### Standards (40)

**HE.2.B.3 Demonstrate the ability to use decision-making skills to enhance health.**

**HE.2.B.3:** Name healthy options to health-related issues or problems.

Cognitive Complexity: N/A | Date Adopted or Revised: 12/08

Belongs to: Demonstrate the ability to use decision making skills to enhance health.

Remarks/Examples

| Some examples may include use of safety equipment, personal safety, peer cooperation, communication, food choices. |

**HE.2.C.1 Comprehend concepts related to health promotion and disease prevention to enhance health.**

**HE.2.C.1.6:** Recognize the locations and functions of major human organs.

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 heart to pump blood, lungs to breathe air, muscles to move the body. |

**LACC.2.RI.1 Key Ideas and Details**

**LACC.2.RI.1.3:** Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.

Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 12/10

Belongs to: Key Ideas and Details.

**LACC.2.RI.2 Craft and Structure**

**LACC.2.RI.2.4:** Determine the meaning of words and phrases in a text relevant to a grade 2 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.2.RI.4 Range of Reading and Level of Text Complexity**

**LACC.2.RI.4.10:** By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 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.2.SL.1 Comprehension and Collaboration**

**LACC.2.SL.1.1:** Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.

a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).
### LACC.2.W.3 Research to Build and Present Knowledge

#### LACC.2.W.3.7
- Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
  - Cognitive Complexity: Level 4: Extended Thinking & Complex Reasoning | Date Adopted or Revised: 12/10
  - Belongs to: [Research to Build and Present Knowledge](#)

#### LACC.2.W.3.8
- Recall information from experiences or gather information from provided sources to answer a question.
  - Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 12/10
  - Belongs to: [Research to Build and Present Knowledge](#)

### MACC.2.MD.4 Represent and Interpret Data

#### MACC.2.MD.4.10
- Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.
  - Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 12/10
  - Belongs to: [Represent and Interpret data](#)

#### MACC.2.MD.4.9
- Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
  - Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 12/10
  - Belongs to: [Represent and Interpret data](#)

### SC.E.6 Earth Structures

#### SC.E.6.1
- Recognize that Earth is made up of rocks. Rocks come in many sizes and shapes.
  - Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
  - Belongs to: [Earth Structures](#)
  - Remarks/Examples
    - Sizes - boulder, stone, pebble, sand, granular.

#### SC.E.6.2
- 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.
  - Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
  - Belongs to: [Earth Structures](#)

#### SC.E.6.3
- Classify soil types based on color, texture (size of particles), the ability to retain water, and the ability to support the growth of plants.
  - Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
  - Belongs to: [Earth Structures](#)

### SC.E.7 Earth Systems and Patterns

#### SC.E.7.1
- 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.
  - Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
  - Belongs to: [Earth Systems and Patterns](#)

#### SC.E.7.2
- Investigate by observing and measuring, that the Sun's energy directly and indirectly warms the water, land, and air.
  - Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
  - Belongs to: [Earth Systems and Patterns](#)
  - Remarks/Examples

#### SC.E.7.3
- Investigate, observe and describe how water left in an open container disappears (evaporates), but water in a closed container does not disappear (evaporate).
  - Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
  - Belongs to: [Earth Systems and Patterns](#)

#### SC.E.7.4
- Investigate that air is all around us and that moving air is wind.
  - Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Revised: 02/08
  - Belongs to: [Earth Systems and Patterns](#)

#### SC.E.7.5
- State the importance of preparing for severe weather, lightning, and other weather related events.
  - Cognitive Complexity: Level 1: Recall | Date Adopted or Revised: 02/08
  - Belongs to: [Earth Systems and Patterns](#)

### SC.C.L.14 Organization and Development of Living Organisms

#### SC.C.L.14.1
- Distinguish human body parts (brain, heart, lungs, stomach, muscles, and skeleton) and their basic functions.
  - Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Revised: 02/08
SC.2.L.16 Heredity and Reproduction

SC.2.L.16.1: Observe and describe major stages in the life cycles of plants and animals, including beans and butterflies.
Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Reviewed: 02/08
Belongs to: Heredity and Reproduction
Remarks/Examples

Other examples for life cycles: peanuts, frogs and meal worms.

