

# ALBERTA

## Curricular Connections for Plants, People + Climate Change



## Lesson # 1 – Plants, Planet, People

### Grade 3

- **Science**  
3–4 - Demonstrate positive attitudes for the study of science and for the application of science in responsible ways: respect for living things and environments, and commitment for their care.
- **Science**  
3-9 - Recognize that habitat preservation can help maintain animal populations, and identify ways that student actions can assist habitat preservation.
- **Science**  
3–10 - Describe the appearances and life cycles of some common animals, and identify their adaptations to different environments.
- **Social Studies**  
3.1.3 Examine the geographic characteristics that shape communities in other parts of the world by exploring and reflecting upon the following questions for inquiry:
  - How does the physical geography influence the human activities in the communities (e.g., availability of water, climate)? (CC, LPP)
  - In what ways do the communities show concern for their natural environment? (GC, LPP)
  - In what ways do the people in the communities depend on, adapt to and change the environment in which they live and work? (ER, LPP)

### Grade 4

- **Science**  
1. Describe the importance of plants to humans and their importance to the natural environment. Students who meet this expectation should be able to give examples of plants being used as a source of food or shelter, and be aware of the role plants play in the environment; e.g., preventing erosion, maintaining oxygen
- **Science**

1. Identify plant and animal wastes, and describe how they are recycled in nature. For example, plant leaves serve as a source of food for soil insects, worms and other creatures. The wastes of these animals may then be further broken down by molds, fungi and bacteria

- **Science**

10. Describe the care and growth of a plant that students have nurtured, in particular:

- Identify the light, temperature, water and growing medium requirements of the plant
- Identify the life stages of the plant
- Identify the reproductive structures of the plant.

- **Science**

11. Describe different ways that seeds are distributed; e.g., by wind, by animals; and recognize seed adaptations for different methods of distribution.

- **Science**

2. Identify and describe the general purpose of plant roots, stems, leaves and flowers

- **Science**

3. Describe common plants, and classify them on the basis of their characteristics and uses.

- **Science**

4. Recognize that plant requirements for growth; i.e., air, light energy, water, nutrients and space; vary from plant to plant and that other conditions; e.g., temperature and humidity; may also be important to the growth of particular plants.

- **Science**

4–10 Demonstrate knowledge and skills for the study, interpretation, propagation and enhancement of plant growth.

- **Science**

4–4 Demonstrate positive attitudes for the study of science and for the application of science in responsible ways. Respect for living things and environments, and commitment for their care.

- **Science**

5. Identify examples of plants that have special needs.

- **Science**

7. Recognize that plants of the same kind have a common life cycle and produce new plants that are similar, but not identical, to the parent plants.

- **Science**

8. Describe ways that various flowering plants can be propagated, including from seed, from cuttings, from bulbs and by runners.

- **Science**

9. Nurture a plant through one complete life cycle—from seed to seed.

- **Social Studies**

4.3.1 Appreciate the factors contributing to quality of life in Alberta:

- Appreciate the influence of the natural environment and resources on the growth and development of Alberta (ER, LPP)

- **Social Studies**

4.1.1 value Alberta's physical geography and natural environment:

- Appreciate how land sustains communities and quality of life (ER, LPP)
- Appreciate the variety and abundance of natural resources in Alberta (ER, LPP)
- Demonstrate care and concern for the environment through their choices and actions (LPP)
- **Social Studies**  
4.2.2 assess, critically, how the cultural and linguistic heritage and diversity of Alberta has evolved over time by exploring and reflecting upon the following questions and issues:
  - What do the stories of Aboriginal peoples tell us about their beliefs regarding the relationship between people and the land? (TCC)
- **Social Studies**  
4.3.1 appreciate the factors contributing to quality of life in Alberta:
  - Value and respect their relationships with the environment (C, ER, LPP)
- **Social Studies**  
4.2.2 assess, critically, how the cultural and linguistic heritage and diversity of Alberta has evolved over time by exploring and reflecting upon the following questions and issues:
  - How are agriculture and the establishment of communities interconnected? (ER, LPP)

## Lesson # 2 – Plant Needs

### Grade 3

- **Science**  
3–4 - Demonstrate positive attitudes for the study of science and for the application of science in responsible ways: respect for living things and environments, and commitment for their care.

