

About These Lesson Plans

Outdoor education, in natural settings where possible, is a vital way for young people to make visceral and lasting connections with all creatures who share the planet with them.

Thus, these lessons are designed so that educators can facilitate connections between nature and students of all ages. While the attached activities do not require that students be transported to turtle habitats (pond, wetland, forest), teachers may certainly incorporate such areas into their lessons, as long as respect is shown for nature, and care is taken to avoid littering and disturbance of flora and fauna.

Before You Begin a Lesson: Ontario Turtles Primer

1. Using turtle ID sheets and life-sized turtle models, introduce turtles that are at-risk in Ontario. Discuss differences and similarities between species.
2. Discuss turtle habitat. Habitat is everything found in the turtles' environment, including water, rocks, shoreline plants, trees, gravel, mud for hibernating, and sunny spaces. Habitat is where turtles live out their lives: feeding, mating, finding a nest site and laying eggs, hibernating and sunbathing.
3. Explain that the major threats to turtles and other wildlife are those created by humans: pollution, habitat loss, invasive species, and developments such as roads and power lines. Protecting sufficient undisturbed habitat for turtles is very important to the survival of the species.

Ontario Curriculum Connections

From the Ontario Ministry of Education Curriculum Document *"The Ontario Curriculum: Grades 1 to 8 – Science and Technology"*

Life Systems Strand

By the end of Grade 1, students will:

- demonstrate an understanding of the basic needs of animals and plants (e.g., the need for food, air and water);
- investigate the characteristics and needs of animals and plants;
- demonstrate awareness that animals and plants depend on their environment to meet their basic needs, and describe the requirements for good health for humans.

By the end of Grade 2, students will:

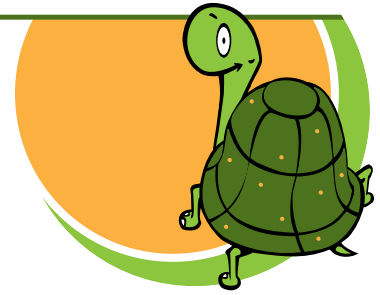
- demonstrate an understanding of the similarities and differences among various types of animals and the ways in which animals adapt to different environmental conditions;
- investigate physical and behavioural characteristics and the process of growth of different types of animals;
- identify ways in which humans can affect other animals.

By the end of Grade 4, students will:

- demonstrate an understanding of the concepts of habitat and community, and identify the factors that could affect habitats and communities of plants and animals;
- investigate the dependency of plants and animals on their habitat and the interrelationships of the plants and animals living in a specific habitat;
- describe ways in which humans can change habitats and the effects of these changes on the plants and animals within the habitats.

By the end of Grade 7, students will:

- demonstrate an understanding of the interactions of plants, animals, fungi and micro-organisms in an ecosystem;
- investigate the interactions in an ecosystem, and identify factors that affect the balance among



"Man's heart, away from nature, becomes hard; [the Lakota] knew that lack of respect for growing, living things soon led to lack of respect for humans, too."

Luther Standing Bear
c. 1968 – 1939



the components of an ecosystem (e.g., forest fires, parasites);

- demonstrate an understanding of the effects of human activities and technological innovations, as well as the effects of changes that take place naturally, on the sustainability of ecosystems.

Earth and Space Systems Strand

By the end of Grade 1, students will:

- demonstrate an understanding of changes that occur in daily and seasonal cycles and of how these changes affect the characteristics, behaviour, and location of living things;
- investigate changes that occur in a daily cycle and in a seasonal cycle;
- describe how living things, including humans, adapt to and prepare for daily and seasonal changes.

By the end of Grade 2, students will:

- demonstrate an awareness of the forms in which water and air are present in the environment, and describe ways in which living things are affected by water and air;
- describe ways in which clean air and water are vital for meeting the needs of humans and other living things.

