Course Title: Science - Grade 4
Course Number: 5020050
Course Abbreviated Title: SCIENCE GRADE 4
Course Path: Section: Grades PreK to 12 Education Courses Grade Group: Grades PreK to 5 Education Courses Subject: Science SubSubject: General Sciences
Course length: Year (Y)
Course Type: Core
Status: Draft - Board Approval Pending

Special Notes:

Instructional Practices

Teaching from a range of complex text is optimized when teachers in all subject areas implement the following strategies on a routine basis:

1. Ensuring wide reading from complex text that varies in length.
2. Making close reading and rereading of texts central to lessons.
3. Emphasizing text-specific complex questions, and cognitively complex tasks, reinforce focus on the text and cultivate independence.
4. Emphasizing students supporting answers based upon evidence from the text.
5. Providing extensive research and writing opportunities (claims and evidence). Integration of Common Core Standards for Mathematical Practice.

Additional content addressed on the Grade 4 NAEP Science assessment includes:

- Earth materials have properties that make them useful in solving human problems and enhancing the quality of life. (SC.6.E.6.2)
- The Sun warms the land, air, and water and helps plants grow. (SC.3.E.6.1; SC.3.L.17.2)
- Weather changes from day to day and during the seasons. (SC.2.E.7.1)
- Scientists use tools for observing, recording, and predicting weather changes. (SC.5.E.7.3; SC.5.E.7.4)
- Plants and animals have life cycles. (SC.2.L.16.1)
- Environment changes impact organism survival and reproduction. (SC.5.L.15.1)
- Organisms need food, water, air, and shelter. (SC.1.L.17.1)
- Some objects are composed of a single substance; others are composed of more than one substance. (SC.5.P.8.3)
- Heat (thermal energy) results when substances burn, materials rub against each other, and electricity flows though wires. (SC.3.P.11.2)
- Metals are conductors of heat and electricity. (SC.3.P.11.2)
- Increasing the temperature of any substance requires the addition of energy.
- Electricity flowing through an electrical circuit produces magnetic effects in the wires. Energy is transferred to the surroundings as light, sound, and heat (thermal energy). (SC.5.P.11.1; SC.5.P.11.2)

The NAEP frameworks for Science may be accessed at http://www.nagb.org/publications/frameworks/science-09.pdf
HE.4.C.1 Comprehend concepts related to health promotion and disease prevention to enhance health.

HE.4.C.6: Identify the human body parts and organs that work together to form healthy body systems.
Cognitive Complexity: N/A | Date Adopted or Revised: 12/08
Belongs to: Comprehend concepts related to health promotion and disease prevention to enhance health.
Remarks/Examples
Some examples may include muscular and skeletal systems, circulatory and respiratory systems, endocrine and reproductive systems.

LACC.4.RI.1 Key Ideas and Details

LACC.4.RI.1.3: Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 12/10
Belongs to: Key Ideas and Details

LACC.4.RI.2 Craft and Structure

LACC.4.RI.2.4: Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.
Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 12/10
Belongs to: Craft and Structure

LACC.4.RI.4 Range of Reading and Level of Text Complexity

LACC.4.RI.4.10: By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 12/10
Belongs to: Range of Reading and Level of Text Complexity

LACC.4.SL.1 Comprehension and Collaboration

LACC.4.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others’ ideas and expressing their own clearly.

- a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.
- b. Follow agreed-upon rules for discussions and carry out assigned roles.
- c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others.
- d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 12/10
Belongs to: Comprehension and Collaboration

LACC.4.W.3 Research to Build and Present Knowledge

LACC.4.W.3.8: Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 12/10
Belongs to: Research to Build and Present Knowledge

LACC.4.W.3.9: Draw evidence from literary or informational texts to support analysis, reflection, and research.

- a. Apply grade 4 Reading standards to literature (e.g., “Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character’s thoughts, words, or actions].”).
- b. Apply grade 4 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”).

Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 12/10
Belongs to: Research to Build and Present Knowledge

MACC.4.MD.1 Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

MACC.4.MD.1.1: Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches.
### MACC.4.MD.2 Represent and interpret data.

**MACC.4.MD.2.4:** Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. *For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.*

Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 12/10
Belongs to: Represent and Interpret data.

