4 ESD Poster picture cards: 1, 7, 12, 13, 21, 22, 23, 24, 28, 31. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.

Activity Directions:

Activity 1:

Look at a map of Manitoba. List cities and towns that are located near rivers or other water bodies. List cities and towns that are not located near rivers. Why are more cities and towns located near water? What do communities use water for (e.g., drinking, irrigation, transportation, fishing, recreation, water for mechanical processes in factories, etc.)? What problems could there be if no water was near? What problems can having water nearby create (e.g., flooding, erosion)? Talk about safety measures that can be taken to protect communities from such problems.

Activity 2:

Do a “tree survey” by taking a walk around the neighbourhood. Count the number of trees on each block and in parks. Which areas look or feel better? Which areas have more trees? Are the two related? Talk about the benefits of having trees in the community (e.g., aesthetics, shade, shelter, homes for wildlife, fruit, clean the air, soak up extra moisture, prevent erosion, etc.).

Activity 3:

Discuss the importance of taking care of the natural environment. Have students examine or draw a map of your community. Look at the map and decide on a good location for a new green space. Have them create a diorama or mural for the new green space with areas for trees, wildlife (birds, rabbits), and a water source. Encourage other ideas to enhance the space for all community members (e.g., a wood pile as a shelter for rabbits and ground squirrels, birdhouses, bat houses, a bird feeding station, a community garden area with a compost site, a fitness trail or nature study trail, etc.).

Activity 4:

Brainstorm ways students can help the natural environment of their community (e.g., recycling, using less paper, conserving water and energy, cleaning up litter, planting trees, putting up birdhouses on school property, and creating a community/school garden). Make a plan to act on one of the ideas presented.

Students’ suggestions for the plan can provide an opportunity to assess how well they are able to apply what they have learned to real-life situations.

Targeted Outcome/Intended Learning:

Social Studies: Cluster 1: Our Local Community (2.1.8: Remembrance Day)

KP 035: Identify possible sources of conflict in groups and communities.

Physical Education/Health Education: 4. Personal and Social Management

K.4.2.B.2a: Identify positive communication skills (e.g., focus on speaker, repeat back information, use appropriate body language, ask relevant questions, include everyone, disagree politely, show self-control, take turns, work cooperatively . . .) for listening with attention in small group settings.

K.4.2.C.1a: Identify appropriate ways for sharing and expressing feelings and emotions related to different situations (e.g., cooperative-type activities, competitive-type activities, at home, in public . . .).

K.4.2.C.1b: Discuss ways (e.g., show empathy when others are suffering, help rather than hurt or neglect others, respect rather than belittle, support and protect rather than dominate or ignore . . .) to communicate with someone who is feeling different emotions (e.g., sad, happy, hurt, angry . . .).

Background:

This learning experience looks at one aspect of conflict in groups and communities. For a simple conflict chart, see the Manitoba Social Studies BLM 2.1.8b at <www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr2/blms/index.html>. While it is titled Remembrance Day Conflict Chart, it is also designed for local issues.

Materials

- Suggested K-4 ESD Poster picture cards: 2, 4, 9, 18, 25, 26, 27, 29, 35. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.
- Suggested K-4 ESD Poster word card: respect. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Websites:

For songs and poems about peace and other topics (particularly the songs “Peace is Not . . .”, “Do You Know Where I Find Peace?”, and “We Are Proud Canadians”), go to <www.Songs4Teachers.com>.

Books:

What Does Peace Feel Like? by V. Randunsky (2004). Manitoba Education Library Call #303.66 R33.

Somewhere Today—A Book of Peace by Shirley Moore Thomas and Eric Futran (1998). Manitoba Education Library Call #303.66 T46.

Activity Directions:**Activity 1:**

Students read a book such as *What Does Peace Feel Like?*, *Somewhere Today*, or another book about peace. Students then have a discussion about peace to gain a better understanding of how their actions relate to the bigger picture of “national peace.” Students read the poem “Peace is Not . . .” from <www.Songs4Teachers.com>. Students make the connection that peace means getting along with others and communicating effectively. A feeling of peace comes from having food, clean water, a safe place to live, proper clothing, and love.

Activity 2:

Conflicts in groups and communities can sometimes start with a simple misunderstanding. To show how misunderstandings can sometimes begin, explain that you are going to whisper a secret message to one student. That student will then carefully repeat the message in a whisper to the person next to him or her, and so on, until the message has been given to everyone. No one is allowed to speak during this exercise except the person who is transferring the message. Have the last student to receive the message repeat it out loud for the whole class. Has the message changed? Discuss what can happen in real life when a message changes as it is translated or passed from one person to another, country to country. How could this result in conflict? What are some ways that this could be prevented from happening or resolved (e.g., repeating the message back, ensuring proper understanding, etc.)? Discuss some other causes of misunderstandings (e.g., cultural differences, differences in attitudes, hand gestures, body language, and expressions).

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Grade 2 Learning Experience #3: Can This Be Done Here?

Targeted Outcome/Intended Learning:

Social Studies: 2: Communities in Canada
(2.2.3: Natural Resources)

KL 021: Give examples of ways that the natural environment shapes daily life in the communities studied.

Activity Centre #1 is related to this learning experience.



Background:

On the board, brainstorm for the various aspects of the natural environment: weather, climate, seasons, types of storms, soil type (rocky, sandy, clay soils, rich soils), proximity to water (lakes, rivers, streams, ocean), types of plants growing in the area (grassy, lichen, shrubs, deciduous trees, evergreens), terrain (flat, hilly, mountainous).

Discuss how the weather would affect the way people dress, the way they build their houses, etc. Ask them how living next to water might affect the weather and how they dress. Talk about soil type. Look at pictures of farms in the communities studied. Infer that soil type and weather could influence farming (and manufacturing).

Talk about how all these things can influence what types of plants and animals live in or near the communities studied.

Materials:

- four or five books about the communities being studied
- paper and pencil for recording ideas
- Suggested K-4 ESD Poster picture cards: (1, 3, 22), (7, 9, 28), (11, 12), (17, 19), (4, 24). Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Activity Directions:

Activity 1:

Break students into groups and then give each group one or a set of the following sustainable development website picture cards: (1, 3, 22), (7, 9, 28), (11, 12), (17, 19), (4, 24). Ask students to decide whether the kinds of activities featured in the picture card(s) they were given would be possible in the community they are studying. Prompt students with ideas (e.g., After looking at the “wind power” card, ask whether this community would be a windy place, and whether it has hills or open spaces where a wind farm could be used for power. After looking at the gardening card, ask what kinds of plants would grow here. What kinds of plants do we grow in our community? After looking at the farm and garden cards, ask what kinds of farms might be there. After looking at the recreation cards, you could ask what kinds of games and activities this community would have. Can they go fishing or canoeing? Do they get lots of snow? Is it cold enough in winter for skating?).

Encourage students to use books and other materials about the communities studied to confirm their ideas. Ask them to report their findings in their notebooks. Assess students’ understanding by observing their discussions and reading their notes.

Social Studies BLM 2.2.3 is useful in comparing two communities, etc. It can be found at
<www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr2/blms/index.html>.

Targeted Outcome/Intended Learning:

Social Studies: Cluster 2: Communities in Canada (2.2.3: Natural Resources)
KL-022: Explain the importance of conserving or restoring natural resources.

Background:

The Canadian Wildlife Federation offers an education program called Project Wild, which includes an activity that uses various everyday objects as metaphors for parts of the wetland. This activity's objective is to give students an appreciation of the beneficial qualities of wetlands, and to help them understand their importance to both plants and animals (including humans).

