

Prince Edward Island



Curricular Connections for Plants, People + Climate Change

Lesson # 1 – Plants, Planet, People

Grade 3

Life Science

Investigating Germination and Growing Conditions for Plants

- **Science**
Construct and label bar graphs that show plant growth under different conditions (202-4)
- **Science**
Identify and describe parts of plants and their general function (100-28, 203-2)

The Life Cycle of a Plant

- **Science**
Observe and describe changes, using written language, pictures, and charts, that occur through the life cycle of a flowering plant (100-30, 201-5)
- **Science**
Estimate measurements of the plant as it grows (201-6)

Uses for Plants

- **Science**
Describe ways in which plants are important to living things and the environment (102-12)
- **Science**
Identify parts of different plants that provide humans with useful products, and describe the preparation that is required to obtain these products and how our supply of useful plants is replenished (102-13)
- **Science**
Respond to the ideas and actions of others and acknowledge their ideas about the uses and replenishing of plants (203-5)

Earth and Space Science

Interactions of Living Things and Soils

- **Science**

Investigate and describe how living things affect and are affected by soils (100-35)

- **Science**

Identify and use a variety of sources of science information to gather information about how living things affect and are affected by soils (201-7)

Technological Products and Processes Related to Soils

- **Science**

Demonstrate and describe ways of using earth materials to make useful objects (101-12)

- **Science**

Communicate questions, ideas, and intentions while using earth materials to make useful objects (203-1)

Grade 4

- **Science**

(302-3, 104-6, 206-1) Classify organisms according to their role in a food chain and draw a diagram to illustrate the food chain

- **Science**

(206-2) Compile and display the data collected in the habitat study using tallies, tables, and/or bar graphs

- **Social Studies**

4.3.3 Examine the relationship between humans and the physical environment

Lesson # 2 – Plant Needs

Grade 3

Life Science

Investigating Germination and Growing Conditions for Plants

- **Science**

Place seeds in groups according to one or more attributes (202-2)

- **Science**

Ask questions to investigate related to growing conditions for plants (200-1)

- **Science**

Make predictions about which conditions will be the best for plant growth (200-3)

- **Science**

Make and record relevant observations and measurements of plant growth during their investigations (201-5)

- **Science**

Construct and label bar graphs that show plant growth under different conditions (202-4)

- **Science**

Draw inferences that identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow (100-29)

- **Science**
Identify and describe parts of plants and their general function (100-28, 203-2)
- **Science**
Identify and suggest explanations for patterns and discrepancies in the growth rate of similar plants grown in varying conditions (202-5)

The Life Cycle of a Plant

- **Science**
Observe and describe changes, using written language, pictures, and charts, that occur through the life cycle of a flowering plant (100-30, 201-5)
- **Science**
Estimate measurements of the plant as it grows (201-6)

Uses for Plants

- **Science**
Describe ways in which plants are important to living things and the environment (102-12)

Earth and Space Science

Interactions of Living Things and Soils

- **Science**
Investigate and describe how living things affect and are affected by soils (100-35)
- **Science**
Identify and use a variety of sources of science information to gather information about how living things affect and are affected by soils (201-7)

Grade 4

- **Science**
(106-4) Describe how scientists' knowledge of plant growth has led to agricultural innovations and techniques
- **Science**
(108-1) Identify examples of positive and negative effects of technological developments on natural habitats
- **Science**
(204-1) Identify questions to investigate about the types of plants and/or animals at a local habitat, and the conditions under which they live
- **Science**
(300-2, 104-6) Using appropriate terminology, compare the structural features of plants that enable them to thrive in different kinds of places
- **Social Studies**
4.3.3 Examine the relationship between humans and the physical environment

Lesson # 3 – Plant Adaptations

Grade 3

Life Science

Investigating Germination and Growing Conditions for Plants

- **Science**
Make predictions about which conditions will be the best for plant growth (200-3)
- **Science**
Make and record relevant observations and measurements of plant growth during their investigations (201-5)
- **Science**
Construct and label bar graphs that show plant growth under different conditions (202-4)
- **Science**
Draw inferences that identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow (100-29)
- **Science**
Identify and suggest explanations for patterns and discrepancies in the growth rate of similar plants grown in varying conditions (202-5)

Uses for Plants

- **Science**
Describe ways in which plants are important to living things and the environment (102-12)
- **Science**
Identify parts of different plants that provide humans with useful products, and describe the preparation that is required to obtain these products and how our supply of useful plants is replenished (102-13)

Earth and Space Science

Interactions of Living Things and Soils

- **Science**
Investigate and describe how living things affect and are affected by soils (100-35)
- **Science**
Identify and use a variety of sources of science information to gather information about how living things affect and are affected by soils (201-7)

Grade 4

- **Science**
(106-4) Describe how scientists' knowledge of plant growth has led to agricultural innovations and techniques
- **Science**

(108-1) Identify examples of positive and negative effects of technological developments on natural habitats

- **Science**

(204-1) Identify questions to investigate about the types of plants and/or animals at a local habitat, and the conditions under which they live