### Grade 4

- **Science**  
1. Describe the importance of plants to humans and their importance to the natural environment. Students who meet this expectation should be able to give examples of plants being used as a source of food or shelter, and be aware of the role plants play in the environment; e.g., preventing erosion, maintaining oxygen
- **Science**  
1. Identify plant and animal wastes, and describe how they are recycled in nature. For example, plant leaves serve as a source of food for soil insects, worms and other creatures. The wastes of these animals may then be further broken down by molds, fungi and bacteria
- **Science**  
10. Describe the care and growth of a plant that students have nurtured, in particular:

- Identify the light, temperature, water and growing medium requirements of the plant
- Identify the life stages of the plant
- Identify the reproductive structures of the plant.
- **Science**

10. Develop a flow chart for a consumer product that indicates the source materials, final product, its use and method of disposal.
- **Science**

11. Describe different ways that seeds are distributed; e.g., by wind, by animals; and recognize seed adaptations for different methods of distribution.
- **Science**

2. Identify and describe the general purpose of plant roots, stems, leaves and flowers
- **Science**

3. Describe common plants, and classify them on the basis of their characteristics and uses.
- **Science**

4. Recognize that plant requirements for growth; i.e., air, light energy, water, nutrients and space; vary from plant to plant and that other conditions; e.g., temperature and humidity; may also be important to the growth of particular plants.
- **Science**

4–10 Demonstrate knowledge and skills for the study, interpretation, propagation and enhancement of plant growth.
- **Science**

4–4 Demonstrate positive attitudes for the study of science and for the application of science in responsible ways. Respect for living things and environments, and commitment for their care.
- **Science**

5. Identify examples of plants that have special needs.
- **Science**

7. Recognize that plants of the same kind have a common life cycle and produce new plants that are similar, but not identical, to the parent plants.
- **Science**

8. Describe ways that various flowering plants can be propagated, including from seed, from cuttings, from bulbs and by runners.
- **Science**

9. Nurture a plant through one complete life cycle—from seed to seed.
- **Social Studies**

4.1.1 value Alberta’s physical geography and natural environment:

  - Appreciate how land sustains communities and quality of life (ER, LPP)
  - Appreciate the variety and abundance of natural resources in Alberta (ER, LPP)
  - Demonstrate care and concern for the environment through their choices and actions (LPP)
- **Social Studies**

4.2.2 assess, critically, how the cultural and linguistic heritage and diversity of Alberta has evolved over time by exploring and reflecting upon the following questions and issues:

- What do the stories of Aboriginal peoples tell us about their beliefs regarding the relationship between people and the land? (TCC)

## Lesson # 3 – Plant Adaptations

### Grade 3

- **Science**  
3–4 - Demonstrate positive attitudes for the study of science and for the application of science in responsible ways: respect for living things and environments, and commitment for their care.

### Grade 4

- **Science**  
1. Describe the importance of plants to humans and their importance to the natural environment. Students who meet this expectation should be able to give examples of plants being used as a source of food or shelter, and be aware of the role plants play in the environment; e.g., preventing erosion, maintaining oxygen
- **Science**  
10. Describe the care and growth of a plant that students have nurtured, in particular:
  - Identify the light, temperature, water and growing medium requirements of the plant
  - Identify the life stages of the plant
  - Identify the reproductive structures of the plant.
- **Science**  
10. Develop a flow chart for a consumer product that indicates the source materials, final product, its use and method of disposal.
- **Science**  
11. Describe different ways that seeds are distributed; e.g., by wind, by animals; and recognize seed adaptations for different methods of distribution.
- **Science**  
2. Identify and describe the general purpose of plant roots, stems, leaves and flowers
- **Science**  
3. Describe common plants, and classify them on the basis of their characteristics and uses.
- **Science**  
4. Recognize that plant requirements for growth; i.e., air, light energy, water, nutrients and space; vary from plant to plant and that other conditions; e.g., temperature and humidity; may also be important to the growth of particular plants.
- **Science**  
4–10 Demonstrate knowledge and skills for the study, interpretation, propagation and enhancement of plant growth.
- **Science**

4–4 Demonstrate positive attitudes for the study of science and for the application of science in responsible ways. Respect for living things and environments, and commitment for their care.