The items and pictures listed in the materials section could serve as metaphors for the major attributes of wetlands. For example, the sponge serves as a metaphor for wetlands, which absorb excess water caused by runoff and hold moisture for a time even if standing water dries up. The pillow is a metaphor for how wetlands are resting places for migratory birds. The playground depicts how water provides a nursery for young wildlife. The sieve demonstrates how wetlands strain silt, debris, and small impurities from runoff water. Cereal depicts how wetlands provide food for wildlife and humans. Soap shows how wetlands help clean the environment. The rain barrel is a metaphor for how wetlands hold water for irrigation and are a source of moisture during dry periods. The food chopper and compost are similar to how wetlands break down plant and animal material so that nutrients can be re-used. The garden is like the wetlands in that both are a rich source of food. Recycle bins are like wetlands in that wetlands also recycle nutrients, fertilizers, and organic material collected from runoff through their own biological processes.

For more information about Project Wild, go to www.wildeducation.org/programs/project_wild/prog_wld.asp. To find out more about the importance of woodlands, go to the Project Learning Tree website at www.plt.org and search for "Tree Readings". There, you will find a kid-friendly article about the qualities of plants that make them useful to humans for a variety of products. You can find statistics about how important trees are in a community at www.arborday.org/trees/benefits.cfm. This site also features a picture that students can click on to obtain information about how trees in your yard can benefit the environment.

Materials:

- one large bag or box
- a sponge
- one small pillow
- a flour or pasta sieve
- a small box of cereal or a picture of groceries
- a toy baby bed or crib
- a bar of soap
- a small toy house
- pictures of animals, plants, lakes, streams (from calendars, etc.)
- books about wetlands and wetland creatures
- Suggested K-4 ESD Poster picture cards: 7, 13, 20, 21, 24, 34. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.
- Suggested K-4 ESD Poster word card: depend. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Activity Directions

Activity 1:

Ask students if they know what the word *metaphor* means. Provide some examples of metaphors (“an angel” is often used as a metaphor for someone who is very kind and generous; “a volcano in your tummy” is a metaphor for feeling upset; a turtle or a sloth can be used as a metaphor of slowness; “a sticky situation” is a metaphor for having a problem that you don’t know how to solve easily; “ants in your pants” is a metaphor for not being able to sit still). Use the worksheet from the following site for practice (optional): <http://bogglesworldesl.com/metaphor_worksheets.htm>. Invite students to try some metaphors of their own. This would make a useful writing activity that students could illustrate and display.

Activity 2:

Wetland Metaphors: Place the items and cards from the materials list into a box for later use. One of our most important natural resources is water. Discuss with students the sources of water in their community and in the communities studied (e.g., rivers, streams, lakes, ponds, oceans, etc.). Invite students to close their eyes and imagine one of these wetlands. Ask them to consider what animals and plants they might see, what the air smells like, and what sounds they hear. Discuss why these water bodies might be important to people and animals. Record their ideas on the board. If not offered, suggest how water bodies collect extra rainwater and meltwater—sort of like a sponge. Talk about how water bodies can provide homes and nesting places for hundreds of species of birds, fish, plants, and animals, just like our community provides a place for us to live. If possible, show them pictures of wetlands and animals that live there (calendars are a good source of pictures).

Bring out the mystery box. Tell students that everything in the container has something to do with a wetland or, more precisely, the items in the container are a metaphor for what water bodies do for the natural environment and our community. (Remind them of what a metaphor is.)

Divide students into small groups and tell them that each group will have the opportunity to choose something from the box. The group will then have to figure out how the item or picture represents a wetland or what it does. Give students a few minutes to compile their ideas, and then have them report their ideas to the class. Record their ideas on chart paper, and use this opportunity to correct any misconceptions and address any missed ideas.

Follow this activity with a concluding discussion of why water resources are so important to Canadian communities. Have students write a summary of the activity in their science journals. Ask them to give examples of at least three metaphors from nature and what the metaphors mean to the natural environment. Check their responses for understanding, and discuss.

Note: Kits and activities related to this theme are available on loan from Oak Hammock Marsh. For more information, go to www.oakhammockmarsh.ca/programs/educators/index.html.

Targeted Outcome/Intended Learning:

Social Studies: Cluster 2: Communities in Canada (2.2.4: Work, Goods, and Products)

VE-013: Appreciate that their quality of life is enhanced by the work and products of other Canadian communities.

Examples: West Coast lumber, Atlantic fish, northern mines, Prairie grain . . .



Background:

Use this learning experience as an application activity after learning about the work and products of the Canadian community studied.

Materials:

- books and materials about the communities studied
- writing materials, good quality paper for final copy
- Suggested K-4 ESD Poster picture cards: 1, 4, 7, 11, 12, 21, 22, 24. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.
- Suggested K-4 ESD Poster word card: Connect. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Books:

The Important Book by Margaret Wise Brown (1990). Manitoba Education Library Call #E Bro.

Activity Directions:

Activity 1:

Read *The Important Book* by Margaret Wise Brown, and discuss the rhythm of the story (i.e., the lines rhyme and the first line of each page is repeated at the

bottom of the page). Discuss some of the important things in the students' lives. Ask for examples of important work and products made in their community using natural resources. Use picture cards 1, 4, 7, 11, 12, 21, 22, and 24 to encourage discussion. Extend the discussion to important products and work in the community they are studying. Brainstorm for ideas. Encourage students to use their notebooks, classroom information, and books about the communities studied for ideas. Record their contributions on chart paper.

Activity 2:

Invite each student to select one product or work from natural resources in the communities studied (as listed on the chart paper), and ask them to write a descriptive poem about the product or work. Encourage them to format their poem in a pattern similar to Ms. Brown's book. Model the activity for them, reminding them to keep the first and last lines of the poem the same.

The important thing about dairy farms is the cows.
They produce milk for me and you.
They give people jobs too.
But the most important thing about dairy farms is the cows.

Activity 3:

Students can include an illustration with their poem. These poems can be compiled into a class "Important Natural Resources of (name of the community) book."

To assess students' understanding of the importance of the work and products of the communities studied, observe what resources they choose to write about, and, if necessary, guide them in choosing an appropriate resource and discuss the importance of the resources.

Targeted Outcome/Intended Learning:

Social Studies: Cluster 3: The Canadian Community (2.3.5: Canadian Needs, Choices, and Decisions)

KE-039: Give examples of media influences on their choices and decisions.

Physical Education/Health Education: 5. Healthy Lifestyle Practices

K.5.2.C.1a: Differentiate between “everyday” and “sometime” foods in *Canada’s Food Guide to Healthy Eating*.

Background:

Students look at various products (e.g., cereal, snack foods, novelty items, toys). Discuss with students the advertising they have seen promoting the product. List common features used to promote the products (e.g., colourful packaging, testimonials, jingles, etc.). Is the product a “need” or a “want”? If it is a “want,” does the advertiser try to convince you that it is a “need”? How does the advertiser accomplish that?

To aid in a discussion of everyday and sometimes foods, it might help teachers to refer to the following online article sponsored by the Heart and Stroke Foundation at <www.heartandstroke.com/atf/cf/%7B99452D8B-E7F1-4BD6-A57D-B136CE6C95BF%7D/Pumped_Issue7_EN.pdf>.

Other helpful articles can be found at <www.eatrightontario.ca/en/ViewDocument.aspx?id=34>.

For online lessons, game suggestions, and links to other sites, visit <www.healthyeatingpei.ca/toolkit-section6.php>.

Materials:

- colourful packages from cereal, snack foods, novelty items, toys
- writing and drawing materials (optional: tracing paper for reproduction of product boxes)
- Suggested K–4 ESD Poster picture cards: 5, 19, 21, 23, 24. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.
- Suggested K–4 ESD Poster word card: distinguish. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Videos:

Healthy Habits for Kids, 2005 (DVD, 12 min.). Segment 1 discusses variety, introducing My Pyramid, outlining the food groups, and showing what each group does for the body. Segment 2 explains how and when to make healthy food choices. Manitoba Education Library Call #D-10955.

