## **New Brunswick**

# Curricular Connections for Plants, People + Climate Change



## **Lesson #1 – Plants, Planet, People**

#### Grade 3

Life Science

Science

**100-29** Identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow

- Science
  - 100-28 Identify and describe parts of plants and their general function
- Science
  - **100-30** Observe and describe changes that occur through the life cycle of a flowering plant
- Science
  - **102-12** Describe ways in which plants are important to living things and the environment
- Science
  - **102-13** 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
- Science
  - **200-1** Ask questions that lead to exploration and investigation
- Science
  - **203-5** Respond to the ideas and actions of others and acknowledge their ideas and contributions

#### Earth Science

- Science
  - 100-35 Investigate and describe how living things affect and are affected by soils
- Science
  - 101-12 Demonstrate and describe ways of using earth materials to make useful objects
- Science
  - **200-1** Ask questions that lead to exploration and investigation
- Science

200-3 Make predictions, based on an observed pattern Performing and Recording

#### • Science

**201-7** Identify and use a variety of sources of science information and ideas

#### • Science

203-1 Communicate questions, ideas, and intentions while conducting their explorations

#### Science

**203-3** Communicate procedures and results, using drawings, demonstrations, and written and oral descriptions

#### Social Studies

**3.1** Form questions regarding geography, climate, and vegetation; compare and contrast; make decisions; develop strategies to gather information; make predictions; gather geographic information using maps

#### • Social Studies

**3.1.2** Describe the major physical features, climates, and vegetation of their province and the Atlantic region

#### Grade 4

#### Life Science

#### • 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

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

#### 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

(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 #2 – Plant Needs**

#### Grade 3

Life Science

#### • Science

**100-29** Identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow

#### • Science

100-28 Identify and describe parts of plants and their general function

#### • Science

**100-30** Observe and describe changes that occur through the life cycle of a flowering plant

#### • Science

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

#### • Science

**102-13** 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

#### • Science

**200-1** Ask questions that lead to exploration and investigation

#### • Science

**203-5** Respond to the ideas and actions of others and acknowledge their ideas and contributions

#### Earth Science

• Science

**200-1** Ask questions that lead to exploration and investigation

Science

200-3 Make predictions, based on an observed pattern Performing and Recording

• Science

201-7 Identify and use a variety of sources of science information and ideas

• Science

**202-7** Propose an answer to an initial question or problem and draw simple conclusions based on observations or research

#### • Social Studies

**3.1** Form questions regarding geography, climate, and vegetation; compare and contrast; make decisions; develop strategies to gather information; make predictions; gather geographic information using maps

#### Social Studies

**3.1.2** Describe the major physical features, climates, and vegetation of their province and the Atlantic region

#### **Grade 4**

Life Science

#### • 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

#### • Science

**100-29** Identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow

#### • Science

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

#### • Science

**203-5** Respond to the ideas and actions of others and acknowledge their ideas and contributions

#### Earth Science

• Science

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

• Science

**200-1** Ask questions that lead to exploration and investigation

• Science

**201-7** Identify and use a variety of sources of science information and ideas

#### • Social Studies

**3.1** Form questions regarding geography, climate, and vegetation; compare and contrast; make decisions; develop strategies to gather information; make predictions; gather geographic information using maps

#### Social Studies

**3.1.2** Describe the major physical features, climates, and vegetation of their province and the Atlantic region

#### **Grade 4**

Life Science

#### Science

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

#### • 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

(205-5, 302-1) Make observations and collect information related to local habitats and their associated populations of plants and animals

#### • 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

#### Science

**100-29** Identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow

#### • Science

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

#### Earth Science

Science

**200-1** Ask questions that lead to exploration and investigation

• Science

**201-7** Identify and use a variety of sources of science information and ideas

#### Social Studies

**3.1** Form questions regarding geography, climate, and vegetation; compare and contrast; make decisions; develop strategies to gather information; make predictions; gather geographic information using maps

#### Social Studies

**3.1.2** Describe the major physical features, climates, and vegetation of their province and the Atlantic region

#### **Grade 4**

Life Science

• 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

(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 #5 – Plant Needs and Climate Change**

#### Grade 3

Life Science

#### • Science

**100-29** Identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow

#### • Science

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

#### Earth Science

• Science

**200-1** Ask questions that lead to exploration and investigation

Science

**203-1** Communicate questions, ideas, and intentions while conducting their explorations

#### Social Studies

**3.1** Form questions regarding geography, climate, and vegetation; compare and contrast; make decisions; develop strategies to gather information; make predictions; gather geographic information using maps

#### Social Studies

**3.1.2** Describe the major physical features, climates, and vegetation of their province and the Atlantic region

#### Grade 4

Life Science

• 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

## **Lesson #6 – Soil and Climate Change**

#### Grade 3

Life Science

• Science

**100-29** Identify and investigate life needs of plants and describe how plants are affected by the conditions in which they grow

• Science

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

• Science

**200-1** Ask questions that lead to exploration and investigation

#### Earth Science

Science

**100-36** Explore and describe a variety of soils and find similarities and differences among them

• Science

**100-37** Investigate and describe soil components

• Science

**100-38a** Describe the effect of moisture on characteristics (e.g., cohesion - ability to hold together, texture, colour of the soils

• Science

**100-38b** Compare the absorption of water by different soils

• Science

**100-39** Observe and describe the effects of moving water on different soils

• Science

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

Science

**200-1** Ask questions that lead to exploration and investigation

• Science

**201-7** Identify and use a variety of sources of science information and ideas

Social Studies

**3.1** Form questions regarding geography, climate, and vegetation; compare and contrast; make decisions; develop strategies to gather information; make predictions; gather geographic information using maps

• Social Studies

**3.1.2** Describe the major physical features, climates, and vegetation of their province and the Atlantic region

#### Grade 4

Life Science

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

Social Studies

**4.3.3** Examine the relationship between humans and the physical environment

## Lesson #7 – Food Waste

#### Grade 3

Life Science

Science

**200-1** Ask questions that lead to exploration and investigation

Science

**203-5** Respond to the ideas and actions of others and acknowledge their ideas and contributions

#### Earth Science

• Science

**200-1** Ask questions that lead to exploration and investigation

• Science

201-7 Identify and use a variety of sources of science information and ideas

• Social Studies

**3.1** Form questions regarding geography, climate, and vegetation; compare and contrast; make decisions; develop strategies to gather information; make predictions; gather geographic information using maps

#### Grade 4

Life Science

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

Social Studies

## **Lesson #8 – Take Action**

#### Grade 3

Life Science

- Science
  - 102-12 Describe ways in which plants are important to living things and the environment
- Science
- 102-13 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
- Science
  - **200-1** Ask questions that lead to exploration and investigation
- Science
  - **203-5** Respond to the ideas and actions of others and acknowledge their ideas and contributions

#### Earth Science

- Science
  - **200-1** Ask questions that lead to exploration and investigation
- Science
  - **201-7** Identify and use a variety of sources of science information and ideas
- Social Studies
  - **3.1** Form questions regarding geography, climate, and vegetation; compare and contrast; make decisions; develop strategies to gather information; make predictions; gather geographic information using maps

#### Grade 4

Life Science

- 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
- 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

**1.1** Recognize the importance of healthy eating and regular physical activity for a healthy lifestyle;

## **Grade 4**

## Health

1.1 Examine the benefits of healthy eating and physical activity for a healthy lifestyle;