### SC.4.E.5 Earth in Space and Time

**SC.4.E.5.1:** Observe that the patterns of stars in the sky stay the same although they appear to shift across the sky nightly, and different stars can be seen in different seasons.

Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
Belongs to: Earth in Space and Time.
Remarks/Examples

**CCSS Connections:** MACC.K12.MP.2: Reason abstractly and quantitatively.

**SC.4.E.5.2:** Describe the changes in the observable shape of the moon over the course of about a month.

Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
Belongs to: Earth in Space and Time.

**SC.4.E.5.3:** Recognize that Earth revolves around the Sun in a year and rotates on its axis in a 24-hour day.

Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
Belongs to: Earth in Space and Time.
Remarks/Examples

**CCSS Connections:** MACC.K12.MP.2: Reason abstractly and quantitatively.

**SC.4.E.5.4:** Relate that the rotation of Earth (day and night) and apparent movements of the Sun, Moon, and stars are connected.

Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
Belongs to: Earth in Space and Time.
Remarks/Examples

Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.4.E.5.1, SC.4.E.5.2, and SC.4.E.5.3.


**SC.4.E.5.5:** Investigate and report the effects of space research and exploration on the economy and culture of Florida.

Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
Belongs to: Earth in Space and Time.

### SC.4.E.6 Earth Structures

**SC.4.E.6.1:** Identify the three categories of rocks: igneous (formed from molten rock); sedimentary (pieces of other rocks and fossilized organisms); and metamorphic (formed from heat and pressure).

Cognitive Complexity: Level 1: Recall | Date Adopted or Revised: 02/08
Belongs to: Earth Structures.

**SC.4.E.6.2:** Identify the physical properties of common earth-forming minerals, including hardness, color, luster, cleavage, and streak color, and recognize the role of minerals in the formation of rocks.

Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
Belongs to: Earth Structures.
Remarks/Examples

Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.4.E.6.1.

**SC.4.E.6.3:** Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable.

Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
Belongs to: Earth Structures.
Remarks/Examples

Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.4.E.6.1.

**SC.4.E.6.4:** Describe the basic differences between physical weathering (breaking down of rock by wind, water, ice, temperature change, and plants) and erosion (movement of rock by gravity, wind, water, and ice).

Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
Belongs to: Earth Structures.
Remarks/Examples

Annually assessed on Grade 5 Science FCAT 2.0.

**SC.4.E.6.5:** Investigate how technology and tools help to extend the ability of humans to observe very small things and very large things.

Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
Belongs to: Earth Structures.
Remarks/Examples
### SC.4.E.6.6
Identify resources available in Florida (water, phosphate, oil, limestone, silicon, wind, and solar energy).

**Cognitive Complexity:** Level 1: Recall | Date Adopted or Revised: 02/08
**Begins With:** Earth Structures

### SC.4.L.16 Heredity and Reproduction

#### SC.4.L.16.1
Identify processes of sexual reproduction in flowering plants, including pollination, fertilization (seed production), seed dispersal, and germination.

**Cognitive Complexity:** Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
**Begins With:** Heredity and Reproduction

#### SC.4.L.16.2
Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment.

**Cognitive Complexity:** Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
**Begins With:** Heredity and Reproduction

**Remarks/Examples**
Integrate HE.4.C.1.6. Identify the human body parts and organs that work together to form healthy body systems.

#### SC.4.L.16.3
Recognize that animal behaviors may be shaped by heredity and learning.

**Cognitive Complexity:** Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
**Begins With:** Heredity and Reproduction

#### SC.4.L.16.4
Compare and contrast the major stages in the life cycles of Florida plants and animals, such as those that undergo incomplete and complete metamorphosis, and flowering and nonflowering seed-bearing plants.

**Cognitive Complexity:** Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
**Begins With:** Heredity and Reproduction

**Remarks/Examples**
Annually assessed on Grade 5 Science FCAT 2.0.

### SC.4.L.17 Interdependence

#### SC.4.L.17.1
Compare the seasonal changes in Florida plants and animals to those in other regions of the country.

**Cognitive Complexity:** Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
**Begins With:** Interdependence

#### SC.4.L.17.2
Explain that animals, including humans, cannot make their own food and that when animals eat plants or other animals, the energy stored in the food source is passed to them.