Activity Directions:**Activity 1:**

Look at various products and discuss how the advertisers attract your attention (point out bright colours, catchy sayings, happy looking people/characters on the package). Ask students what attracts them to a product. Record their responses on the board. Ask students what TV commercials they can remember and what they liked about the commercial. Ask them what the characters in the commercial said to them. Did they make the student want to buy the product? Record these responses on the board. In groups or as individuals, invite students to create their own jingle or advertisement for a product of their choice. Model to the students how to write a jingle. Provide some examples from Manitoba Education and Advanced Learning's *Kindergarten to Grade 4 English Language Arts: Curriculum Framework of Outcomes*, or access sample songs at <www.Songs4Teachers.com>.

Have students practise their songs or advertisement and present them to the class. Ask the class if they would buy the product advertised in their classmate's song and why.

There is an alternative activity that was created by teachers at Oak Bluff School. Have students bring in various cereal and snack boxes and examine them for sugar, protein, and fat content. Explain to them what the nutrition label means and how to use it. Discuss a number of the products as a group. Which products have the most sugar? Carbohydrates? Salt? Which are good sources of protein? Vitamins?

Discuss how advertisers encourage people to buy their products. Invite students to recreate the product box, highlighting the bad things about the product and using the same techniques advertisers use to get consumers to buy the products. Students can do this by drawing a picture of the box and adding slogans that warn of negative qualities of the product or by creating a commercial to present to the class. Have them present their picture to the class.

Extension: What is the packaging like? Is it wasteful? Can the packaging be recycled? Have the class write a letter to thank a company that uses “eco-friendly” packaging and/or write a letter to lodge a complaint against the waste of materials in packaging or packaging that is not biodegradable. Students can also brainstorm on how products could be packaged more wisely. These ideas could be added to the letter.

Activity 2:

Review *Canada's Food Guide*. Discuss everyday and sometimes foods. Where do the products the students studied fit into this? Is it an everyday or sometimes food? How do they know? How do they feel about what they have learned? Watch the DVD *Healthy Habits for Kids*.

Social Studies Blackline Masters

Along with links to media awareness websites, BLM 2.3.5 a provides a needs-versus-wants T-chart. See also BLM 2.3.5 b and c, available online at www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr2/blms/index.html.

Hands on Social Studies 2 includes a needs-versus-wants memory game (pp. 188-191). Manitoba Education Library Call #372.84044 L38.

Check out *Canada's Food Guide* at www.hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php.

Targeted Outcome/Intended Learning:

Science: Cluster 1: Growth and Changes in Animals

2-1-17: Identify and describe ways in which humans help other animals.

Examples: protecting endangered animals, feeding birds . . .

Activity Centre #5 has connections with this learning experience.

Background:

This lesson includes a series of activities that focus on different ways humans can help other animals. Teachers are invited to use whichever activities fit best with their own lesson plans.



Materials:

- props like stuffed animals, doctors' kits, outdoor clothing, binoculars, notebooks, insect nets, cameras (teacher can provide or students can bring items from home)
- Suggested K-4 ESD Poster picture cards: 7, 11, 17, 18, 21, 23. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.
- Suggested K-4 ESD Poster word card: protect. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Books:

The House I'll Build for the Wrens by Shirley Neitzel (1997). Brandon Public Library Call #: JE Neitzel.

Books for Reading Centre: Stories about people helping animals or books about careers that involve helping animals.

Activity Directions:

Activity 1:

Read the story *The House I'll Build for the Wrens* by Shirley Neitzel. Ask

students how the boy is helping animals. Where would the wrens have gone if he did not build the house? Where else do wrens live? What happens if there are not enough trees around? What other ways can we help animals?

Activity 2:

Go to the Manitoba Education and Advanced Learning ESD website and look at picture cards 7, 11, 17, 18, 21, and 23 (non-motorized boats, planting trees, flowers for butterflies, preserving waterways, keeping the environment clean, using phosphate-free detergents). How are people in the pictures helping animals? Invite students to write a story about how they could help animals in their community.

Activity 3:

Brainstorm for jobs that people do that help other animals. Look for books about careers in this area. Have students choose a career that involves helping animals and do a presentation about that career. Students can use props like stuffed animals, doctors' kits, outdoor clothing, binoculars, notebooks, insect nets, or cameras to help bring their presentation to life. Look into such organizations as Manitoba Conservation, Canada Fisheries and Oceans, Veterinary Clinics, the Manitoba Wildlife Rehabilitation Centre, the Canadian Wildlife Federation (www.wildeducation.org), Sierra Club (www.sierraclub.ca), Manitoba Naturalists' Society, Ducks Unlimited, Oak Hammock Marsh (www.oakhammockmarsh.ca), Fort Whyte Alive (www.fortwhyte.org), Manitoba Forestry Association (www.thinktrees.org), Winnipeg Humane Society (www.winnipeghumanesociety.ca), and Nature Conservancy Canada Manitoba (www.natureconservancy.ca/en/where-we-work/manitoba).

Activity 4:

As a class, choose a project and plan a fundraiser to help a charitable organization that helps animals, or plan a visit to the Humane Society, a veterinary clinic, FortWhyte Alive, Oak Hammock Marsh, Manitoba Wildlife Rehabilitation Centre, or another park or centre near your community.

Activity 5:

Computer Activity: Greenpeace has some online games about protecting animals that students would enjoy. Find them at <www.greenpeace.org/international/en/multimedia/multimedia-archive/fungames/>.

The stories and presentations students create about helping animals and the organizations that help animals can provide valuable insight into students' understanding of this concept.

Targeted Outcome/Intended Learning:

Science: Cluster 2: Properties of Solids, Liquids, and Gases

2-3-16: Describe ways that humans dispose of solids and liquids to maintain a clean and healthy environment.

Learning Experience #11 has an activity about plastics.

Background:

As a class, discuss what the word *pollution* means. Pollution is anything that affects our land, air, or water in an unwanted way. Pollution can be tires, appliances, oil, and other refuse that finds its way into the water. It can be human-made chemicals in the air, water, or on the land. It can be chemicals and gases from factories. It can be plastics and other refuse on the playground. It can also be smoke from a forest fire or ash from an erupting volcano.

Review what kinds of pollution are found in your community. Ask students where the pollution goes. For solid wastes, where does the garbage go after it is taken away in the garbage truck? Where does soapy water from the drains go? What about smoke in the air? Ask how many students use recycling bins. Invite them to share what they know about the recycling process.

Explain to students that pollution happens as a natural part of life on Earth, but a lot of pollution caused by people could be reduced. We can help decrease the amount of pollution we cause just by changing some of our daily habits.

The following article about plastics is an interesting read for teachers:
<www.ted.com/index.php/talks/capt_charles_moore_on_the_seas_of_plastic.html>.

Materials:

- Cleaning up Voom: Cooking oil, water, ice cream pails (one for every group of 3–4 students) various “absorbent” materials (paper towels, flour, sponges, sawdust, etc.).
- Suggested K–4 ESD Poster picture cards: 1, 3, 5, 6, 7, 8, 11, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 32, 33, 34, 35, 36. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

- Suggested K-4 ESD Poster word card: protect. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Books:

The Cat in the Hat Comes Back by Dr. Seuss (1958).

Activity Directions:**Activity 1:**

On poster paper or on the board, write down the following three categories: “soil,” “water,” and “air.” Encourage students to list liquid and solid pollutants, and suggest which column they belong under. The class could take a walk through their neighbourhood, recording sources of pollution (contrails from an airplane in the sky, smoke stacks, noise from vehicles, exhaust, garbage on the ground . . .).