- **Science**

(108-6, 108-3) Identify their own and their families' impact on habitats, and describe how personal actions help conserve habitats

- **Science**

(300-2, 104-6) Using appropriate terminology, compare the structural features of plants that enable them to thrive in different kinds of places

- **Social Studies**

4.3.3 Examine the relationship between humans and the physical environment

Lesson #4 – Plants, Us and Climate Change

Grade 3

Life Science

Investigating Germination and Growing Conditions for Plants

- **Science**

Make predictions about which conditions will be the best for plant growth (200-3)

- **Science**

Construct and label bar graphs that show plant growth under different conditions (202-4)

- **Science**

Draw inferences that identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow (100-29)

- **Science**

Identify and suggest explanations for patterns and discrepancies in the growth rate of similar plants grown in varying conditions (202-5)

Uses for Plants

- **Science**

Describe ways in which plants are important to living things and the environment (102-12)

- **Science**

Identify parts of different plants that provide humans with useful products, and describe the preparation that is required to obtain these products and how our supply of useful plants is replenished (102-13)

- **Science**

Respond to the ideas and actions of others and acknowledge their ideas about the uses and replenishing of plants (203-5)

Earth and Space Science

Interactions of Living Things and Soils

- **Science**
Investigate and describe how living things affect and are affected by soils (100-35)
- **Science**
Identify and use a variety of sources of science information to gather information about how living things affect and are affected by soils (201-7)

Technological Products and Processes Related to Soils

- **Science**
Demonstrate and describe ways of using earth materials to make useful objects (101-12)
- **Science**
Communicate questions, ideas, and intentions while using earth materials to make useful objects (203-1)

Grade 4

- **Science**
(105-1) Describe current investigations into local or regional habitat issues
- **Science**
(106-4) Describe how scientists' knowledge of plant growth has led to agricultural innovations and techniques
- **Science**
(108-1) Identify examples of positive and negative effects of technological developments on natural habitats
- **Science**
(204-1) Identify questions to investigate about the types of plants and/or animals at a local habitat, and the conditions under which they live
- **Science**
(108-6, 108-3) Identify their own and their families' impact on habitats, and describe how personal actions help conserve habitats
- **Science**
(204-6) Identify various methods for finding answers to questions related to their local habitat, and select one that is appropriate
- **Science**
(300-2, 104-6) Using appropriate terminology, compare the structural features of plants that enable them to thrive in different kinds of places
- **Social Studies**
4.3.3 Examine the relationship between humans and the physical environment

Lesson #5 – Plant Needs and Climate Change

Grade 3

Life Science

Investigating Germination and Growing Conditions for Plants

- **Science**
Ask questions to investigate related to growing conditions for plants (200-1)
- **Science**
Make predictions about which conditions will be the best for plant growth (200-3)
- **Science**
Make and record relevant observations and measurements of plant growth during their investigations (201-5)
- **Science**
Construct and label bar graphs that show plant growth under different conditions (202-4)
- **Science**
Draw inferences that identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow (100-29)
- **Science**
Identify and suggest explanations for patterns and discrepancies in the growth rate of similar plants grown in varying conditions (202-5)

Uses for Plants

- **Science**
Describe ways in which plants are important to living things and the environment (102-12)
- **Science**
Identify parts of different plants that provide humans with useful products, and describe the preparation that is required to obtain these products and how our supply of useful plants is replenished (102-13)
- **Science**
Respond to the ideas and actions of others and acknowledge their ideas about the uses and replenishing of plants (203-5)

Earth and Space Science

Interactions of Living Things and Soils

- **Science**
Investigate and describe how living things affect and are affected by soils (100-35)
- **Science**
Identify and use a variety of sources of science information to gather information about how living things affect and are affected by soils (201-7)

Technological Products and Processes Related to Soils

- **Science**
Demonstrate and describe ways of using earth materials to make useful objects (101-12)

- **Science**
Communicate questions, ideas, and intentions while using earth materials to make useful objects (203-1)

Grade 4

- **Science**
(105-1) Describe current investigations into local or regional habitat issues
- **Science**
(106-4) Describe how scientists' knowledge of plant growth has led to agricultural innovations and techniques
- **Science**
(108-1) Identify examples of positive and negative effects of technological developments on natural habitats
- **Science**
(108-6, 108-3) Identify their own and their families' impact on habitats, and describe how personal actions help conserve habitats
- **Science**
(300-2, 104-6) Using appropriate terminology, compare the structural features of plants that enable them to thrive in different kinds of places
- **Social Studies**
4.3.3 Examine the relationship between humans and the physical environment

Lesson #6 – Soil and Climate Change

Grade 3

Life Science

Investigating Germination and Growing Conditions for Plants

- **Science**
Ask questions to investigate related to growing conditions for plants (200-1)
- **Science**
Make predictions about which conditions will be the best for plant growth (200-3)
- **Science**
Make and record relevant observations and measurements of plant growth during their investigations (201-5)
- **Science**
Construct and label bar graphs that show plant growth under different conditions (202-4)
- **Science**
Draw inferences that identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow (100-29)
- **Science**
Identify and describe parts of plants and their general function (100-28, 203-2)