**Cognitive Complexity:** Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
**Begins With:** Interdependence

**Remarks/Examples**
Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.L.17.2 and SC.4.L.17.2.

#### SC.4.L.17.3
Trace the flow of energy from the Sun as it is transferred along the food chain through the producers to the consumers.

**Cognitive Complexity:** Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
**Begins With:** Interdependence

**Remarks/Examples**
Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.L.17.2 and SC.4.L.17.2.

#### SC.4.L.17.4
Recognize ways plants and animals, including humans, can impact the environment.

**Cognitive Complexity:** Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
**Begins With:** Interdependence

**Remarks/Examples**
Introduce the impacts of invasive species, such as Brazilian pepper, Cuban anole, Kudzu, Australian pine, non-native pets released into wild (Burmeese python). Ocean pollution resulting from discharge of sewage, toxic chemicals, manufacturing wastes, fertilizers, soaps, detergents, runoff and insecticides; population growth causes consumption of limited resources and land use expansion to accommodate for more people; animal extinction (endangered and threatened species).

### SC.4.N.1 The Practice of Science

#### SC.4.N.1.1
Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.

**Cognitive Complexity:** Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
**Begins With:** The Practice of Science

**Remarks/Examples**
* CCSS Connections: LACC.4.RI.1.3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

** * CCSS Connections: MACC.K12.MP.1: Make sense of problems and persevere in solving them; and, MACC.K12.MP.3: Construct viable arguments and critique the reasoning of others.

#### SC.4.N.1.2
Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups.
### SC.N.1.3

**Explain that science does not always follow a rigidly defined method ("the scientific method") but that science does involve the use of observations and empirical evidence.**

- **Remarks/Examples**
  
  * CCSS Connections: LACC.4.SL.1.1. Engage effectively in a range of collaborative discussions with diverse partners on grade 4 topics and texts, building on others’ ideas and expressing their own clearly.
  

### SC.N.1.4

**Attempt reasonable answers to scientific questions and cite evidence in support.**

- **Remarks/Examples**
  
  * CCSS Connections: LACC.4.W.3.8. Recall relevant information from experiences or gather relevant information from print and digital sources: take notes and categorize information, and provide a list of sources. LACC.4.W.3.9. Draw evidence from literary or informational texts to support analysis, reflection, and research.
  
  ** CCSS Connections: MACC.K12.MP.1: Make sense of problems and persevere in solving them; and, MACC.K12.MP.2: Reason abstractly and quantitatively.