Activity 2:

A useful Project Learning Tree program involves students reading Dr. Seuss’s *The Cat in the Hat Comes Back* and being asked what represents pollution in the story. How did the cat get rid of the “pollution” (pink stuff)? (*Answer: First, he moved it from one place to another, and then he got help*). Who did he get help from? What did the little cats do? Who finally got rid of the mess? (*Little Cat Z*) Discuss how this way of dealing with a mess is a lot like how people deal with pollution. We move it from one place to another or break it into smaller pieces (dump it in the ocean or into the air or a landfill site), but does it disappear? In real life, is there something like “Voom” (i.e., the magical “Voom” in the story)? Discuss some positive ways that companies are now using to deal with pollutants (e.g., discuss how car oil can be recycled at special facilities, old paint can be taken to collection sites, and old plastics and glass are being used to make new building materials). For more Project Learning Tree ideas, contact the Manitoba Forestry Association at <www.thinktrees.org> for information about Project Learning Tree programs in your area.

Activity 3: Cleaning up Voom

Materials: cooking oil, water, ice cream pails (one for every group of 3-4 students), various “absorbent” materials (paper towels, flour, sponges, sawdust, etc.).

Objective: To engage students in creative problem solving, while helping them realize just how hard pollution can be to clean up.

Place two cups of water in each ice cream pail. To this, add one tablespoon of cooking oil. Divide students into small groups. Explain to them that they are now Little Cat Z and that their job is to clean up the “pink stuff” (cooking oil) from their pail of water. Have the absorbent materials laid out on a table in small containers. Show them what is in each container, and invite students to choose which materials to use to clean up the pollutant.

After they have finished, share the results. Were any groups successful in their clean-up attempts? What problems did they encounter? What would they do differently next time? Discuss how this is a very real problem in lakes and oceans where oil tankers sometimes accidentally spill their load, where factories drain liquids into water, or even when motor boats spew fuel into lakes and rivers. Discuss what a challenge it is to clean our environment of such pollutants. Explain that laws are now in place to prevent or control such pollution sources, but laws are not always easy to enforce—plus, accidents still do happen.

Use discussion and reactions of students to the experiment to assess their understanding of the concept.

Activity 4:

As a **reflective journal activity**, have students describe their experiment and what they learned about where our solid and liquid garbage goes. Encourage students to go online to find out more about oil spills and what causes them. Their reflections along with photos of the “Voom” experiment, and information about oil spills from the web, could be compiled into a **poster or newsletter** to share the information with other classes.

Activity 5: What’s Happening Here?

Use picture cards numbers 1, 3, 5, 6, 7, 8, 11, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 32, 33, 34, 35, and 36 for the following activity. Have students sit in a sharing circle. Have them take turns choosing one of the picture cards from a container. They must then show the card to other classmates and explain how the people or item in the picture are contributing to the reduction of pollution in their community. If they are not sure, they can seek help from the teacher or a friend. Note picture #36. It has a bin with the word “pre-use” printed on it. Ask students what this might mean. Discuss how many of the items we buy are things that we really don’t need or that come with excess packaging. We need to learn to be smart consumers and decide what is necessary and what is wasteful. Let manufacturers know how we feel.

Activity 6: Take Action:

This lesson could be followed up with a letter to a manufacturing company to give them a “thumbs up” or “thumbs down” about a product or the packaging that the product comes in. Encourage companies to use biodegradable packaging and environmentally friendly products.

Activity 7:

For an excellent website with online activities for Grades 2–6 students, go to www.epa.gov/epawaste/education/kids/planetprotectors/index.htm. There are also links for teachers on this website.

Many opportunities for assessment present themselves within this activity. Students often react very strongly to this activity, showing a desire to learn more and to get involved. While students are being “scientists,” listen for their contribution of ideas and questions about pollution. Are they expressing appreciation of how hard it is to clean up the spill? Are they asking questions about how real pollution events happen? What do they write about in their journal reflections? During the sharing circle, what comments do the cards evoke? Has the “Voom” activity made them more sensitive to pollution reduction activities? Their comments during the circle activity and journal reflection should indicate that.

Targeted Outcome/Intended Learning:

Science: Cluster 4: Air and Water in the Environment

2-4-05: Use the design process to construct and test a device that shows evidence of air movement.

Examples: windsock, wind chime, pinwheel, sailboat, kite . . .



Background:

This learning experience gives students an opportunity to use the design process to construct a wind device.

Materials:

- Suggested K-4 ESD Poster picture card: 1. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.

Activity Directions:

Activity 1:

The science curriculum instruction suggestion section for 2-4-05 provides steps for designing a wind device. It can be found at www.edu.gov.mb.ca/k12/cur/science/found/kto4/2c4.pdf.

York University has a PDF that assists Grade 2 students in the design process for building a wind device. It can be found at <http://exemplars.ysimste.ca/task/2ec.pdf>.

Targeted Outcome/Intended Learning:

Science: Cluster 4: Air and Water in the Environment

2-4-11: Explain and appreciate the importance of clean air and water for humans, plants, and animals.

Activity Centre #6 fits well with this outcome. See also Learning Experience #8.

Background:

For interesting theme-related grinning planet articles, see www.grinningplanet.com/5005/water-conservation-supply-resources.htm.

This article, while too complicated for students, is an interesting read for teachers and provides interesting discussion information to share with students. It can be found at www.ted.com/index.php/talks/capt_charles_moore_on_the_seas_of_plastic.html. Alternately, see *The Story of Bottled Water* at <http://storyofstuff.org/movies/story-of-bottled-water/>.

Materials:

- plastic bags
- measuring tape
- chart paper
- Suggested K–4 ESD Poster picture cards: 5, 13, 18, 19, 20, 21, 23, 24, 27, 29, 32, 34, 35, 36. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.

Activity Directions

Activity 1:

Ask students to imagine what life would be like without clean air and clean water. Ask them to list as many things as they can that might contaminate or make unsafe the air we breathe or the water we drink.

For a free download of an experiment to measure the cleanliness of air in your area, go to www.science.gc.ca/DB0E87EC-D6C3-47ED-B3A0-CC058B89C372/activitybook1.pdf. Other information is available at www.science.gc.ca.

Activity 2:

Invite students to collect and bring to school all of the plastics that their family disposes of over a one-week period. Ask them to have parents or older siblings

help them wash any plastics that contained food before bringing them to school. Have all students place their bags of plastic side by side in one area. Together, measure the perimeter of the space taken up by the garbage. Calculate how much space the garbage would take up if you brought in one month's worth of plastics. How about six months? One year? Equate that to an area in the school (the perimeter of the gym, the whole school). Students should conclude that we create a lot of waste. Ask them to imagine how much plastic would be collected if everyone in the whole school brought in all their plastics. What about the whole community? Encourage students to write a summary of what they discovered in their journals.

Activity 3:

Plastics not only take up a lot of space in the landfill sites and recycling centres, they also cause serious hazards for wildlife, particularly in aquatic environments where fish and aquatic mammals get tangled in drink can holders and nets and mistake bags and other plastics for food. The process used in the production of plastic products also contaminates our air. Plus, most plastics do not biodegrade—they remain in the environment for a very long time. Using picture cards 5, 13, 18, 19, 20, 21, 23, 24, 27, 29, 32, 34, 35, and 36, review with students some of the ways that they can help reduce plastic wastes.

Activity 4:

If one does not already exist, lobby to have a recycling program established in your community and school.

Activity 5:

Look at various products sold in your community. If excess plastic packaging is used, consider writing a class letter to the manufacturer to ask them to use greener packaging. Encourage students to explain to the manufacturer how changing their packaging practices can help clean our water and our air.

Look at their reflective journal entries and their participation in class discussions. Assess how well students have applied their new knowledge to an understanding of the importance of clean air and water in our environment.

Excellent online lesson plans regarding water pollution and safe drinking water can be accessed through the Safe Drinking Water Foundation at www.safewater.org.

