Florida Science

Grade 2

Adopted 2008

The Practice of Science

1. **Raise questions about the natural world, investigate them in teams through free exploration and systematic observations, and generate appropriate explanations based on those explorations.** SC.2.N.1.1

2. **Compare the observations made by different groups using the same tools.** SC.2.N.1.2

3. **Ask "how do you know?" in appropriate situations and attempt reasonable answers when asked the same question by others.** SC.2.N.1.3

4. **Explain how particular scientific investigations should yield similar conclusions when repeated.** SC.2.N.1.4

5. **Distinguish between empirical observation (what you see, hear, feel, smell, or taste) and ideas or inferences (what you think).** SC.2.N.1.5

6. **Explain how scientists alone or in groups are always investigating new ways to solve problems.** SC.2.N.1.6

Access Point for Students with Significant Cognitive Disabilities

Independent

a. Ask questions and make observations about things in the natural world. SC.2.N.1.IN.A

b. Identify information about objects based on observation. SC.2.N.1.IN.B

c. Recognize that the results of a scientific activity should be the same when repeated SC.2.N.1.IN.C

d. Recognize that scientists work to solve problems. SC.2.N.1.IN.D

Supported

a. Answer yes and no questions and make observations about common objects and actions in the natural world. SC.2.N.1.SU.A

b. Identify characteristics of objects based on observation. SC.2.N.1.SU.B

c. Recognize that science activities can be repeated. SC.2.N.1.SU.C

d. Recognize that people work in science. SC.2.N.1.SU.D

Participatory

a. Request a change or help to solve a problem in the environment. SC.2.N.1.PA.A

b. Use senses to recognize objects. SC.2.N.1.PA.B

c. Recognize common objects in different environments. SC.2.N.1.PA.C

Earth Structures

1. **Recognize that Earth is made up of rocks. Rocks come in many sizes and shapes.** SC.2.E.6.1

2. **Describe how small pieces of rock and dead plant and animal parts can be the basis of soil and explain the process by which soil is formed.** SC.2.E.6.2

3. **Classify soil types based on color, texture (size of particles), the ability to retain water, and the ability to support the growth of plants.** SC.2.E.6.3

Access Point for Students with Significant Cognitive Disabilities

Independent

a. Sort rocks according to size and shape. SC.2.E.6.IN.A

b. Identify components of soil, such as dead plants and pieces of rock. SC.2.E.6.IN.B

c. Recognize soil types based on color (dark or light) and texture (size of particles). SC.2.E.6.IN.C

Supported

a. Sort rocks according to size. SC.2.E.6.SU.A

b. Identify small pieces of rock in the soil. SC.2.E.6.SU.B

c. Sort soil samples according to physical properties, such as color (dark or light) or texture (size of particles). SC.2.E.6.SU.C

Participatory

a. Recognize the ground in the environment. SC.2.E.6.PA.A

b. Distinguish examples of soil from other substances. SC.2.E.6.PA.B

Earth Systems and Patterns

1. **Compare and describe changing patterns in nature that repeat themselves, such as weather conditions including temperature and precipitation, day to day and season to season.** SC.2.E.7.1

2. **Investigate by observing and measuring, that the Sun's energy directly and indirectly warms the water, land, and air.** SC.2.E.7.2

3. **Investigate, observe and describe how water left in an open container disappears (evaporates), but water in a closed container does not disappear (evaporate).** SC.2.E.7.3

4. **Investigate that air is all around us and that moving air is wind.** SC.2.E.7.4

5. **State the importance of preparing for severe weather, lightning, and other weather related events.** SC.2.E.7.5

Access Point for Students with Significant Cognitive Disabilities

Independent

a. Identify common weather patterns associated with each season. SC.2.E.7.IN.A

b. Identify that the Sun heats the outside air and water. SC.2.E.7.IN.B

c. Recognize that water in an open container will disappear (evaporate). SC.2.E.7.IN.C

d. Identify effects of wind. SC.2.E.7.IN.D

e. Identify harmful consequences of being outside in severe weather, such as lightning, hurricanes, or tornados. SC.2.E.7.IN.E

Supported

a. Recognize types of weather and match to the weather outdoors. SC.2.E.7.SU.A

b. Recognize that items outside are heated by the Sun. SC.2.E.7.SU.B

c. Recognize that wet things will dry when they are left in the air. SC.2.E.7.SU.C

d. Recognize effects of wind. SC.2.E.7.SU.D

e. Recognize reasons for staying inside during severe weather, such as hurricanes and thunderstorms. SC.2.E.7.SU.E

Participatory

a. Recognize daily outdoor temperature as hot or cold. SC.2.E.7.PA.A

b. Distinguish between items that are wet and items that are dry. SC.2.E.7.PA.B

c. Indicate awareness of air moving. SC.2.E.7.PA.C

d. Recognize where to go to avoid severe weather, such as thunder and lightning. SC.2.E.7.PA.D

Properties of Matter

1. **Observe and measure objects in terms of their properties, including size, shape, color, temperature, weight, texture, sinking or floating in water, and attraction and repulsion of magnets.** SC.2.P.8.1

2. **Identify objects and materials as solid, liquid, or gas.** SC.2.P.8.2

3. **Recognize that solids have a definite shape and that liquids and gases take the shape of their container.** SC.2.P.8.3

4. **Observe and describe water in its solid, liquid, and gaseous states.** SC.2.P.8.4

5. **Measure and compare temperatures taken every day at the same time.** SC.2.P.8.5