### SC.N.1.5

**Compare the methods and results of investigations done by other classmates.**

- **Remarks/Examples**
  

### SC.N.1.6

**Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.**

- **Remarks/Examples**
  

### SC.N.1.7

**Recognize and explain that scientists base their explanations on evidence.**

- **Remarks/Examples**
  
  ** CCSS Connections: MACC.K12.MP.1: Make sense of problems and persevere in solving them.

### SC.N.1.8

**Recognize that science involves creativity in designing experiments.**

- **Remarks/Examples**
  
  ** CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically.

### SC.N.2 The Characteristics of Scientific Knowledge

### SC.N.2.1

**Explain that science focuses solely on the natural world.**

- **Remarks/Examples**
  
  ** SC.N.2 The Characteristics of Scientific Knowledge

### SC.N.3 The Role of Theories, Laws, Hypotheses, and Models

### SC.N.3.1

**Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.**

- **Remarks/Examples**
  

### SC.P.10 Forms of Energy

### SC.P.10.1

**Observe and describe some basic forms of energy, including light, heat, sound, electrical, and the energy of motion.**

- **Remarks/Examples**
  
  ** SC.P.10 Forms of Energy
| SC.4.P.10.2 | Investigate and describe that energy has the ability to cause motion or create change. Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08 | Belongs to: Forms of Energy |
| SC.4.P.10.3 | Investigate and explain that sound is produced by vibrating objects and that pitch depends on how fast or slow the object vibrates. Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08 | Belongs to: Forms of Energy |
| SC.4.P.10.4 | Describe how moving water and air are sources of energy and can be used to move things. Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08 | Belongs to: Forms of Energy |
| SC.4.P.11 Energy Transfer and Transformations | Recognize that heat flows from a hot object to a cold object and that heat flow may cause materials to change temperature. Cognitive Complexity: Level 1: Recall | Date Adopted or Revised: 02/08 | Belongs to: Energy Transfer and Transformations |
| | Identify common materials that conduct heat well or poorly. Cognitive Complexity: Level 1: Recall | Date Adopted or Revised: 02/08 | Belongs to: Energy Transfer and Transformations |
| SC.4.P.12 Motion of Objects | Recognize that an object in motion always changes its position and may change its direction. Cognitive Complexity: Level 1: Recall | Date Adopted or Revised: 02/08 | Belongs to: Motion of Objects |
| | Investigate and describe that the speed of an object is determined by the distance it travels in a unit of time and that objects can move at different speeds. Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08 | Belongs to: Motion of Objects |
| SC.4.P.8 Properties of Matter | Measure and compare objects and materials based on their physical properties including: mass, shape, volume, color, hardness, texture, odor, taste, attraction to magnets. Cognitive Complexity: Level 1: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08 | Belongs to: Properties of Matter |
| SC.4.P.8.2 | Identify properties and common uses of water in each of its states. Cognitive Complexity: Level 1: Recall | Date Adopted or Revised: 02/08 | Belongs to: Properties of Matter |
| SC.4.P.8.3 | Explore the Law of Conservation of Mass by demonstrating that the mass of a whole object is always the same as the sum of the masses of its parts. Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08 | Belongs to: Properties of Matter |
| SC.4.P.8.4 | Investigate and describe that magnets can attract magnetic materials and attract and repel other magnets. Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08 | Belongs to: Properties of Matter |
| SC.4.P.9 Changes in Matter | Identify some familiar changes in materials that result in other materials with different characteristics, such as decaying animal or plant matter, burning, rusting, and cooking. Cognitive Complexity: Level 1: Recall | Date Adopted or Revised: 02/08 | Belongs to: Changes in Matter |

RELATED GLOSSARY TERM DEFINITIONS (50)