Targeted Outcome/Intended Learning:

Science: Cluster 4: Air and Water in the Environment

2-4-13: Recognize that clean water is an increasingly scarce resource in many parts of the world, and describe the consequences of a shortage of clean water.



Background:

Discuss with students how, in many parts of the world, clean water is a precious commodity. In many parts of Asia, South America, Central America, and Africa, tap water and well water are not safe to drink. In countries with a wet and dry season, there are times of the year when there is little or no water at all!

Tell students that they will be conducting an experiment to understand what it is like to have a limited water supply.

The Canadian Hunger Foundation, now known as CHF, provides detailed lessons on peoples' needs around the world. One of its lessons is called Water Works, which can be found by searching their website at <www.chf.ca>.

Materials:

- 1 litre bottle (or a water bottle)
- dish pan, soap, towels (for washing hands)
- Suggested K-4 ESD Poster picture card: 26. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.
- Suggested K-4 ESD Poster word card: consequences. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Activity Directions:

Activity 1:

Ask students to bring a one-litre bottle (or a water bottle) to school with them in the morning. Have them fill the bottle, and tell them that this is all the fresh water they will have for the day. They are not allowed to drink from the water fountain. At the end of the day, discuss how it felt to be so conscious of the amount of water available. Record students' comments on chart paper.

Activity 2:

Discuss ways that they might be able to help. Many charitable organizations have programs to help communities in developing countries build wells and acquire water filters. For more information, see <http://thewaterproject.org>, www.samaritanspurse.ca the Christian Students' Fund at www.ccfcanada.ca, the Canadian Hunger Foundation at www.giftthatmatter.ca, Canadian Feed the Students at www.canadianfeedthestudents.ca, Best Gift Ever at www.bestgiftever.ca, and more!

Targeted Outcome/Intended Learning:

Science: Cluster 4: Air and Water in the Environment

2-4-14: Record personal use of water, and identify ways in which they can reduce water usage.

Examples: rather than leaving water running while brushing teeth, turn off the tap to reduce usage . . .

Background:

This learning experience assists students to take individual actions to help the environment.

Materials:

- ice cream pail
- large measuring cup
- Suggested K-4 ESD Poster picture cards: 7, 13, 15, 16, 23. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.
- Suggested K-4 ESD Poster word cards: reduce, protect, restore, consequences, value, conserve, and reuse. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.

Recommended Resource: activities, videos and resources connected to the Manitoba curriculum. Also see "What is Your water IQ?" at www.h2oiq.ca.

Activity Directions

Activity 1:

Brainstorm ways that students can save water at home and at school. To see how much water they are using, perform a few simple experiments. In pairs, have students time how long it takes to wash their hands. Then put a pail in the sink and run the water for the same amount of time. How much water was used? Chart the results. What was the average amount of water used? The total amount used? How can we reduce the amount of water we use to wash hands? (Turn off the tap while we soap up our hands.)

Activity 2:

Discuss activities to try at home: Have them find out which uses more water: a bath or a shower? To find out, plug the drain of the tub and take a five-minute shower. How much water collects in the tub? Discuss water-saver shower heads. Discuss other ideas, such as keeping a jug of water in the fridge so that people don't have to run the tap water to get a cool drink. Stop drips from leaky faucets. Collect rainwater in barrels. Use the rainwater to water flowers and gardens. Water the grass during the coolest part of the day (and not while it is raining). Make sure the washing machine is full each time. Don't keep running the water while you are washing hands, brushing teeth, etc. Fill a plastic bottle with water and a few stones and place it in your toilet tank without blocking moving parts—less water will now be used when the toilet is flushed. Use only organic fertilizers and pesticides. Don't dump toxic leftovers down the sewer or into the trash can. Find out where they can be safely disposed of. Plant a tree—trees store water and release it slowly into the ground. If your family changes the oil in the car at home, be sure to take it to a gas station for recycling. **Students can create a newsletter or poster about saving and protecting water.** This newsletter or poster can be taken home and/or distributed locally.

Activity 3:

Oak Hammock Marsh has Project Wet kits to loan for free. In particular: Kit #19: "Sum of Parts" demonstrates how everyone contributes to pollution of a river as it flows through a watershed, and recognize that everyone's contribution can be reduced. It can be accessed at www.oakhammockmarsh.ca. Also see *Rivers to Oceans: Learning about Watersheds* at www.RiverstoOceansWeek.ca and www.safewater.org.

Activity 4:

For a student-generated activity centre, students could create picture and word cards for a matching game of *Dos* and *Don'ts*. Students can use the word cards *reduce*, *protect*, *restore*, *consequences*, *value*, *conserve*, and *reuse*, and website picture cards 7, 13, 15, 16, and 23 as part of the matching game.

Targeted Outcome/Intended Learning:

Physical Education/Health Education: 5. Healthy Lifestyle Practices

K.5.2.A.1: Identify the daily habits and responsibilities for leading a physically active and healthy life (e.g., self-regulation relative to practising daily health routines for cleanliness, rest, healthy eating, good posture . . .).

Activity Centre #7 has related activities.

Background:

This learning experience assists students in identifying daily habits and taking action for healthy routines.

Materials:

- writing materials
- Suggested K-4 ESD Poster picture cards: 7, 9, 10, 15, 16, 18, 24, 27, 28. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Activity Directions:

Activity 1:

Use sustainable development website picture cards 7, 9, 10, 15, 16, 18, 24, 27, and 28 for the following activity. Have students select a card and write a story about healthy living, given the theme of the assigned card. Once edited, the stories can be collated into a classroom storybook about healthy living.

Activity 2:

Students pick a card from the website picture cards listed above and act out the healthy living activity depicted. Classmates are invited to guess what the activity is.

Targeted Outcome/Intended Learning:

Physical Education/ Health Education: 5. Healthy Lifestyle Practices

K.5.2.A.2: Identify common communicable disease/illness/conditions in the classroom and home, and ways to prevent the spread of disease/illness conditions (e.g., cover mouth when coughing, wash hands regularly, share food appropriately).



Background:

With increasing concerns about public health and communicable diseases (in particular, viruses), it is extremely important for students to learn proper hand-washing techniques. This activity will help students understand why proper hand washing is so important.

Materials:

- clay from the garden, or clay slurry from a pottery studio
- water, soap, towels, or a hand-washing kit from your local community health nurse
- Suggested K-4 ESD Poster card: 16. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.
- Suggested K-4 ESD Poster word card: care. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.

14 Grade 2 Learning Experience #14: Hand-Washing Horribles

Activity Directions:

Activity 1:

Check with your local community health nurse about the availability of a hand-washing kit, or mix clay with water to create a soupy mix (a local pottery artist might be able to provide this). Have students dip their hands into the mix. Let them dry for a minute. Each student is blindfolded and then washes her or his hands as thoroughly as possible. Have students share the results of their efforts. How much mud is left on their hands? If the mud were actually germs, how well did they do at getting rid of them? Discuss how they felt about the hand-washing activity. Demonstrate and have students practise the following proper hand-washing procedure: using soap, wash the front and back of hands for a count of 10 per side. Wash in between fingers, and rub fingertips gently (remind them to turn the water tap off while they are soaping their hands). Assure them that if they follow this procedure, they will get all of the dirt off of their hands.

Activity 2:

Students write and illustrate a reflective report (or journal entry), describing the hand-washing activity. In it, they describe what happened, how they felt about it, what changes they might make in how they wash their hands, and why. Use the reports to assess their understanding of the importance of clean hands and as a springboard to clarifying any misconceptions students might have developed.

Activity 3:

Discuss what to do when you have a cold. Encourage students to contribute suggestions. Discuss sneezing or coughing into your elbow and not your hands.

Special thanks to Janis Dilk of Vermillion Colony School for this activity idea.

