

Grade 2 Science

70-80% of the school year should be spent on core units, and the remainder of the time should be spent on optional units or on further development of the core units. No less than 3 weeks (7.5 hours) and not more than 8 weeks (20 hours) should be spent on any core unit.

- 1 Core Unit: Habitats 2 Core Unit: Magnets 3 Core Unit: Plant Growth**
4 Core Unit: Weather 5 Optional Unit: Air and Water
6 Optional Unit: Dinosaurs 7 Optional Unit: Foods
8 Optional Unit: Measuring Matter 9 Optional Unit: Oceans

1 Core Unit: Habitats (pp. 204-209 in Science: A Curriculum Guide for the Elementary Level)

1. Appreciate the intricacy of the environment:

- 1.1 Investigate the characteristics of the woodland, grassland, desert, pond, or ocean environments.
- 1.2 Compare many different environments.
- 1.3 Observe and describe the local environment.

2. Recognize interactions which occur within the environment:

- 2.1 Show how the nonliving environment affects life.
- 2.2 Describe how plants or animals adapt to changes in their environments.
- 2.3 Recognize relationships which exist between plants and animals in an environment.

2 Core Unit: Magnets (pp. 210-215 in Science: A Curriculum Guide for the Elementary Level)

1. Investigate magnetism through direct experience:

- 1.1 Predict whether an object will be attracted to a magnet.
- 1.2 Identify objects which can be attracted to magnets.
- 1.3 Identify substances which can be magnetized.
- 1.4 Locate the poles of various types of magnets.
- 1.5 Observe the attraction and repulsion of magnetic poles.
- 1.6 Identify some uses of magnets.
- 1.7 Discover the parts of a magnet where the attraction is the strongest.
- 1.8 Use a compass to determine the direction of the magnetic north pole.

3 Core Unit: Plant Growth (pp. 216-225 in Science: A Curriculum Guide for the Elementary Level)

1. Identify and describe the parts of a plant:

- 1.1 Identify the roots, stems, leaves, and flowers of plants.
- 1.2 Compare the flowers, stems, leaves, or flowers of various plants.
- 1.3 Observe and record changes in plants as they grow.

2. Describe how plants reproduce:

- 2.1 Observe and describe seeds.
- 2.2 Compare different types of seeds.

- 2.3 Identify the plants which produce different types of seeds.
- 2.4 Classify seeds.
- 2.5 Identify the conditions necessary for seed germination.
- 2.6 Investigate how seeds are propagated.
- 2.7 Use vegetative reproduction to produce new plants.

3. Recognize the role of agriculture in our society:

- 3.1 Identify some types of grain or seeds grown for food.
- 3.2 Identify the parts of different plants that can be used as food.
- 3.3 Prepare some food from a commercial.
- 3.4 Appreciate the importance of agriculture in Saskatchewan.
- 3.5 Recognize other uses for plants.

4 Core Unit: Weather (pp. 226-230 in Science: A Curriculum Guide for the Elementary Level)

1. Observe and record data:

- 1.1 Use a thermometer to measure air temperature.
- 1.2 Observe and record cloud patterns.
- 1.3 Take weather measurements.
- 1.4 Construct an instrument for obtaining measurements and collecting data about weather.

2. Describe weather:

- 2.1 Describe weather changes that occur from day to day.
- 2.2 Describe weather changes that occur with the seasons.

3. Explain the effects of weather:

- 3.1 Illustrate how living things adapt to the seasonal changes of the weather.
- 3.2 Investigate the relationship between cloud formations and weather.
- 3.3 Suggest why understanding weather is important.
- 3.4 Describe some effects of weather on agriculture.
- 3.5 Show how weather affects our daily lives.

5 Optional Unit: Air and Water (p. 231 in Science: A Curriculum Guide for the Elementary Level)

1. Recognize the importance of air and water to life:

- 1.1 Identify those places on a globe or map that depict water.
- 1.2 Distinguish between fresh and salt water.
- 1.3 Describe the water cycle.
- 1.4 Observe indirectly that air is all around us.
- 1.5 Explain that virtually all living things require air and water.

2. Recognize that polluted air and polluted water endanger life:

- 2.1 Identify some ways in which air and water can become polluted.
- 2.2 Describe some ways in which polluted air and water can be harmful.
- 2.3 Suggest some things that can be done to keep air and water from becoming polluted.

