

Grade 3

Adopted 2008

The Practice of Science

- 1. Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.** SC.3.N.1.1

- 2. Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.** SC.3.N.1.2

- 3. Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.** SC.3.N.1.3

- 4. Recognize the importance of communication among scientists.** SC.3.N.1.4

- 5. Recognize that scientists question, discuss, and check each others' evidence and explanations.** SC.3.N.1.5

- 6. Infer based on observation.** SC.3.N.1.6

- 7. Explain that empirical evidence is information, such as observations or measurements, that is used to help validate explanations of natural phenomena.** SC.3.N.1.7

Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Ask questions, explore, observe, and identify outcomes. [SC.3.N.1.IN.A](#)
- b. Work with a group to make observations and identify results. [SC.3.N.1.IN.B](#)
- c. Record observations to describe findings using written or visual formats, such as picture stories. [SC.3.N.1.IN.C](#)
- d. Recognize that scientists share their knowledge and results with each other. [SC.3.N.1.IN.D](#)

Supported

- a. Ask literal questions, explore, observe, and share information. [SC.3.N.1.SU.A](#)
- b. Work with a partner to make observations. [SC.3.N.1.SU.B](#)
- c. Record observations to describe findings using dictated words and phrases and pictures. [SC.3.N.1.SU.C](#)
- d. Recognize that people work in different kinds of jobs related to science. [SC.3.N.1.SU.D](#)

Participatory

- a. Explore, observe, and recognize common objects in the natural world. [SC.3.N.1.PA.A](#)
- b. Assist with investigations with a partner. [SC.3.N.1.PA.B](#)
- c. Recognize that people share information. [SC.3.N.1.PA.C](#)

The Role of Theories, Laws, Hypotheses, and Models

- 1. Recognize that words in science can have different or more specific meanings than their use in everyday language; for example, energy, cell, heat/cold, and evidence.** [SC.3.N.3.1](#)
- 2. Recognize that scientists use models to help understand and explain how things work.** [SC.3.N.3.2](#)
- 3. Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.** [SC.3.N.3.3](#)

Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Recognize meanings of words used in science, such as energy, temperature, and gravity. [SC.3.N.3.IN.A](#)
- b. Use models to identify how things work. [SC.3.N.3.IN.B](#)
- c. Identify that models are representations of things found in the real world. [SC.3.N.3.IN.C](#)

Supported

- a. Recognize meanings of words used in science, such as telescope, environment, and solid. [SC.3.N.3.SU.A](#)
- b. Recognize that models represent real things. [SC.3.N.3.SU.B](#)

Participatory

- a. Recognize common objects related to science by name, such as ice, animal, and plant. [SC.3.N.3.PA.A](#)
- b. Recognize a model of a real object. [SC.3.N.3.PA.B](#)

Earth in Space and Time

- 1. Explain that stars can be different; some are smaller, some are larger, and some appear brighter than others; all except the Sun are so far away that they look like points of light.** [SC.3.E.5.1](#)
- 2. Identify the Sun as a star that emits energy; some of it in the form of light.** [SC.3.E.5.2](#)
- 3. Recognize that the Sun appears large and bright because it is the closest star to Earth.** [SC.3.E.5.3](#)
- 4. Explore the Law of Gravity by demonstrating that gravity is a force that can be overcome.** [SC.3.E.5.4](#)
- 5. Investigate that the number of stars that can be seen through telescopes is dramatically greater than those seen by the unaided eye.** [SC.3.E.5.5](#)

Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Recognize that stars in the sky look different from each other. [SC.3.E.5.IN.A](#)
- b. Recognize that the Sun is a star that gives off its own light. [SC.3.E.5.IN.B](#)
- c. Recognize that the Sun is the closest star to Earth. [SC.3.E.5.IN.C](#)
- d. Observe and describe ways to keep an object from falling due to gravity. [SC.3.E.5.IN.D](#)
- e. Recognize that stars appear larger and closer when seen through a telescope. [SC.3.E.5.IN.E](#)