GRADE 2 ACTIVITY CENTRES

The lessons and activities presented and related links are to supplement existing curriculum guidelines. The activity centres presented here can be used on their own, in combination with other activity centres, or, in some cases, as a whole-group activity. References to related learning experiences are given where applicable.

Sustainable Development Themes Related to the K–4 ESD Poster Activity Centres

Activity Centre	Subject	Cluster Section	SLO	Page
1. Working With the Environment	Social Studies	1. Our Local Community (2.1.2: Natural Resources)	KL-017: Give examples of ways in which the natural environment influences their communities.	2-43
	Science	4. Air and Water in The Environment	2-4-11: Explain and appreciate the importance of clean air and water for humans, plants, and animals.	
2. What is Leadership?	Social Studies	1. Our Local Community (2.1.7: Leadership)	KP-034: Give examples of ways in which they may demonstrate leadership.	2-45
3. Inuit Snow Games	Social Studies	2. Communities in Canada (2.2.1: Diverse Peoples)	KH 027: Recognize that First Nations and Inuit people are Canada’s original peoples.	2-47
	Physical Education/ Health Education	1. Movement	S.1.2.C.1: Demonstrate functional use of basic movement skills (e.g., hopping, jumping, kicking . . .) and equipment in outdoor activities and/or special events (e.g., hopscotch, rope skipping, snow soccer, tabloids, cultural theme days, Aboriginal games . . .).	

continued

Activity Centre	Subject	Cluster Section	SLO	Page
4. Where in the World?	Social Studies	3. The Canadian Community (2.3.6: Global Connections)	KG-032: Give examples of connections linking Canada to other countries. <i>Examples: food, immigration, media . . .</i>	2-53
5. Reading Centre	Science	1. Growth and Changes in Animals	2-1-17: Identify and describe ways in which humans help other animals. <i>Examples: protecting endangered animals, feeding birds . . .</i>	2-55
6. Keeping It Clean	Science	4. Air and Water in The Environment	2-4-12: Identify substances that pollute air and water, and describe ways of reducing such pollution. <i>Examples: car exhaust, smoke, carbon monoxide, oil, house paints, and sewage . . .</i>	2-57
7. Staying Safe	Physical Education/ Health Education	3. Safety	K.3.2.B.1: Identify safety rules to be followed related to the home, school, and community (i.e., road, vehicles such as tractors and boats, bus ridership, electricity, weather, seasons, stairs/balconies, tools, Internet use).	2-59

Targeted Outcome/Intended Learning:

Social Studies: Cluster 1: Our Local Community
(2.1.2: Natural Resources)

KL-017: Give examples of ways in which the natural environment influences their communities.

Science: Cluster 4: Air and Water in the Environment

2-4-11: Explain and appreciate the importance of clean air and water for humans, plants, and animals.

Activities suggested in Learning Experience #1 should be presented prior to using this activity centre. This centre can serve as an application activity or a follow-up to Learning Experience #1, and as such can provide assessment opportunities for this outcome.



Background:

The natural environment influences our communities in so many ways. Climate affects how we dress, what activities we can do, and the foods we can grow. The land and the living things it supports affect industry, agriculture, and population patterns. Proximity to clean water is important to all aspects of life. In this activity, students will gain an appreciation of the many businesses that depend on the natural environment for their existence, thus shaping the character of our communities.

Before using the activity centres, use a word web to review the basic components of the natural environment (water, soil, vegetation, weather, wildlife). Brainstorm with students the types of businesses that might depend on these resources for their needs (e.g., building companies, lumber yards, factories that use water in manufacturing, and grain companies (e.g., nurseries and landscapers, cement and brick manufacturers, farms, golf courses, etc.). In this activity centre, students will have the chance to find the names of real businesses that depend on the natural environment to make a living.

Materials:

- local newspapers, a local business directory
- scissors, glue stick, markers, paper

- Suggested K-4 ESD Poster picture cards: 1, 4, 6, 7, 8, 9, 12, 13, 19, 21, 22, 24, 28. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.
- Suggested K-4 ESD Poster word card: environment. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Activity Directions:

Activity 1:

Provide pairs of students with local newspapers and a local business directory. Ask them to look through the newspapers and business directories to find examples of community activities and businesses that depend on natural resources (nursery, landscape, construction, parks, agri-business, recycling oil, etc.). Record the activity and the way it uses natural resources. This can be done as a collage or a list. Students can also create their own categories for sorting.

Activity 2:

Have students pick four picture cards from among picture cards 1, 4, 6, 7, 8, 9, 12, 13, 19, 21, 22, 24, and 28, and describe how the natural environment is important to the activity shown in the picture.

Targeted Outcome/Intended Learning:

Social Studies: Cluster 1: Our Local Community (2.1.7: Leadership)

KP-034: Give examples of ways in which they may demonstrate leadership.

This activity complements Learning Experience #2.

Background:

This activity assists students to identify and develop leadership skills.

Materials:

- paper/ journals
- pencils/writing materials
- Suggested K-4 ESD Poster picture cards: 8, 14, 16, 18, 26, 27. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.
- Suggested K-4 ESD Poster word cards: communicate, care, appreciate, cooperate, connect, contribute, create, help, ideas, protect, needs, learn, listen, organize, respect, teach, understand, value, share, safety. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Activity Directions:

Activity 1:

After a discussion of what makes a good leader, show students the word cards *communicate, care, appreciate, cooperate, connect, contribute, create, help, ideas, protect, needs, learn, listen, organize, respect, teach, understand, value, share,* and *safety*. Read each word with the whole class, and discuss what each word would mean to a good leader.

Activity 2:

Follow up with this activity. Place the word cards and picture cards 8, 14, 16, 18, 26, and 27 in a basket on the centre of the table. Congratulate the students and tell them that they are now all important leaders in their school. As a think-pair-share activity, have students choose a card, and then write or draw about how they would use this word or image in their new leadership role. Model the activity by choosing a card and discussing how you would use the word (e.g., “protect”). “As a leader in the school, I would make sure that all of the outside school doors were locked when class is underway” or “I would start a buddy system on the playground to make sure all the kids are safe and no one is picked on or treated unfairly.” Students could report their ideas to the class during sharing time or create a booklet of class leaders that the teacher can then read to the class and discuss.

While students are engaged in the activity, examine students’ drawings/ writing to assess their understanding of the selected word and what leadership means in relation to the word. Make suggestions to the student to clarify the student’s understanding. During sharing time, use anecdotal records to assess students’ understanding.

Social Studies Blackline Masters

Excellent discussion and learning activities for this theme at www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr2/blms/index.html.

Targeted Outcome/Intended Learning:

Social Studies: Cluster 2: Communities in Canada (2.2.1: Diverse Peoples)
KH 027: Recognize that First Nations and Inuit people are Canada's original peoples.

Physical Education/Health Education: 1. Movement

S.1.2.C.1: Demonstrate functional use of basic movement skills (e.g., hopping, jumping, kicking . . .) and equipment in outdoor activities and/or special events (e.g., hopscotch, rope skipping, snow soccer, tabloids, cultural theme days, Aboriginal games . . .).

Background:

These Inuit games reflect many facets of Inuit culture and lifestyle. The Inuit are a fun-loving people, but the Arctic environment is full of hardships. Most of the games help to develop skills for life in the Arctic—skills include strength, endurance, throwing, aiming, stalking, etc. These games will give students meaningful insights into both the fun and hardships of a people who live intimately with winter and snow.

Google “Arctic Winter Games” to find out more about northern life. Wikipedia has some useful resources, including http://en.wikipedia.org/wiki/Arctic_Winter_Games.