- **Science**  
5. Identify examples of plants that have special needs.
- **Science**  
7. Recognize that plants of the same kind have a common life cycle and produce new plants that are similar, but not identical, to the parent plants.
- **Science**  
8. Describe ways that various flowering plants can be propagated, including from seed, from cuttings, from bulbs and by runners.
- **Social Studies**  
4.1.1 value Alberta’s physical geography and natural environment:
  - Appreciate how land sustains communities and quality of life (ER, LPP)
  - Appreciate the variety and abundance of natural resources in Alberta (ER, LPP)
  - Demonstrate care and concern for the environment through their choices and actions (LPP)
- **Social Studies**  
4.2.2 assess, critically, how the cultural and linguistic heritage and diversity of Alberta has evolved over time by exploring and reflecting upon the following questions and issues:
  - How are agriculture and the establishment of communities interconnected? (ER, LPP)
- **Social Studies**  
4.2.2 assess, critically, how the cultural and linguistic heritage and diversity of Alberta has evolved over time by exploring and reflecting upon the following questions and issues:
  - What do the stories of Aboriginal peoples tell us about their beliefs regarding the relationship between people and the land? (TCC)

## Lesson #4 – Plants, Us & Climate Change

### Grade 3

- **Science**  
3–4 - Demonstrate positive attitudes for the study of science and for the application of science in responsible ways: respect for living things and environments, and commitment for their care.
- **Social Studies**  
3.1.3 Examine the geographic characteristics that shape communities in other parts of the world by exploring and reflecting upon the following questions for inquiry:
  - How does the physical geography influence the human activities in the communities (e.g., availability of water, climate)? (CC, LPP)

- In what ways do the communities show concern for their natural environment? (GC, LPP)
- In what ways do the people in the communities depend on, adapt to and change the environment in which they live and work? (ER, LPP)
- **Social Studies**  
3.2.2 explore the concept of global citizenship by reflecting upon the following questions for inquiry:
  - What are some environmental concerns that Canada and communities around the world share? (ER, GC)

## Grade 4

- **Science**  
4–5 Recognize that human activity can lead to the production of wastes, and identify alternatives for the responsible use and disposal of materials.
- **Science**  
1. Describe the importance of plants to humans and their importance to the natural environment. Students who meet this expectation should be able to give examples of plants being used as a source of food or shelter, and be aware of the role plants play in the environment; e.g., preventing erosion, maintaining oxygen
- **Science**  
1. Identify plant and animal wastes, and describe how they are recycled in nature. For example, plant leaves serve as a source of food for soil insects, worms and other creatures. The wastes of these animals may then be further broken down by molds, fungi and bacteria
- **Science**  
10. Describe the care and growth of a plant that students have nurtured, in particular:
  - Identify the light, temperature, water and growing medium requirements of the plant
  - Identify the life stages of the plant
  - Identify the reproductive structures of the plant.
- **Science**  
10. Develop a flow chart for a consumer product that indicates the source materials, final product, its use and method of disposal.
- **Science**  
2. Identify and classify wastes that result from human activity.
- **Science**  
2. Identify and describe the general purpose of plant roots, stems, leaves and flowers
- **Science**  
3. Describe common plants, and classify them on the basis of their characteristics and uses.
- **Science**  
4. Distinguish between wastes that are readily biodegradable and those that are not.

- **Science**  
4. Recognize that plant requirements for growth; i.e., air, light energy, water, nutrients and space; vary from plant to plant and that other conditions; e.g., temperature and humidity; may also be important to the growth of particular plants.
- **Science**  
4–10 Demonstrate knowledge and skills for the study, interpretation, propagation and enhancement of plant growth.
- **Science**  
4–4 Demonstrate positive attitudes for the study of science and for the application of science in responsible ways. Respect for living things and environments, and commitment for their care.
- **Science**  
5. Identify examples of plants that have special needs.
- **Social Studies**  
4.1.1 value Alberta’s physical geography and natural environment:
  - Appreciate how land sustains communities and quality of life (ER, LPP)
  - Appreciate the variety and abundance of natural resources in Alberta (ER, LPP)
  - Demonstrate care and concern for the environment through their choices and actions (LPP)
- **Social Studies**  
4.1.4 Analyze how Albertans interact with their environment by exploring and reflecting upon the following questions and issues:
  - How do Albertans deal with competing demands on land use (e.g., conservation, solar and wind power, recreation, agriculture, oil exploration, forestry)? (ER, LPP)
- **Social Studies**  
4.3.2 assess, critically, the challenges and opportunities that Alberta has faced in its growth and development by exploring and reflecting upon the following questions and issues:
  - In what ways have occupations and commerce been affected by geography, climate and natural resources in Alberta (i.e., forestry, agriculture, aviation, seasonal activities, tourism)? (ER, LPP, TCC)
- **Social Studies**  
4.2.2 assess, critically, how the cultural and linguistic heritage and diversity of Alberta has evolved over time by exploring and reflecting upon the following questions and issues:
  - What do the stories of Aboriginal peoples tell us about their beliefs regarding the relationship between people and the land? (TCC)