Supported

- a. Recognize that all stars except the Sun appear very small. [SC.3.E.5.SU.A](#)
- b. Recognize that the Sun gives off light. [SC.3.E.5.SU.B](#)
- c. Recognize that the Sun is a star. [SC.3.E.5.SU.C](#)
- d. Observe and recognize ways to stop a falling object, such as catching a ball. [SC.3.E.5.SU.D](#)
- e. Recognize a telescope as a tool to view stars in space. [SC.3.E.5.SU.E](#)

Participatory

- a. Recognize stars in the sky. [SC.3.E.5.PA.A](#)
- b. Recognize that the Sun is bright. [SC.3.E.5.PA.B](#)
- c. Recognize that an object can be stopped from falling. [SC.3.E.5.PA.C](#)
- d. Match a familiar object enlarged by magnification. [SC.3.E.5.PA.D](#)

Earth Structures

- 1. Demonstrate that radiant energy from the Sun can heat objects and when the Sun is not present, heat may be lost.** [SC.3.E.6.1](#)

Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Identify that energy from the Sun heats objects. [SC.3.E.6.IN.A](#)

Supported

- a. Recognize that many things will get hot when left in the Sun. [SC.3.E.6.SU.A](#)

Participatory

- a. Distinguish between hot and cold objects. [SC.3.E.6.PA.A](#)

Properties of Matter

- 1. Measure and compare temperatures of various samples of solids and liquids.** [SC.3.P.8.1](#)

- 2. Measure and compare the mass and volume of solids and liquids.** [SC.3.P.8.2](#)
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3. Compare materials and objects according to properties such as size, shape, color, texture, and hardness. SC.3.P.8.3

Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Observe and identify the colder/hotter temperature measured on a thermometer. SC.3.P.8.IN.A
- b. Measure the weight of solids or liquids. SC.3.P.8.IN.B
- c. Group objects by two observable properties, such as size and shape or color and texture. SC.3.P.8.IN.C

Supported

- a. Recognize that a thermometer measures temperature (cold and hot). SC.3.P.8.SU.A
- b. Sort solid objects by weight (heavy and light). SC.3.P.8.SU.B
- c. Sort objects by an observable property, such as size, shape, color, and texture. SC.3.P.8.SU.C

Participatory

- a. Recognize the temperature of items, such as food, as cool or warm. SC.3.P.8.PA.A
 - b. Recognize the larger of two objects. SC.3.P.8.PA.B
 - c. Match objects by an observable property, such as size, shape, and color. SC.3.P.8.PA.C
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Changes in Matter

1. Describe the changes water undergoes when it changes state through heating and cooling by using familiar scientific terms such as melting, freezing, boiling, evaporation, and condensation. SC.3.P.9.1

Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Describe changes in the state of water as a result of freezing and melting. SC.3.P.9.IN.A

Supported

- a. Identify that water can change from solid to liquid state by heating. SC.3.P.9.SU.A

Participatory

- a. Recognize that ice can change to water. SC.3.P.9.PA.A
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Forms of Energy

1. Identify some basic forms of energy such as light, heat, sound, electrical, and mechanical. SC.3.P.10.1

2. Recognize that energy has the ability to cause motion or create change. SC.3.P.10.2

3. Demonstrate that light travels in a straight line until it strikes an object or travels from one medium to another. SC.3.P.10.3

4. Demonstrate that light can be reflected, refracted, and absorbed. SC.3.P.10.4

Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Recognize forms of energy, such as light, heat, electrical, and energy of motion. SC.3.P.10.IN.A
- b. Recognize examples of the use of energy, such as electrical (radio, freezer) and energy of motion (bowling, wind). SC.3.P.10.IN.B
- c. Identify that light may come from different sources, such as the Sun or electric lamp. SC.3.P.10.IN.C