- **Science**
Identify and suggest explanations for patterns and discrepancies in the growth rate of similar plants grown in varying conditions (202-5)

Uses for Plants

- **Science**
Describe ways in which plants are important to living things and the environment (102-12)
- **Science**
Identify parts of different plants that provide humans with useful products, and describe the preparation that is required to obtain these products and how our supply of useful plants is replenished (102-13)
- **Science**
Respond to the ideas and actions of others and acknowledge their ideas about the uses and replenishing of plants (203-5)

Earth and Space Science

Investigating Soils Composition

- **Science**
Ask questions and make predictions that lead to exploration and investigation about the composition of soil (200-1, 200-3)
- **Science**
Explore and describe a variety of soils and find similarities and differences among them (100-36)
- **Science**
Investigate and describe soil components using appropriate tools such as spoons, magnifying glasses, jars, and filters (100-37, 201-3)
- **Science**
Make and record observations and measurements in investigations related to soil composition (201-5)
- **Science**
Propose an answer to initial question related to soil composition based on their investigations (202-7)

Water Absorption of Soils

- **Science**
Describe the effect of moisture on characteristics of the soils (100-38a)
- **Science**
Make predictions about the absorption of water by different types of soil that lead to exploration and investigation (200-3)
- **Science**
Compare the absorption of water by different soils (100-38b)
- **Science**

Construct and label bar graphs to show the amount of water absorbed by the different soils samples (202-4)

- **Science**
Place containers of soil in order of their ability to absorb water (202-2)
- **Science**
Communicate procedures and results of investigations related to test water absorption of soils, using drawings, demonstrations, and/ or written and oral descriptions (203-3)

Moving Water and Soil

- **Science**
Observe and describe the effects of moving water on different types of soil (100-39)

Interactions of Living Things and Soils

- **Science**
Investigate and describe how living things affect and are affected by soils (100-35)
- **Science**
Identify and use a variety of sources of science information to gather information about how living things affect and are affected by soils (201-7)

Technological Products and Processes Related to Soils

- **Science**
Demonstrate and describe ways of using earth materials to make useful objects (101-12)
- **Science**
Communicate questions, ideas, and intentions while using earth materials to make useful objects (203-1)
similar plants grown in varying conditions (202-5)

Grade 4

- **Science**
(106-4) Describe how scientists' knowledge of plant growth has led to agricultural innovations and techniques
- **Science**
(300-2, 104-6) Using appropriate terminology, compare the structural features of plants that enable them to thrive in different kinds of places
- **Social Studies**
4.3.3 Examine the relationship between humans and the physical environment

Lesson #7 – Food Waste

Grade 3

Life Science

Uses for Plants

- **Science**
Describe ways in which plants are important to living things and the environment (102-12)
- **Science**
Identify parts of different plants that provide humans with useful products, and describe the preparation that is required to obtain these products and how our supply of useful plants is replenished (102-13)
- **Science**
Respond to the ideas and actions of others and acknowledge their ideas about the uses and replenishing of plants (203-5)

Technological Products and Processes Related to Soils

- **Science**
Demonstrate and describe ways of using earth materials to make useful objects (101-12)
- **Science**
Communicate questions, ideas, and intentions while using earth materials to make useful objects (203-1)

Grade 4

- **Science**
(108-6, 108-3) Identify their own and their families' impact on habitats, and describe how personal actions help conserve habitats
- **Science**
(205-5, 302-1) Make observations and collect information related to local habitats and their associated populations of plants and animals
- **Social Studies**
4.3.3 Examine the relationship between humans and the physical environment

Lesson #8 – Take Action

Grade 3

Life Science

Uses for Plants

- **Science**
Describe ways in which plants are important to living things and the environment (102-12)
- **Science**
Identify parts of different plants that provide humans with useful products, and describe the preparation that is required to obtain these products and how our supply of useful plants is replenished (102-13)

- **Science**
Respond to the ideas and actions of others and acknowledge their ideas about the uses and replenishing of plants (203-5)

Earth and Space Science

Technological Products and Processes Related to Soils

- **Science**
Demonstrate and describe ways of using earth materials to make useful objects (101-12)
- **Science**
Communicate questions, ideas, and intentions while using earth materials to make useful objects (203-1)

Grade 4

- **Science**
(105-1) Describe current investigations into local or regional habitat issues
- **Science**
(108-6, 108-3) Identify their own and their families' impact on habitats, and describe how personal actions help conserve habitats
- **Social Studies**
4.3.3 Examine the relationship between humans and the physical environment

Other Relevant Curricular Connections (English, Art, Math & Health)

Grade 3

Health

W-3.5 Apply guidelines from Canada's Food Guide to Healthy Eating to individual nutritional circumstances

Grade 4

Health

W-4.4 Analyse the need for variety and moderation in a balanced diet