## Lesson #5 – Plant Needs and Climate Change

### Grade 3

- **Science**  
3–4 - Demonstrate positive attitudes for the study of science and for the application of science in responsible ways: respect for living things and environments, and commitment for their care.



- **Science**  
3-9 - Recognize that habitat preservation can help maintain animal populations, and identify ways that student actions can assist habitat preservation.
- **Science**  
8. Identify examples of environmental conditions that may threaten animal survival, and identify examples of extinct animals.
- **Social Studies**  
3.1.3 Examine the geographic characteristics that shape communities in other parts of the world by exploring and reflecting upon the following questions for inquiry:
  - How does the physical geography influence the human activities in the communities (e.g., availability of water, climate)? (CC, LPP)
  - In what ways do the communities show concern for their natural environment? (GC, LPP)
  - In what ways do the people in the communities depend on, adapt to and change the environment in which they live and work? (ER, LPP)
- **Social Studies**  
3.2.2 explore the concept of global citizenship by reflecting upon the following questions for inquiry:
  - What are some environmental concerns that Canada and communities around the world share? (ER, GC)

## Grade 4

- **Science**  
4–5 Recognize that human activity can lead to the production of wastes, and identify alternatives for the responsible use and disposal of materials.
- **Science**  
1. Describe the importance of plants to humans and their importance to the natural environment. Students who meet this expectation should be able to give examples of plants being used as a source of food or shelter, and be aware of the role plants play in the environment; e.g., preventing erosion, maintaining oxygen
- **Science**  
1. Identify plant and animal wastes, and describe how they are recycled in nature. For example, plant leaves serve as a source of food for soil insects, worms and other creatures. The wastes of these animals may then be further broken down by molds, fungi and bacteria
- **Science**  
10. Describe the care and growth of a plant that students have nurtured, in particular:
  - Identify the light, temperature, water and growing medium requirements of the plant
  - Identify the life stages of the plant
  - Identify the reproductive structures of the plant.
- **Science**  
10. Develop a flow chart for a consumer product that indicates the source materials, final product, its use and method of disposal.
- **Science**

- 2. Identify and classify wastes that result from human activity.
- **Science**
- 3. Describe alternative methods of disposal, and identify possible advantages and disadvantages of each.
- **Science**
- 4. Distinguish between wastes that are readily biodegradable and those that are not.
- **Science**
- 4. Recognize that plant requirements for growth; i.e., air, light energy, water, nutrients and space; vary from plant to plant and that other conditions; e.g., temperature and humidity; may also be important to the growth of particular plants.
- **Science**
- 4–10 Demonstrate knowledge and skills for the study, interpretation, propagation and enhancement of plant growth.
- **Science**
- 4–4 Demonstrate positive attitudes for the study of science and for the application of science in responsible ways. Respect for living things and environments, and commitment for their care.
- **Science**
- 5. Identify examples of plants that have special needs.
- **Social Studies**
- 4.1.1 value Alberta’s physical geography and natural environment:
  - Appreciate how land sustains communities and quality of life (ER, LPP)
  - Appreciate the variety and abundance of natural resources in Alberta (ER, LPP)
  - Demonstrate care and concern for the environment through their choices and actions (LPP)
- **Social Studies**
- 4.1.4 Analyze how Albertans interact with their environment by exploring and reflecting upon the following questions and issues:
  - How do Albertans deal with competing demands on land use (e.g., conservation, solar and wind power, recreation, agriculture, oil exploration, forestry)? (ER, LPP)
- **Social Studies**
- 4.3.2 assess, critically, the challenges and opportunities that Alberta has faced in its growth and development by exploring and reflecting upon the following questions and issues:
  - In what ways have occupations and commerce been affected by geography, climate and natural resources in Alberta (i.e., forestry, agriculture, aviation, seasonal activities, tourism)? (ER, LPP, TCC)