Materials:

- Inuit snow games illustrated sheets
- a smooth dowel, piece of rawhide, or firm cloth
- a 10-foot length of soft rope
- pebbles and a large (flat stone)
- skipping rope
- a piece of cloth to tie around the middle of the skipping rope
- Suggested K-4 ESD Poster picture card: 12. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.
- Suggested K-4 ESD Poster word card: connect. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.

Books:

The Lonely Inukshuk (1999). Manitoba Education Library Call #E Lon.

Maple Moon by Connie Brummel Crook (1997). Manitoba Education Library Call #E cro.

A Friend Called Chum by B. Wheeler (1984). Manitoba Education Library Call #E Whe.

The Kids Book of the Far North by Ann Love and Jane Drake (2000). Manitoba Education Library Call #909.913.

Sooshevan, Child of the Beothuk by Donald Gale (1988). Manitoba Education Library Call #3 E. Gal.

Videos:

The Wapos Bay series by Gordon Tootoosis (24 minutes each) (DVD). An award-winning series of animations about three Cree students living in remote northern Saskatchewan. English and Cree soundtracks. See *The Elements*: Manitoba Education Library Call #D-11113 and *They Dance at Night*: Call #D-11110.

Activity Directions:**Activity 1:***

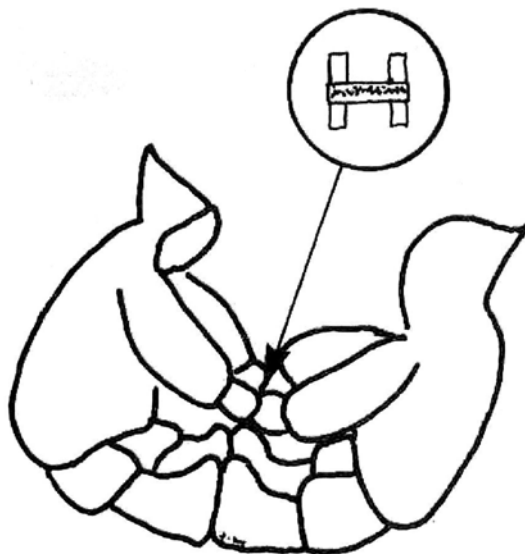
Have a collection of books about First Nations, Métis, or Inuit people for students to read and discover.

These games would be great indoors or as an outdoor winter activity. Review each game prior to the activity, and discuss with students what skill the game might help the player develop for real-life situations.

* **Note:** This activity is reproduced from: "Snow Activity Program" by J. Pattimore, Manitoba Parks Branch, Department of Natural Resources, 1981.

Ac Sa Raq (Thong Game)

Opponents sit facing each other on the floor (ground). Legs are kept straight while feet are placed against feet. Both opponents hold onto a dowel or piece of rawhide. The object is to pull your opponent up off the ground.

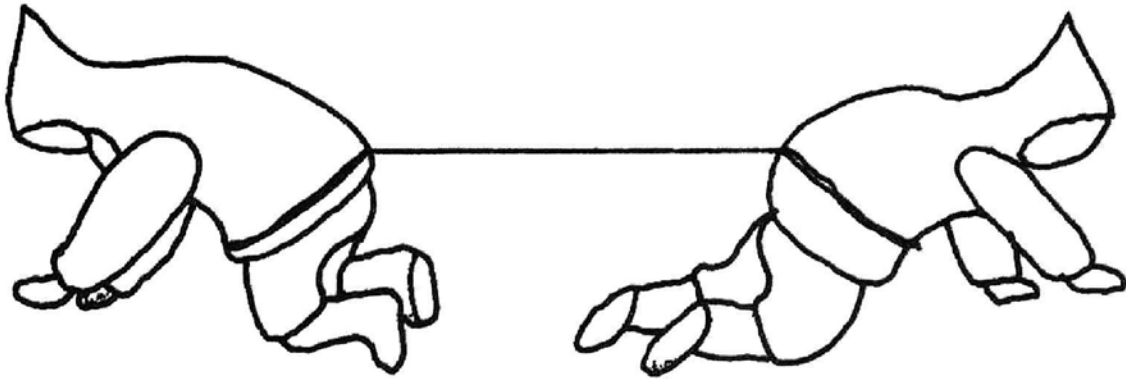
**Tu Nu Miu (Back to Back)**

Two students sit back to back with a mark on the ground beneath them (e.g., tape on the floor). The object of the game is to push your opponent over the line using only your hands and feet.



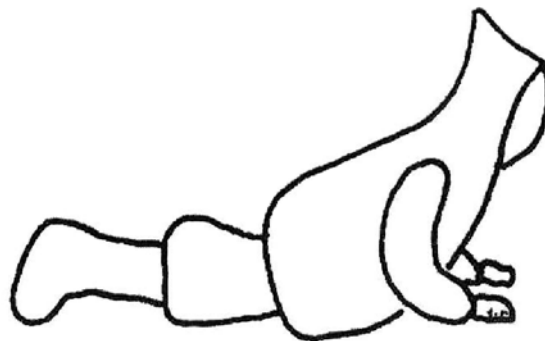
Holman Island Dog-Team Pull

A rope is used as a harness around each opponent's waist. On hands and knees, the contestants try to pull their opponent over a line drawn between them.



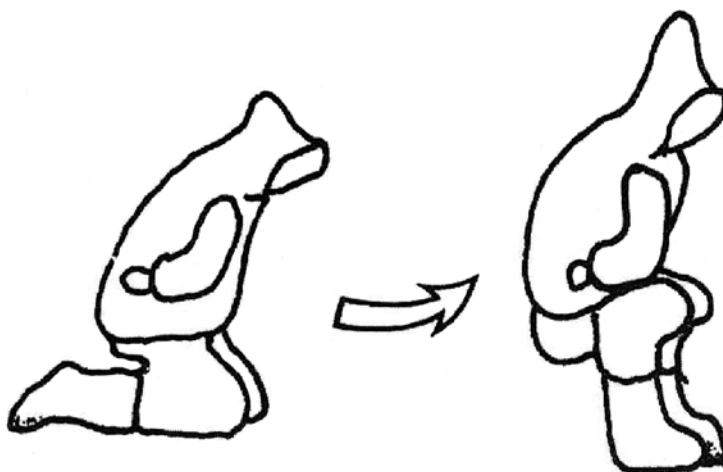
Seal Racing

Opponents lie on their stomachs on the floor. Using their hands for support, with legs limp and body trailing, students race for the finish line.



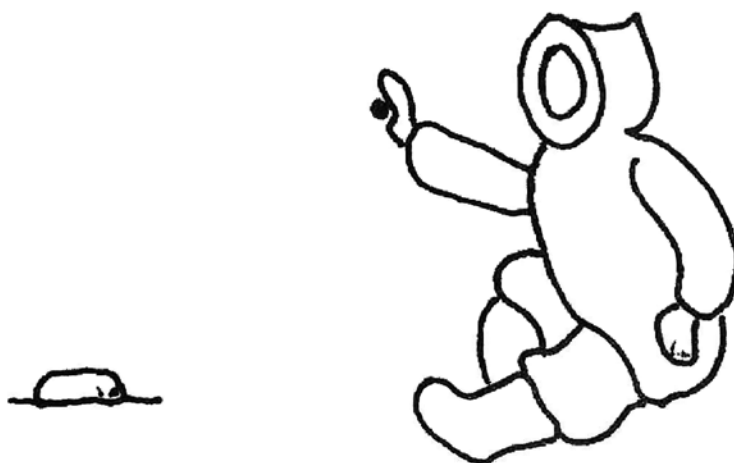
Peed Le Ta Tuq

Opponents move from a kneeling position to a squatting one with a quick jump and then back to kneeling again.