From the Ontario Ministry of Education Curriculum Document “*The Ontario Curriculum: Grades 1 to 8 – Mathematics*”

Data Management and Probability Strand

By the end of Grade 1, students will:

- describe the likelihood that everyday events will occur, using mathematical language

By the end of Grade 2, students will:

- describe probability as a measure of the likelihood that an event will occur, using mathematical language

By the end of Grade 6, students will:

- read, describe, and interpret data, and explain relationships between sets of data;
- determine the theoretical probability of an outcome in a probability experiment, and use it to predict the frequency of the outcome.

Number Sense and Numeration Strand

By the end of Grade 4, students will:

- solve problems involving the addition, subtraction, multiplication, and division of single- and multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to tenths and money amounts, using a variety of strategies

By the end of Grade 5, students will:

- solve problems involving the multiplication and division of multi-digit whole numbers, and involving the addition and subtraction of decimal numbers to hundredths, using a variety of strategies
- demonstrate an understanding of proportional reasoning by investigating whole-number rates

By the end of Grade 6, students will:

- solve problems involving the multiplication and division of whole numbers, and the addition and subtraction of decimal numbers to thousandths, using a variety of strategies
- demonstrate an understanding of relationships involving percent, ratio, and unit rate

By the end of Grade 7, students will:

- demonstrate an understanding of addition and subtraction of fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers;
- demonstrate an understanding of proportional relationships using percent, ratio, and rate.

By the end of Grade 8, students will:

- solve problems involving whole numbers, decimal numbers, fractions, and integers, using a variety of computational strategies;
- solve problems by using proportional reasoning in a variety of meaningful contexts.



From the Ontario Ministry of Education Curriculum Document *"The Ontario Curriculum: Grades 1 to 8 – The Arts"*

Drama and Dance Strand

By the end of Grade 1, students will:

- interpret the meaning of stories, poems, and other material drawn from a variety of sources and cultures, using some basic drama and dance techniques (e.g., role playing, movement sequences).

By the end of Grade 2, students will:

- interpret the meaning of stories, poems, and other material drawn from a variety of sources and cultures, using several basic drama and dance techniques
- communicate understanding of works in drama and dance through discussion, writing, movement, and visual art work.

By the end of Grade 3, students will:

- interpret and communicate the meaning of stories, poems, plays, and other material drawn from a range of sources and cultures, using basic drama and dance techniques (e.g., writing in role);
- solve problems presented in different kinds of dramatic situations through role playing and movement.

By the end of Grade 4, students will:

- interpret and communicate the meaning of stories, poems, plays, and other material drawn from a variety of sources and cultures, using a variety of drama and dance techniques
- communicate, orally and in writing, their response to their own and others' work in drama and dance (e.g., through discussions, interviews, research projects);
- identify and apply solutions to problems presented through drama and dance, and make appropriate decisions in large and small groups.

By the end of Grade 5, students will:

- interpret and communicate the meaning of stories, films, plays, songs, and other material drawn from different sources and cultures, using a range of drama and dance techniques
- describe, orally and in writing, their response to their own and others' work in drama and dance, gather others' responses (e.g., through interviews, research), and compare the responses;
- solve problems presented through drama and dance, working in large and small groups and using various strategies.

By the end of Grade 6, students will:

- demonstrate an understanding of the principles involved in the structuring of works in drama and dance;
- interpret and communicate the meaning of novels, scripts, legends, fables, and other material drawn from a range of sources and cultures, using a variety of drama and dance techniques (e.g. "reader's theatre"), and evaluate the effectiveness of the techniques; multimedia presentations);
- solve problems presented through drama and dance in different ways, and evaluate the effectiveness of each solution.

By the end of Grade 7, students will:

- interpret and communicate the meaning of novels, scripts, historical fiction, and other material drawn from a wide variety of sources and cultures, using a variety of drama and dance techniques (e.g., drama anthologies).

By the end of Grade 8, students will:

- evaluate the overall effect of various aspects of drama and dance (i.e., elements, principles, techniques, style);
- interpret and communicate ideas and feelings drawn from fictional accounts, documentaries, and other material from a wide variety of sources and cultures, selecting and combining complex drama and dance techniques (e.g. "forum theatre").