## Lesson #6 – Soil and Climate Change

### Grade 3

Curricular Connections for Plants, People and Climate Change (ALBERTA)

- **Science**  
3–4 - Demonstrate positive attitudes for the study of science and for the application of science in responsible ways: respect for living things and environments, and commitment for their care.
- **Social Studies**  
3.1.3 Examine the geographic characteristics that shape communities in other parts of the world by exploring and reflecting upon the following questions for inquiry:
  - How does the physical geography influence the human activities in the communities (e.g., availability of water, climate)? (CC, LPP)
  - In what ways do the communities show concern for their natural environment? (GC, LPP)
  - In what ways do the people in the communities depend on, adapt to and change the environment in which they live and work? (ER, LPP)
- **Social Studies**  
3.2.2 explore the concept of global citizenship by reflecting upon the following questions for inquiry:
  - What are some environmental concerns that Canada and communities around the world share? (ER, GC)

## Grade 4

- **Science**  
4–5 Recognize that human activity can lead to the production of wastes, and identify alternatives for the responsible use and disposal of materials.
- **Science**  
1. Describe the importance of plants to humans and their importance to the natural environment. Students who meet this expectation should be able to give examples of plants being used as a source of food or shelter, and be aware of the role plants play in the environment; e.g., preventing erosion, maintaining oxygen
- **Science**  
1. Identify plant and animal wastes, and describe how they are recycled in nature. For example, plant leaves serve as a source of food for soil insects, worms and other creatures. The wastes of these animals may then be further broken down by molds, fungi and bacteria
- **Science**  
10. Describe the care and growth of a plant that students have nurtured, in particular:
  - Identify the light, temperature, water and growing medium requirements of the plant
  - Identify the life stages of the plant
  - Identify the reproductive structures of the plant.
- **Science**  
10. Develop a flow chart for a consumer product that indicates the source materials, final product, its use and method of disposal.

- **Science**  
2. Identify and classify wastes that result from human activity.
- **Science**  
3. Describe alternative methods of disposal, and identify possible advantages and disadvantages of each.
- **Science**  
4. Distinguish between wastes that are readily biodegradable and those that are not.
- **Science**  
4–10 Demonstrate knowledge and skills for the study, interpretation, propagation and enhancement of plant growth.
- **Science**  
4–4 Demonstrate positive attitudes for the study of science and for the application of science in responsible ways. Respect for living things and environments, and commitment for their care.
- **Science**  
7. Identify kinds of wastes that may be toxic to people and to the environment.
- **Social Studies**  
4.1.1 value Alberta’s physical geography and natural environment:
  - Appreciate how land sustains communities and quality of life (ER, LPP)
  - Appreciate the variety and abundance of natural resources in Alberta (ER, LPP)
  - Demonstrate care and concern for the environment through their choices and actions (LPP)
- **Social Studies**  
4.1.4 Analyze how Albertans interact with their environment by exploring and reflecting upon the following questions and issues:
  - How do Albertans deal with competing demands on land use (e.g., conservation, solar and wind power, recreation, agriculture, oil exploration, forestry)? (ER, LPP)
- **Social Studies**  
4.1.4 analyze how Albertans interact with their environment by exploring and reflecting upon the following questions and issues:
  - In what ways do the physical geography and natural resources of a region determine the establishment of communities? (LPP)
- **Social Studies**  
4.3.2 assess, critically, the challenges and opportunities that Alberta has faced in its growth and development by exploring and reflecting upon the following questions and issues:
  - In what ways have occupations and commerce been affected by geography, climate and natural resources in Alberta (i.e., forestry, agriculture, aviation, seasonal activities, tourism)? (ER, LPP, TCC)
- **Social Studies**  
4.2.2 assess, critically, how the cultural and linguistic heritage and diversity of Alberta has evolved over time by exploring and reflecting upon the following questions and issues:
  - What do the stories of Aboriginal peoples tell us about their beliefs regarding the relationship between people and the land? (TCC)