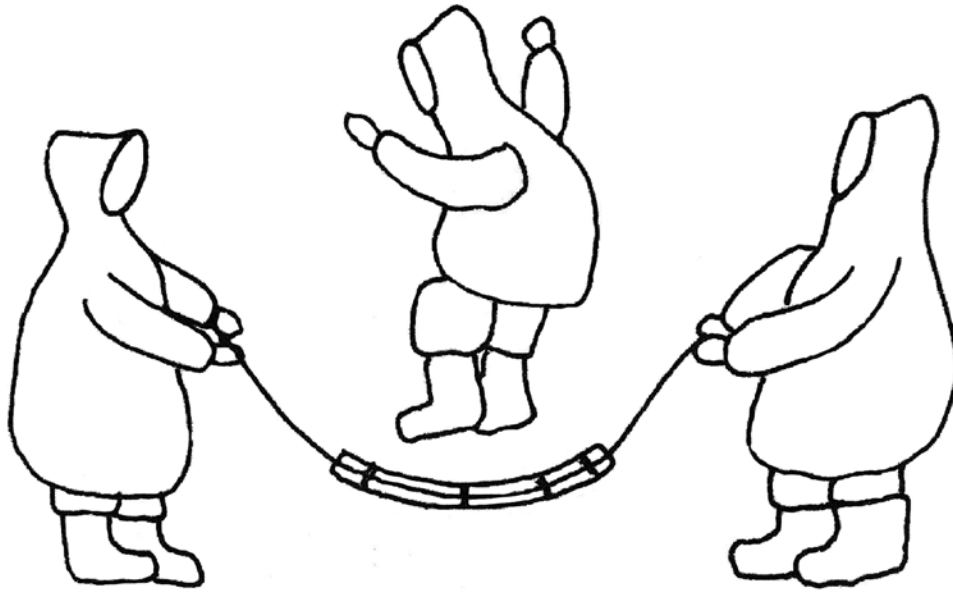
Nakartartuq

Using pebbles for tossing and a large stone as the target, students take turns trying to hit or land their pebbles as close to the stone as possible.



Holman Island Skipping

A rope with an animal hide rolled around the mid-portion of the rope is used as the “skipping rope.” The skin is swung rhythmically from side to side. The object is to make as many jumps as possible.



The social studies curriculum provides excellent suggestions, Internet links, and activities for this outcome. Among these are a collection of picture cards and descriptions of Aboriginal contributions and inventions (BLM 2.2.1c). These cards would be ideal for an activity centre. They can be found at www.edu.gov.mb.ca/k12/cur/socstud/foundation_gr2/blms/index.html.

Targeted Outcome/Intended Learning:

Social Studies: Cluster 3: The Canadian Community (2.3.6: Global Connections)

KG-032: Give examples of connections linking Canada to other countries.

Examples: food, immigration, media . . .

Background:

Before using the centre, have a discussion with the students about how we all have connections to other parts of the world. Do they have family in other parts of the world? Have they ever eaten a banana or orange? Look at clothing labels. Where were they made?

Materials:

- a large world map
- labels, pins, or stickers,
- lengths of string
- books and other information about the countries and places of product origin
- Suggested K-4 ESD Poster picture card: 4. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.
- Suggested K-4 ESD Poster word card: need. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.

Activity Directions:

Activity 1:

Encourage students to bring in fruit, vegetables, clothing, and other objects made in other parts of the world. Label these items with their place of origin. Using a globe or large world map, highlight (using a pin or sticker) these locations for the students. In the activity centre, have the items laid out for students to examine. Show them how to find country information on the product labels. Ask them to match the places of origin with the highlighted

marks on the map. Students can use lengths of string to measure how far away these locations are from Manitoba. Note: If the map can be left up for the duration of the time that the centre will be in use, then students will be able to leave their lengths of string on the map, and a cumulative effect will help students see which countries we obtain the most goods from (i.e., assuming each student is measuring a different product). Encourage students to pick a product and learn a little about its country of origin. Students can share their discoveries with classmates following centre time (or after all students have used the centre), thus providing the teacher an opportunity to assess students' understanding of one aspect of how Canada is connected to other parts of the world.

Activity 2:

Use a length of string to measure how far your item travelled to get to Manitoba. Can you find the country on the map?

Targeted Outcome/Intended Learning:

Science: Cluster 1: Growth and Changes in Animals

2-1-17: Identify and describe ways in which humans help other animals.

Examples: protecting endangered animals, feeding birds . . .

See Learning Experience #7 for activity descriptions for this outcome.

Background:

This is intended as a reading centre. To introduce or reinforce the concept of habitat, the Frankie the Fish activity at

<www.edu.gov.mb.ca/conservation/sustain/habitathelp.pdf> could be useful.

Materials:

- Suggested K-4 ESD Poster picture cards: 11 or 21. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.
- Suggested K-4 ESD Poster word card: help. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Books for Reading Centre:

The House I'll Build for the Wrens by Shirley Neitzel (1997). Brandon Library Call #J.E. Neitzel.

Hey! Get Off Our Train! by John Birmingham (1989).

The Great Kapok Tree by Lynn Cherry (1990). Manitoba Education Library Call #E Che.

The Adventures of Nick the Ecologist and his Robot O-Zone: The Mystery of the Missing Trees by Kevin J. Villeneuve (2007).

Activities:

Activity 1:

Ask students how they think humans help other animals. Record their information on a chart.

Activity 2:

Have students select one of the books. After students have read their book, have them tell you how humans help other animals. This can be recorded on the chart. The name of the book could be put by an item already on the chart. New items could be added. This may take a while for all students to have a chance to read the book they want.

Activity 3:

After all students have read and added their part, discuss ways in which students or the class could help animals. The class may wish to take action, such as establishing a bird feeder.

Targeted Outcome/Intended Learning:

Science: Cluster 4: Air and Water in the Environment

2-4-12: Identify substances that pollute air and water, and describe ways of reducing such pollution.

Examples: car exhaust, smoke, carbon monoxide, oil, house paints, and sewage . . .

Background:

This centre is useful as a review/application activity.

Materials:

- paper and writing materials
- Suggested K-4 ESD Poster picture cards: 1, 3, 5, 6, 7, 8, 11, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.
- Suggested K-4 ESD Poster word card: reduce. Available online at www.edu.gov.mb.ca/k12/esd/poster.html.

Activity Directions:

Activity 1: In a basket, arrange picture cards 1, 3, 5, 6, 7, 8, 11, 18, 19, 20, 21, 22, 23, 24, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36. Tell students that their job is to pick three cards, and write or draw an explanation of how the activity or object in each card can help us to keep our air and/or water cleaner for humans, plants, and animals.

Targeted Outcome/Intended Learning:

Physical Education/Health Education: 3. Safety

K.3.2.B.1: Identify safety rules to be followed related to the home, school, and community (i.e., road, vehicles such as tractors and boats, bus ridership, electricity, weather, seasons, stairs/balconies, tools, Internet use).

The charades game in Learning Experience #13 has connections with this activity.

Background:

This activity is designed to assist students in recognizing and developing safe habits.

Materials:

- 15 cm. strips of cardboard
- pencils or markers to record safety rules
- Suggested K-4 ESD Poster picture cards: 7, 8, 9, 10, 14, 16, 28, 31. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.
- Suggested K-4 ESD Poster word card: safety. Available online at <www.edu.gov.mb.ca/k12/esd/poster.html>.

Activity Directions:

Activity 1:

Using sustainable development picture cards 7, 8, 9, 10, 14, 16, 28, and 31, ask students to create a safety statement to match each card. Invite students to create their own cards to show other safety rules (e.g., safety around ice, tools, tractors, etc.). Cards and statements could be later used as a match-up game.

The safety statements students create will help to assess their understanding of safety rules, and provide an opportunity for discussion of issues that might be unclear. Encourage students to check their statements for spelling and accuracy of the message.

Activity 2:

Students can then invite their classmates to play a match-up game to match their safety statements with a picture card.