<p>| Attraction | The electric or magnetic force exerted by oppositely charged particles, tending to draw or hold the particles together. |
| <strong>Axis:</strong> | The imaginary line on which an object rotates (e.g., Earth’s axis runs through Earth between the North Pole and the South Pole); an imaginary straight line that runs through a body; a reference to the line in a coordinate system or graph. |
| <strong>Base:</strong> | A substance that increases the OH– concentration of a solution; a proton acceptor. |
| <strong>Conservation of Mass:</strong> | The principle that mass cannot be created or destroyed; also conservation of matter. |
| <strong>Consumer:</strong> | An organism that feeds on other organisms for food. |
| <strong>Energy:</strong> | The capacity to do work. |
| <strong>Environment:</strong> | The sum of conditions affecting an organism, including all living and nonliving things in an area, such as plants, animals, water, soil, weather, landforms, and air. |
| <strong>Erosion:</strong> | The wearing away of Earth’s surface by the breakdown and transportation of rock and soil. |
| <strong>Experiment:</strong> | A procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis. |
| <strong>Fertilization:</strong> | The act or process of initiating biological reproduction by insemination or pollination. |
| <strong>Food chain:</strong> | Transfer of energy through various stages as a result of feeding patterns of organisms. |
| <strong>Germination:</strong> | The beginning of growth, as of a seed, spore, or bud. The germination of most seeds and spores occurs in response to warmth and water. |
| <strong>Gravity:</strong> | The force of attraction between any two objects. |
| <strong>Heat:</strong> | Energy that transfers between substances because of a temperature difference between the substances; the transfer of energy is always from the warmer substance to the cooler substance. |
| <strong>Heredity:</strong> | The passage of biological traits or characteristics from parents to offspring through the inheritance of genes. |
| <strong>Igneous:</strong> | A type of rock that forms from molten or partly molten material that cools and hardens. |
| <strong>Inference:</strong> | The act of reasoning from factual knowledge or evidence. |
| <strong>Investigation:</strong> | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| <strong>Law:</strong> | A statement that describes invariable relationships among phenomena under a specified set of conditions. |
| <strong>Life cycle:</strong> | The entire sequence of events in an organism’s growth, development, and reproduction. |
| <strong>Light:</strong> | Electromagnetic radiation that lies within the visible range. |
| <strong>Magnet:</strong> | An object that produces a magnetic field and that has the property, either natural or induced, of attracting iron or steel. |
| <strong>Magnetic:</strong> | Having the property of attracting iron and certain other materials by virtue of a field of force. |
| <strong>Mass:</strong> | The amount of matter an object contains. |
| <strong>Matter:</strong> | Substance that possesses inertia and occupies space, of which all objects are constituted. |
| <strong>Metamorphic:</strong> | A type of rock that forms from existing rock because of extreme changes caused by heat, pressure, or chemical environments. |
| <strong>Metamorphosis:</strong> | Change in the form and often the habits of an animal during its development after birth or hatching. The transformation of a maggot into an adult fly and of a tadpole into an adult frog are examples of metamorphosis. |
| <strong>Mineral:</strong> | A naturally occurring, homogeneous inorganic solid substance having a definite chemical composition and characteristic crystalline structure, color, and hardness. |
| <strong>Model:</strong> | A systematic description of an object or phenomenon that shares important characteristics with the object or phenomenon. Scientific models can be material, visual, mathematical, or computational and are often used in the construction of scientific theories. |
| <strong>Moon:</strong> | A natural satellite that revolves around a planet. |
| <strong>Motion:</strong> | The act or process of changing position and/or direction. |
| <strong>Observation:</strong> | What one has observed using senses or instruments. |
| <strong>Organ:</strong> | A structure containing different tissues that are organized to carry out a specific function of the body (e.g., heart, lungs, brain, etc.). |
| <strong>Organism:</strong> | An individual form of life of one or more cells that maintains various vital processes necessary for life. |
| <strong>Pollination:</strong> | The process by which plant pollen is transferred from the male reproductive organs to the female reproductive organs to form seeds. In flowering plants, pollen is transferred from the anther to the stigma by vectors such as the wind or insects. |
| <strong>Pollution:</strong> | Any alteration of the natural environment producing a condition harmful to living organisms; may occur naturally or as a result of human activities. |
| <strong>Producer:</strong> | An organism, usually a plant or bacterium, that produces organic compounds from simple inorganic molecules and energy (typically light energy) from the environment. |
| <strong>Reflection:</strong> | The bouncing off or turning back of light, sound, or heat from a surface. |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scientific method</td>
<td>A process that uses science process skills as tools to gather, organize, analyze, and communicate information.</td>
</tr>
<tr>
<td>Scientist</td>
<td>A person with expert knowledge of one or more sciences, that engages in processes to acquire and communicate knowledge.</td>
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<tr>
<td>Season</td>
<td>One of four natural divisions of the year—spring, summer, autumn, and winter—in temperate zones. Each season has its own characteristic weather and lasts approximately three months. The change in the seasons is brought about by the shift in the angle at which the Sun's rays strike the Earth. This angle changes as the Earth orbits in its yearly cycle around the Sun due to the tilt of the Earth's axis.</td>
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<tr>
<td>Sedimentary</td>
<td>Rock formed from layers of sediment that overlay and squeeze together or are chemically combined.</td>
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<tr>
<td>Sense</td>
<td>Any of the faculties by which stimuli from outside or inside the body are received and felt, as the faculties of hearing, sight, smell, touch, taste, and equilibrium.</td>
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<tr>
<td>Sexual reproduction</td>
<td>Reproduction involving the union of male and female gametes producing an offspring with traits from both parents.</td>
</tr>
<tr>
<td>Space</td>
<td>The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth's atmosphere.</td>
</tr>
<tr>
<td>Speed</td>
<td>Amount of distance traveled divided by time taken; the time-rate at which any physical process takes place.</td>
</tr>
<tr>
<td>Sun</td>
<td>The closest star to Earth and the center of our solar system.</td>
</tr>
<tr>
<td>Vibration</td>
<td>A periodic and repetitive movement around an equilibrium point.</td>
</tr>
<tr>
<td>Volume</td>
<td>A measure of the amount of space an object takes up; also the loudness of a sound or signal.</td>
</tr>
<tr>
<td>Weight</td>
<td>The force with which a body is attracted to Earth or another celestial body, equal to the product of the object's mass and the acceleration of gravity.</td>
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