# Lesson #7 – Food Waste

## Grade 3

- **Science**  
3–4 - Demonstrate positive attitudes for the study of science and for the application of science in responsible ways: respect for living things and environments, and commitment for their care.
- **Social Studies**  
3.1.3 Examine the geographic characteristics that shape communities in other parts of the world by exploring and reflecting upon the following questions for inquiry:
  - How does the physical geography influence the human activities in the communities (e.g., availability of water, climate)? (CC, LPP)
  - In what ways do the communities show concern for their natural environment? (GC, LPP)
  - In what ways do the people in the communities depend on, adapt to and change the environment in which they live and work? (ER, LPP)
- **Social Studies**  
3.2.2 explore the concept of global citizenship by reflecting upon the following questions for inquiry:
  - What are some environmental concerns that Canada and communities around the world share? (ER, GC)

## Grade 4

- **Science**  
4–5 Recognize that human activity can lead to the production of wastes, and identify alternatives for the responsible use and disposal of materials.
- **Science**  
1. Describe the importance of plants to humans and their importance to the natural environment. Students who meet this expectation should be able to give examples of plants being used as a source of food or shelter, and be aware of the role plants play in the environment; e.g., preventing erosion, maintaining oxygen
- **Science**  
10. Describe the care and growth of a plant that students have nurtured, in particular:
  - Identify the light, temperature, water and growing medium requirements of the plant
  - Identify the life stages of the plant
  - Identify the reproductive structures of the plant.
- **Science**  
10. Develop a flow chart for a consumer product that indicates the source materials, final product, its use and method of disposal.
- **Science**

- 2. Identify and classify wastes that result from human activity.
- **Science**
- 3. Describe alternative methods of disposal, and identify possible advantages and disadvantages of each.
- **Science**
- 4. Distinguish between wastes that are readily biodegradable and those that are not.
- **Science**
- 4–4 Demonstrate positive attitudes for the study of science and for the application of science in responsible ways. Respect for living things and environments, and commitment for their care.
- **Science**
- 6. Identify methods of waste disposal currently used within the local community.
- **Science**
- 7. Identify kinds of wastes that may be toxic to people and to the environment.
- **Social Studies**
- 4.1.4 Analyze how Albertans interact with their environment by exploring and reflecting upon the following questions and issues:
  - How do Albertans deal with competing demands on land use (e.g., conservation, solar and wind power, recreation, agriculture, oil exploration, forestry)? (ER, LPP)
- **Social Studies**
- 4.1.4 analyze how Albertans interact with their environment by exploring and reflecting upon the following questions and issues:
  - In what ways do the physical geography and natural resources of a region determine the establishment of communities? (LPP)
- **Social Studies**
- 4.3.2 assess, critically, the challenges and opportunities that Alberta has faced in its growth and development by exploring and reflecting upon the following questions and issues:
  - In what ways have occupations and commerce been affected by geography, climate and natural resources in Alberta (i.e., forestry, agriculture, aviation, seasonal activities, tourism)? (ER, LPP, TCC)
- **Social Studies**
- 4.2.2 assess, critically, how the cultural and linguistic heritage and diversity of Alberta has evolved over time by exploring and reflecting upon the following questions and issues:
  - What do the stories of Aboriginal peoples tell us about their beliefs regarding the relationship between people and the land? (TCC)

## Lesson #8 – Take Action

### Grade 3

- **Science**

3–4 - Demonstrate positive attitudes for the study of science and for the application of science in responsible ways: respect for living things and environments, and commitment for their care.

- **Science**

3-9 - Recognize that habitat preservation can help maintain animal populations, and identify ways that student actions can assist habitat preservation.

- **Social Studies**

3.2.2 explore the concept of global citizenship by reflecting upon the following questions for inquiry:

- What are some environmental concerns that Canada and communities around the world share? (ER, GC)

## Grade 4

- **Science**

4–5 Recognize that human activity can lead to the production of wastes, and identify alternatives for the responsible use and disposal of materials.

- **Science**

1. Describe the importance of plants to humans and their importance to the natural environment. Students who meet this expectation should be able to give examples of plants being used as a source of food or shelter, and be aware of the role plants play in the environment; e.g., preventing erosion, maintaining oxygen

- **Science**

1. Identify plant and animal wastes, and describe how they are recycled in nature. For example, plant leaves serve as a source of food for soil insects, worms and other creatures. The wastes of these animals may then be further broken down by molds, fungi and bacteria

- **Science**

10. Describe the care and growth of a plant that students have nurtured, in particular:

- Identify the light, temperature, water and growing medium requirements of the plant
- Identify the life stages of the plant
- Identify the reproductive structures of the plant.

