

How Do We Use and Care for Living Things?



Focus: Students describe ways that humans use their knowledge of plants and animals to meet their own needs [e.g., animals and plants for food; animals for wool, fur, and leather, plants for clothing (cotton); trees for shelter (wood)]. Students describe how humans use their knowledge to meet the needs of plants and animals in their care.

Specific Curriculum Outcomes

Students will be expected to:

- 39.0 describe ways humans use their knowledge of living things in meeting their own needs and the needs of plants and animals [GCO 1/3]

Performance Indicators

Students who achieve these outcomes will be able to:

- identify a variety of ways in which humans use their knowledge of living things to meet their needs
- describe how we use our knowledge to care for the animals we use to meet our needs

NOTES:

Attitude Outcome Statements

Encourage students to:

- recognize the role and contribution of science in their understanding of the world [GCO 4]
- show interest in and curiosity about objects and events within the immediate environment [GCO 4]

Cross-Curricular Connections

English Language Arts

Students will be expected to:

- speak and listen to explore, extend clarify, and reflect on their thoughts, ideas, feelings, and experiences [GCO 1]
- use writing and other forms of representation to explore, clarify, and reflect on their thoughts, feelings, experiences, and learnings; and to use their imaginations [GCO 8]

Getting Organized

Components	Materials	Before You Begin	Vocabulary
• Science Card 8 • IWB Activity 8 • Science Card 9 • Science Card 1 (optional) Literacy Place: • <i>School Days</i> (“Caring for Speedy” pages 14–16, Shared Reading–Active Learning Kit)	• variety of items made of natural materials • poster board • craft supplies	• Arrange for a visit from someone knowledgeable about caring for animals. • Arrange for a class trip to a farm or other place where living things are raised for human use, hunted, fished, gathered. • Have members of the local Aboriginal community describe traditional recipes created from foods hunted or gathered.	• farm/farming • raise (in the context of farming)

Safety

- Review school safety rules before students go on a class trip.
- If tasting foods, ensure students are not allergic to any foods being tasted.

Science Background

- One way that humans can meet their needs for food is by hunting, fishing, and gathering. People still do these things to help meet their needs. But many thousands of years ago, some human societies developed technologies of farming, enabling them to settle in one place and produce large volumes of food crops. People also began domesticating animals, such as dogs, sheep, goats, cows, and pigs. Fish and other aquatic animals can be farmed, too. Successful farmers need to know the needs of the plants and animals in their care and how to meet them.

Possible Misconceptions

- Students may not connect some familiar materials, such as leather or cotton, with living things. Also, students may not connect items such as fur or wood with farming. Provide a wide variety of examples of items made from living things and their sources. Include some unexpected examples, such as penicillin antibiotics, which are made from fungi. Another example is the traditional use of capelin or seaweed (kelp) as a fertilizer for home gardens.

ACTIVATE



Sources of Foods and Natural Materials

Use Science Card 8 to get students thinking and asking questions about the sources of the natural materials that make familiar objects, and also the sources of the food they eat. Read the title question: Where does it come from? then ask:

- **What living thing was used to make this item?**
- **How does this item meet a human need?**
- **In what other ways do we use living things to meet our needs?**

Science Card 8 shows a number of foods and other items that come from living things. They include the following, clockwise from top left:

- sweater made from wool
- field berries (blueberry, raspberry, black currant, red currant, blackberry, strawberry)
- boots made from sealskin
- house frame made from wood
- hood lining made from coyote fur
- hat made from wool
- hard boiled eggs from a chicken
- jeans made from cotton
- milk from a cow
- T-shirt made from cotton
- salmon steak from a salmon

As a class, discuss how the items were obtained. For example, the wool came from sheep raised on a farm and shorn of their woolly coat. The eggs came from chickens raised on a farm for the purpose of producing eggs. The salmon may have come from farmed salmon or salmon caught in the wild.

Allow students to explore and play freely with a variety of items made of natural materials such as those at the Curiosity Centre. Invite students to suggest and bring in other items to add.

Encourage students to ask questions and record them on the I Wonder Wall.



IWB Activity:

- Invite students to
- match objects to the
- living thing that is its
- source using Activity
- 8: *What's the source?*
- (see the Teacher's
- Website).



An Elder's Perspective on Using Plants and Animals

Have an Elder talk to the class about how they make use of animals and plants when living on the land or how their ancestors made use of different plants and animals (i.e. which plants did they use for medicine? What uses did they have for certain animals other than for food?, etc).

Invite an Innu, Inuit, or Mi'kmaq Elder to talk to the students about how all parts of an animal were used, particularly in traditional culture. The Elder could also address the practical reasons why early Aboriginal peoples learned to make use of all the resources available from the animals and plants in their area.

