

# 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

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- 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

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

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

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

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

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- 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

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## 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](#)

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## 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](#)

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### 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](#)

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### 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](#)

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**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](#)
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**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](#)
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**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](#)
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**Properties of Matter**

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

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**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**

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**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**

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

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**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

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

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**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

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**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

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**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