- **Science**

10. Develop a flow chart for a consumer product that indicates the source materials, final product, its use and method of disposal.

- **Science**

2. Identify and classify wastes that result from human activity.

- **Science**

3. Describe alternative methods of disposal, and identify possible advantages and disadvantages of each.

- **Science**

4. Distinguish between wastes that are readily biodegradable and those that are not.

- **Science**

4–10 Demonstrate knowledge and skills for the study, interpretation, propagation and enhancement of plant growth.

- **Science**

4–4 Demonstrate positive attitudes for the study of science and for the application of science in responsible ways. Respect for living things and environments, and commitment for their care.

- **Science**

6. Identify methods of waste disposal currently used within the local community.

- **Science**

7. Identify kinds of wastes that may be toxic to people and to the environment.

- **Social Studies**

4.3.1 Appreciate the factors contributing to quality of life in Alberta:

- Appreciate the influence of the natural environment and resources on the growth and development of Alberta (ER, LPP)

- **Social Studies**

4.1.1 value Alberta's physical geography and natural environment:

- Appreciate how land sustains communities and quality of life (ER, LPP)
- Appreciate the variety and abundance of natural resources in Alberta (ER, LPP)
- Demonstrate care and concern for the environment through their choices and actions (LPP)

- **Social Studies**

4.1.4 Analyze how Albertans interact with their environment by exploring and reflecting upon the following questions and issues:

- How do Albertans deal with competing demands on land use (e.g., conservation, solar and wind power, recreation, agriculture, oil exploration, forestry)? (ER, LPP)

- **Social Studies**

4.1.4 analyze how Albertans interact with their environment by exploring and reflecting upon the following questions and issues:

- In what ways do the physical geography and natural resources of a region determine the establishment of communities? (LPP)

- **Social Studies**

4.3.2 assess, critically, the challenges and opportunities that Alberta has faced in its growth and development by exploring and reflecting upon the following questions and issues:

- In what ways have occupations and commerce been affected by geography, climate and natural resources in Alberta (i.e., forestry, agriculture, aviation, seasonal activities, tourism)? (ER, LPP, TCC)

- **Social Studies**

4.2.2 assess, critically, how the cultural and linguistic heritage and diversity of Alberta has evolved over time by exploring and reflecting upon the following questions and issues:

- What do the stories of Aboriginal peoples tell us about their beliefs regarding the relationship between people and the land? (TCC)



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

## Grade 3

### Fine Art

- Component 1 ANALYSIS: Students will notice commonalities within classes of natural objects or forms.
- Component 10 (ii) SUBJECT MATTER: Students will develop themes, with an emphasis on social concerns, based on: A. Plants and animals B. Environments and places C. Manufactured or human-made things D. Fantasy E. People
- Component 2 ASSESSMENT: Students will assess the visual qualities of objects.
- Mime: Explore the weight, shape, size, texture and resistance of objects in order to develop insights into the ways humans contribute to their society (occupational mime)
- STRUCTURED DRAMATIC PLAY Integrative:
  - Understand and respond to environment
  - Respect and investigate ideas of others
  - Role play learn to respond to stimuli; e.g., music, pictures, objects, literature

### Health

- W-3.5 Apply guidelines from Canada's Food Guide to Healthy Eating to individual nutritional circumstances; e.g., active children eat/drink more
- W-3.8 Employ practices that provide safety for self and others; e.g., describe strategies for safely preparing and storing food

### Math

- Relate the passage of time to common activities, using nonstandard and standard units (minutes, hours, days, weeks, months, years). [CN, ME, R]

## Grade 4

### Fine Arts

- Component 1 ANALYSIS: Students will notice commonalities within classes of natural objects or forms.
- Component 10 (ii) SUBJECT MATTER: Students will develop themes, with an emphasis on social concerns, based on: A. Plants and animals B. Environments and places C. Manufactured or human-made things D. Fantasy E. People
- Component 2 ASSESSMENT: Students will assess the visual qualities of objects.

- STRUCTURED DRAMATIC PLAY Integrative:
  - Understand and respond to environment
  - Respect and investigate ideas of others
  - Role play learn to respond to stimuli; e.g., music, pictures, objects, literature

### **Health**

- W-4.5 analyze the need for variety and moderation in a balanced diet; e.g., role of protein, fats, carbohydrates, minerals, water, vitamins