Supported

- a. Recognize objects that use electricity (television) and the energy of motion (bowling ball). SC.3.P.10.SU.A
- b. Recognize examples of sources of light, such as the Sun or a flashlight. SC.3.P.10.SU.B

Participatory

- a. Recognize the change in the motion of an object. SC.3.P.10.PA.A
 - b. Distinguish light and dark. SC.3.P.10.PA.B
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Energy Transfer and Transformations

1. Investigate, observe, and explain that things that give off light often also give off heat. SC.3.P.11.1

2. Investigate, observe, and explain that heat is produced when one object rubs against another, such as rubbing one's hands together. SC.3.P.11.2

Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Identify that objects that give off light often give off heat. [SC.3.P.11.IN.A](#)
- b. Observe and identify that heat is produced when objects are rubbed together. [SC.3.P.11.IN.B](#)

Supported

- a. Recognize objects that give off both heat and light, such as a light bulb. [SC.3.P.11.SU.A](#)
- b. Observe and recognize that rubbing objects together causes heat. [SC.3.P.11.SU.B](#)

Participatory

- a. Recognize sources of light. [SC.3.P.11.PA.A](#)
 - b. Recognize sources of heat. [SC.3.P.11.PA.B](#)
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Organization and Development of Living Organisms

- 1. Describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction.** [SC.3.L.14.1](#)
 - 2. Investigate and describe how plants respond to stimuli (heat, light, gravity), such as the way plant stems grow toward light and their roots grow downward in response to gravity.** [SC.3.L.14.2](#)
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Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Identify the major parts of a plant, including seed, root, stem, leaf, and flower, and their functions. [SC.3.L.14.IN.A](#)
- b. Identify behaviors of plants that show they are growing. [SC.3.L.14.IN.B](#)

Supported

- a. Identify the major parts of a plant, such as the root, stem, leaf, and flower. [SC.3.L.14.SU.A](#)
- b. Recognize that plants grow toward light and roots grow down in the soil. [SC.3.L.14.SU.B](#)

Participatory

- a. Recognize the leaf and flower of a plant. [SC.3.L.14.PA.A](#)
 - b. Recognize that plants grow. [SC.3.L.14.PA.B](#)
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Diversity and Evolution of Living Organisms

- 1. Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors.** [SC.3.L.15.1](#)

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- 2. Classify flowering and nonflowering plants into major groups such as those that produce seeds, or those like ferns and mosses that produce spores, according to their physical characteristics.** SC.3.L.15.2
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Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Classify animals by a similar physical characteristic, such as fur, feathers, and number of legs. SC.3.L.15.IN.A
- b. Classify parts of plants into groups based on physical characteristics, such as classifying leaves by shape. SC.3.L.15.IN.B

Supported

- a. Sort common animals by observable characteristics. SC.3.L.15.SU.A
- b. Sort common plants by observable characteristics. SC.3.L.15.SU.B

Participatory

- a. Match animals that are the same. SC.3.L.15.PA.A
 - b. Match plants that are the same. SC.3.L.15.PA.B
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Interdependence

- 1. Describe how animals and plants respond to changing seasons.** SC.3.L.17.1
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- 2. Recognize that plants use energy from the Sun, air, and water to make their own food.** SC.3.L.17.2
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Access Point for Students with Significant Cognitive Disabilities

Independent

- a. Identify changes in the appearance of animals and plants throughout the year. SC.3.L.17.IN.A
- b. Recognize that most plants make their own food. SC.3.L.17.IN.B

Supported

- a. Recognize that the appearance of some plants in the environment changes throughout the year. SC.3.L.17.SU.A
- b. Recognize that plants need light to grow. SC.3.L.17.SU.B

Participatory

- a. Recognize clothing worn by humans in different weather (seasons). SC.3.L.17.PA.A
- b. Recognize that plants need water. SC.3.L.17.PA.B