6. **Measure and compare the volume of liquids using containers of various shapes and sizes.** SC.2.P.8.6

Access Point for Students with Significant Cognitive Disabilities

Independent

a. Identify objects by observable properties, such as, size, shape, color, SC.2.P.8.IN.A

b. Identify objects and materials as solid or liquid. SC.2.P.8.IN.B

c. Recognize that solids have a definite shape and liquids take the shape of their container. SC.2.P.8.IN.C

d. Describe and compare outside daily temperatures as warm or cold. SC.2.P.8.IN.D

e. Compare the volume of liquid in a variety of containers. SC.2.P.8.IN.E

Supported

a. Identify objects by observable properties, such as size, shape, and color. SC.2.P.8.SU.A

b. Recognize water in solid or liquid states. SC.2.P.8.SU.B

c. Recognize that solids have a definite shape. SC.2.P.8.SU.C

e. Recognize different volumes of liquids in identical containers. SC.2.P.8.SU.E

Participatory

a. Match objects by one observable property, such as size or color. SC.2.P.8.PA.A

b. Recognize water as a liquid. SC.2.P.8.PA.B

c. Recognize different containers that hold liquids. SC.2.P.8.PA.C

d. Recognize common objects or materials as warm or cold. SC.2.P.8.PA.D

Changes in Matter

1. **Investigate that materials can be altered to change some of their properties, but not all materials respond the same way to any one alteration.** SC.2.P.9.1

Access Point for Students with Significant Cognitive Disabilities

Independent

a. Explore and identify that observable properties of materials can be changed. SC.2.P.9.IN.A

Supported

a. Recognize changes in observable properties of materials. SC.2.P.9.SU.A

Participatory

a. Recognize that the appearance of an object or material has changed. SC.2.P.9.PA.A

Forms of Energy

1. **Discuss that people use electricity or other forms of energy to cook their food, cool or warm their homes, and power their cars.** SC.2.P.10.1

Access Point for Students with Significant Cognitive Disabilities

Independent

a. Identify ways people use electricity in their lives. SC.2.P.10.IN.A

Supported

a. Recognize a way people use electricity in their lives. SC.2.P.10.SU.A

Participatory

a. Activate a device that uses electricity. SC.2.P.10.PA.A

Forces and Changes in Motion

1. **Investigate the effect of applying various pushes and pulls on different objects.** SC.2.P.13.1
2. **Demonstrate that magnets can be used to make some things move without touching them.** SC.2.P.13.2
3. **Recognize that objects are pulled toward the ground unless something holds them up.** SC.2.P.13.3
4. **Demonstrate that the greater the force (push or pull) applied to an object, the greater the change in motion of the object.** SC.2.P.13.4

Access Point for Students with Significant Cognitive Disabilities

Independent

a. Observe and identify that pushing or pulling an object can change the direction of movement of the object. SC.2.P.13.IN.A

b. Observe and recognize that magnets can move some objects. SC.2.P.13.IN.B

c. Identify and demonstrate that an object will fall to the ground when dropped. SC.2.P.13.IN.C

d. Identify that pushing or pulling an object with more force will make the object go faster or farther. SC.2.P.13.IN.D

Supported

a. Identify that pushing or pulling an object makes it move. SC.2.P.13.SU.A

b. Use magnets to cause objects to move. SC.2.P.13.SU.B

c. Recognize that an object will fall to the ground when dropped. SC.2.P.13.SU.C

d. Recognize that pushing or pulling an object with more force will make the object go faster or farther. SC.2.P.13.SU.D

Participatory

a. Recognize that pushing and pulling an object makes it move. SC.2.P.13.PA.A

b. Indicate that an object has fallen. SC.2.P.13.PA.B

Organization and Development of Living Organisms

1. **Distinguish human body parts (brain, heart, lungs, stomach, muscles, and skeleton) and their basic functions.** SC.2.L.14.1

Access Point for Students with Significant Cognitive Disabilities

Independent

a. Identify major external body parts, such as hands and legs, and their uses. SC.2.L.14.IN.A

Supported

a. Match external body parts, such as a foot, to their uses. SC.2.L.14.SU.A

Participatory

a. Recognize one or more external body parts. SC.2.L.14.PA.A

Heredity and Reproduction

1. **Observe and describe major stages in the life cycles of plants and animals, including beans and butterflies.** SC.2.L.16.1

Access Point for Students with Significant Cognitive Disabilities

Independent

a. Observe and recognize the major stages in the life cycles of plants and animals. SC.2.L.16.IN.A

Supported

a. Observe and recognize the sequence of stages in the life cycles of common animals. SC.2.L.16.SU.A

Participatory

a. Recognize that offspring can be matched with their parents, such as a human baby with adult humans and a puppy with dogs. SC.2.L.16.PA.A

Interdependence

1. **Compare and contrast the basic needs that all living things, including humans, have for survival.** SC.2.L.17.1

2. **Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs.** SC.2.L.17.2

Access Point for Students with Significant Cognitive Disabilities

Independent

a. Identify the basic needs of living things, including water, food, and air. SC.2.L.17.IN.A

b. Recognize that many different kinds of living things are found in different habitats. SC.2.L.17.IN.B

Supported

a. Recognize that living things have basic needs, including water and food. SC.2.L.17.SU.A

b. Recognize that many kinds of living things are found in the environment. SC.2.L.17.SU.B

Participatory

a. Recognize that animals need water. SC.2.L.17.PA.A

b. Recognize common living things in the immediate environment. SC.2.L.17.PA.B