What's On the Menu?

Provide a list of plants and animals farmed, hunted, or fished in Newfoundland and Labrador for food. Students can identify ones they have eaten or would like to try. Some examples include:

- vegetables (including turnip, potato, carrot, cabbage, beet, and onions)
- berries (picked wild: bake apples, blueberries, and partridgeberries; farmed: strawberries and cranberries)
- meat (farmed: cattle, sheep (lamb), pigs; hunted: caribou, hare, moose, seal)
- poultry (chickens, turkey, eggs; hunted: ducks, partridge, turr)
- fish and seafood (cod, crab, lobster, mussels, salmon, scallops, shrimp, trout)
- dairy (goats, sheep, and cows)

CONNECT

Caring for Living Things

Display Science Card 9. Tell students that each photograph shows a way that humans care for living things that will be used to meet their needs. Ask:

- **What living thing is shown here?**
- **How will the living thing be used?**
- **How is the living thing being cared for?**

The photographs show the following:

- Tomato seedlings are being planted. The plastic is to protect the ground from frost.
- An East Coast fish farm. The man is feeding the fish. The fish are being raised to be eaten by people.
- Chicks being raised on a chicken farm. The heat lamp is keeping the chicks warm. The chicks may become laying hens or chickens to be eaten.





- A coniferous seedling is being planted in a spot where it will have sunlight and room to grow. The tree will eventually be cut down to make paper or wood for building.
- A variety of plants in a greenhouse. The greenhouse protects the plants from cold, windy weather while allowing sunshine to come through. The greenhouse worker is watering the plants.
- A sheep on a sheep farm. The veterinarian shown is checking the health of the sheep.

Consider revisiting Science Card 1 and have students discuss how the farmer cares for the living things shown. Ask:

- **What living things are shown?**
- **How will the living thing be used?**
- **How is the living thing being cared for?**

Encourage students to ask questions about how people care for living thing. Add the questions to the I Wonder Wall.

Class Trip

Take a trip to a local farm, community garden, fish plant, or other location where animals or plants are raised for human use, fished, hunted, gathered, or processed. While on the trip, encourage students to take turns taking digital pictures to record the trip.

On returning to the class, ask questions such as these (as applicable):

- **What living things did we see being raised/fished/hunted/gathered?**
- **For what purpose will the living things be used?**
- **How are the living things being cared for? What needs do they have?**
- **What knowledge of the plant or animal was used to fish, hunt, or gather it?**



Encourage students to ask their own questions and add them to the I Wonder Wall. Print the digital pictures and use them to make a display about the trip. Have the students produce drawings and sentences with information about the living things you saw, the purpose for which they were being raised, and the ways in which their needs were being met.

Class Visit

Arrange for a naturalist, hunter, fisher, farmer, grandparent, Elder from an Aboriginal community, or other knowledgeable person to discuss how they use living things to meet human needs. Or, arrange for a veterinarian or animal shelter worker to visit and describe how we care for the animals we use to meet our needs.

CONSOLIDATE



Literacy Place Connection:

"Caring for Speedy" on pages 14–16 of *School Days* provides a "how-to" for caring for a class pet (a hamster, in this case). Revisit or read the text with students and ask:

- What does a hamster need to survive?
- Why do you think students enjoy having a class pet

Pet Rules

If you have a class pet, work as a class to develop a set of rules for caring for the class pet. Discuss the importance of each rule developed and relate it to the basic needs of the pet. Make a poster using the rules and post it close to the pet. Then have students work in pairs to develop a set of simple rules for caring for a house plant or a pet at home (real or imagined).

A Local Meal

Have students design a meal or product made entirely of foods or natural materials from Newfoundland and Labrador. They can format their meal as a menu or create a labelled drawing or a collage made from cutouts from magazines.

If possible, invite members from the local Aboriginal community to describe traditional recipes for meals created from foods hunted or gathered. Students could be invited to sample dried arctic char (Inuit) or dried caribou (Innu or Mi'kmaq). Where facilities exist, a traditional moose or caribou stew could be prepared and shared among the students.

EXPLORE MORE

Time Machine

Students can research the ways that Aboriginal peoples or early settlers used living things to meet their needs in the past and compare their findings to how people meet their needs using living things today. Students can choose one need to focus on such as shelter and clothing or food. They can use the Internet and books in the Reading Centre to conduct their research, and may also talk to a knowledgeable person such as an Elder or museum worker. Have students create a poster to communicate their findings.

Virtual Farm

Allow students to create their own virtual farm using a program such as Farmville.