

ELEMENTARY TEACHERS' FEDERATION OF ONTARIO

2011 Aboriginal Curriculum and the Sciences Primary



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Primary Lesson Plan

The circle is one of the strongest shapes in nature. When we see the world from a Native American perspective, that circle shapes our vision. We find circles and the idea of the circle everywhere, from the shapes of most Native dwellings to the view of the world as a series of continual, repeating cycles. Human life, itself, is seen as a circle, as we come from our mother, the Earth, when we are born and return to that same earth when we die Lesson stories keep the Native people of each generation from repeating errors which their ancestors made. And today, because (as Sitting Bull is reputed to have said) “there are no longer just Indians here,” that circle of stories is desperately needed by all Americans.

~ Joseph Bruchac, III, 1993

Background

The Circle

The circle is a powerful force within First Nations cultures. It is the belief of many First Nations people that the life force of all existence moves in a circle. The circular pattern is woven through all things and is a reflection of the interrelatedness of all things. All life is affected by other life and everything lives in relationship to every other thing. The circle represents wholeness and continuity. When elders teach young children, the first lesson begins with Nature as the circle becomes evident in natural surroundings. The children learn that they are a part of the circle. There is a cycle of life, the cycles of the seasons, the cycles of the planetary movements, and the cycles in learning and thought, the growth of a tree, the whirl of the wind, or the journey of the salmon. All things move in this circular way and become part the cycle of life from birth to new life. Knowing all life follows this circular pattern, all ceremony takes place in a circle.

Objectives

The purpose of this lesson is to begin to nurture an awareness of nature and introduce the idea that everything on Mother Earth is connected.

Science and Technology

GRADE 1 | UNDERSTANDING EARTH AND SPACE SYSTEMS DAILY AND SEASONAL CHANGES

Fundamental Concepts: Change and Continuity

Big ideas:

- Changes occur in daily and seasonal cycles. (Overall expectations 1, 2, and 3)
- Changes in daily and seasonal cycles affect living things. (Overall expectations 1 and 3)

Overall Expectations

By the end of Grade 1, students will:

1. Assess the impact of daily and seasonal changes on living things, including humans;
2. Investigate daily and seasonal changes;
3. Demonstrate an understanding of what daily and seasonal changes are and of how these changes affect living things.

Specific Expectations

1. Relating Science and Technology to Society and the Environment

- 1.2 Assess ways in which daily and seasonal changes have an impact on society and the environment.

2. Developing Investigation and Communication Skills

- 2.4 Use scientific inquiry/research skills (see page 15), including generating questions and knowledge acquired from previous investigations, to identify daily and/or seasonal changes and their effects.

3. Understanding Basic Concepts

- 3.2 Define a cycle as a circular sequence of events.
- 3.3 Describe changes in the amount of heat and light from the sun that occur throughout the day and the seasons.
- 3.4 Describe and compare the four seasons.
- 3.5 Describe changes in the appearance or behaviour of living things that are adaptations to seasonal changes.
- 3.6 Describe how humans prepare for and/or respond to daily and seasonal changes.

Lesson Plan

Task 1: Reviewing the Circle and Sphere

Ask students to identify all of the circles that they notice in nature. A nature walk may be an option for this task.

Show students a globe. Ask them what the shape of the world is. Answers could be round, circle, or sphere. Take an orange and ask what shape it is. Is its shape similar to the globe? Cut the orange open and show students the resulting cross-sectional area, a circle shape.

The circle is a basic shape that appears all over nature. Discuss why it is important to take notice of our surroundings and find patterns. Explain to the students that to be a good scientist, you must be a good observer.

Begin the lesson by asking students to identify the seasons (fall, winter, spring, and summer). Using a white board, poster board, or chart paper, draw a circle and divide it into four equal parts, writing the name of each season in one quarter-circle.

Read one of the recommended stories (Thirteen Moons on Turtle's Back: A Native American Year of Moons, by Joseph Bruchac and Jonathan London, or Moonstick: The Seasons of the Sioux, by Eve Bunting), or listen to the English narration of Changes, by Penny Condon, which can be found at <http://www.metismuseum.ca/resource.php/12608>. Discuss the main themes of the stories—the creation of the seasons, the changes in temperature, plant life, environment, and human beings, and animals' adaptation to these changes.

Guiding Questions

What happens in the fall, winter, spring, and summer to the plants, animals, and temperature? *In the summer the sun shines during the day, and the moon and stars are visible at night; leaves change colour in the fall; there are fewer birds in winter; dogs' fur gets thicker in winter; trees and flowers bloom in spring.*

What are some changes that take place between day and night? What changes in plants, animals, and the weather take place between summer and fall? Between fall and winter? Between winter and spring? How do these changes affect your activities and those of your family?

How do we keep warm in the winter? *We wear appropriate clothing.* In the spring, it rains a lot; what do we do to keep dry? *We carry an umbrella, or wear boots and a raincoat.* When do we turn on an air conditioner or heater?

Task 2: Learning Vocabulary

During the discussions, help students to use and understand the following words:

- Circle
- Round
- Season
- Fall
- Cycle(s)
- Sphere
- Spring
- Winter
- Observer
- Surface
- Summer

Task 3: DESCRIBING THE SEASONS

Provide students with a circle divided into four sections (Appendix 1) and have students copy the name of one season into each section (fall, winter, spring, and summer). Ask the students to describe each season in three or four words and record their responses. Students should copy these descriptions onto their own work sheets. Some students may wish to illustrate each season instead of writing down descriptive words.

Alternatively, you may wish to provide each student with a paper plate and ask them to draw a horizontal and a vertical line through the centre of the circle. Have students copy the names of the four seasons onto the paper plate (fall, winter, spring, and summer). Have students represent each season by writing, drawing, or cutting out images from magazines.

For example:

- Spring – warm, rain, flowers
- Winter – cold, snow, no plants
- Fall – cool, leaves change colours, clouds
- Summer – hot, lots of flowers, sunny days

Ask students to hypothesize which vegetables or plant life Aboriginal People gathered in each season.

Closing Activity

Have students in partners discuss which season they prefer and why. What type of weather, food, clothing, and temperature can be expected during their favourite season?

Display students' paper plate depictions of the cycle of the seasons around the classroom.

Resources

Changes_by Penny Condon. Audio version narrated by the author, found at <http://www.metismuseum.ca/resource.php/12608>

Thirteen Moons on Turtle's Back: A Native American Year of Moons_by Joseph Bruchac and Jonathan London; illustrated by Thomas Locker. Puffin 2002. ISBN-13: 978-0698115842.

Moonstick: The Season of the Sioux_by Eve Bunting; illustrated by John Sandford. Harper Collins, 2000. ISBN-13: 978-0064436199.

Appendix 1

Describing the Seasons (Task 3)