6 Optional Unit: Dinosaurs (pp. 232-233 in Science: A Curriculum Guide for the Elementary Level)**1. Describe some animals that lived on earth a long time ago:**

- 1.1 Describe how the earth might have been different a long time ago.
- 1.2 Compare the skeletal structures of two or more different dinosaurs.
- 1.3 Compare the skeletal structure of a dinosaur to a representation of that dinosaur as it might have appeared when it was alive.
- 1.4 Compare the characteristics of meat-eating and plant-eating dinosaurs.

2. Recognize how information about dinosaurs is obtained:

- 2.1 Explain how information regarding the bones, teeth, eggs, or footprints of dinosaurs have been left behind.
- 2.2 Build a model to show how one type of fossil is formed.

3. Appreciate that animals and plants are endangered today:

- 3.1 Explain what is meant by an endangered animal.
- 3.2 Give an example of an animal that has become extinct recently.
- 3.3 Identify several different types of living things that are endangered today.
- 3.4 Give some reasons why certain plants or animals have become endangered.
- 3.5 Suggest some ways in which people can help animals or plants that are endangered.

7 Optional Unit: Foods (p. 234 in Science: A Curriculum Guide for the Elementary Level)**1. Identify some of the sources of food:**

- 1.1 Recognize that food comes from plants and animals.
- 1.2 Identify the plants or animals that foods come from.
- 1.3 Classify foods according to their source.
- 1.4 List foods that are produced on farms.
- 1.5 List foods which come from fresh or salt water.
- 1.6 Identify foods that come from the stems, leaves, flowers, roots, fruits or seeds of plants.

2. Describe the four major food groups:

- 2.1 Classify foods according to the four major food groups.
- 2.2 Compare different foods within the same food group or in different groups.
- 2.3 Explain the importance of each food group in maintaining health.

3. Value the importance of food:

- 3.1 Demonstrate a preference for healthy foods.
- 3.2 Develop a preference for wholesome, natural foods.
- 3.3 Recognize the importance of a properly balanced diet.
- 3.4 Explain why "junk food" should be avoided.
- 3.5 Plan a healthy meal or snack.
- 3.6 Empathize with people throughout the world who suffer from hunger or malnutrition.
- 3.7 Participate in an ethnic festival of foods to celebrate various types of food eaten throughout the world.

8 Optional Unit: Measuring Matter (p. 235 in Science: A Curriculum Guide for the Elementary Level)**1. Measure length:**

- 1.1 Compare objects to determine their relative size.
 - 1.2 Sort objects according to size.
 - 1.3 Measure the length of an object using an appropriate measuring device.
 - 1.4 Estimate the length of objects and compare the estimates to the measured values.
 - 1.5 Express the length of an object in arbitrary units.
- 2. Measure volume:**
- 2.1 Recognize that mass is conserved when a liquid is poured from one container to another container having a different shape.
 - 2.2 Determine which of several containers is capable of holding the greatest amount of water.
 - 2.3 Measure the amount of sand or water that can be used to fill different types of containers.
 - 2.4 Express the volume of an object in arbitrary units.
- 3. Measure mass:**
- 3.1 Compare the mass of several different objects.
 - 3.2 Use a balance to measure the mass of different objects.
 - 3.3 Express the mass of an object in arbitrary units.
- 4. Apply standard units when measuring:**
- 4.1 Explain what a standard unit is.
 - 4.2 Suggest why people use standard units.
 - 4.3 Recognize that most measuring instruments use standard units.
 - 4.4 Identify standard SI units that are used for measuring length, volume, and mass.

9 Optional Unit: Oceans (p. 236 in Science: A Curriculum Guide for the Elementary Level)

- 1. Recognize the importance of the oceans of the world:**
- 1.1 Recognize that the largest bodies of water on the earth are oceans.
 - 1.2 Explain how the water in the oceans is different from the water in lakes and rivers.
 - 1.3 Recognize how the water cycle influences weather and life.
 - 1.4 Describe the movement of water in the oceans.
 - 1.5 Recognize similarities in landforms found on land and on the bottom of the oceans.
 - 1.6 Describe some ways in which the oceans are studied.
- 2. Appreciate the diversity of marine organisms:**
- 2.1 Describe how plants and animals are adapted to live in the oceans.
 - 2.2 Explain some of the benefits of marine organisms.
 - 2.3 Explain how water pollution affects the oceans.