SC.2.L.17 Interdependence

SC.2.L.17.1: Compare and contrast the basic needs that all living things, including humans, have for survival.
Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Reviewed: 02/08
Belongs to: Interdependence
Remarks/Examples

SC.2.L.17.2: 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.
Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Reviewed: 02/08
Belongs to: Interdependence
Remarks/Examples

Build on knowledge from grade 1 (food, air, water, space). Animals need air, food, water, shelter, and plants need air, water, nutrients, light.

SC.2.N.1 The Practice of Science

SC.2.N.1.1: Raise questions about the natural world, investigate them in teams through free exploration and systematic observations, and generate appropriate explanations based on those explorations.
Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Reviewed: 02/08
Belongs to: The Practice of Science

SC.2.N.1.2: Compare the observations made by different groups using the same tools.
Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Reviewed: 02/08
Belongs to: The Practice of Science
Remarks/Examples

* CCSS Connections: LACC.2.SL.1.1. Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in groups.

* * MACC.K12.MP.5: Use appropriate tools strategically.

SC.2.N.1.3: Ask “how do you know?” in appropriate situations and attempt reasonable answers when asked the same question by others.
Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Reviewed: 02/08
Belongs to: The Practice of Science
Remarks/Examples

* CCSS Connections: LACC.2.W.3.B. Recall information from experiences or gather information from provided sources to answer a question.

SC.2.N.1.4: Explain how particular scientific investigations should yield similar conclusions when repeated.
Cognitive Complexity: Level 3: Strategic Thinking & Complex Reasoning | Date Adopted or Reviewed: 02/08
Belongs to: The Practice of Science
Remarks/Examples

* CCSS Connections: MACC.2.MD.4.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.

SC.2.N.1.5: Distinguish between empirical observation (what you see, hear, feel, smell, or taste) and ideas or inferences (what you think).
Cognitive Complexity: Level 2: Basic Application of Skills & Concepts | Date Adopted or Reviewed: 02/08
Belongs to: The Practice of Science
Remarks/Examples

* * CCSS Connections: MACC.K12.MP.5: Use appropriate tools strategically.

SC.2.N.1.6: Explain how scientists alone or in groups are always investigating new ways to solve problems.
### SC.2.P.10 Forms of Energy

<table>
<thead>
<tr>
<th>SC.2.P.10.1</th>
<th>Discuss that people use electricity or other forms of energy to cook their food, cool or warm their homes, and power their cars.</th>
</tr>
</thead>
</table>

### SC.2.P.13 Forces and Changes in Motion

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

### SC.2.P.8 Properties of Matter

<table>
<thead>
<tr>
<th>SC.2.P.8.1</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC.2.P.8.2</td>
<td>Identify objects and materials as solid, liquid, or gas.</td>
</tr>
<tr>
<td>SC.2.P.8.3</td>
<td>Recognize that solids have a definite shape and that liquids and gases take the shape of their container.</td>
</tr>
<tr>
<td>SC.2.P.8.4</td>
<td>Observe and describe water in its solid, liquid, and gaseous states.</td>
</tr>
<tr>
<td>SC.2.P.8.5</td>
<td>Measure and compare temperatures taken every day at the same time.</td>
</tr>
<tr>
<td>SC.2.P.8.6</td>
<td>Measure and compare the volume of liquids using containers of various shapes and sizes.</td>
</tr>
</tbody>
</table>

### SC.2.P.9 Changes in Matter

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

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

| **Attraction**: | The electric or magnetic force exerted by oppositely charged particles, tending to draw or hold the particles together. |
| **Electricity**: | The physical phenomena arising from the behavior of electrons and protons that is caused by the attraction of particles with opposite charges and the repulsion of particles with the same charge. |
| **Energy**: | The capacity to do work. |
| **Force**: | A vector quantity that exists between two objects and, when unbalanced by another force, causes changes in velocity of objects in the direction of its application; a push or pull. |
| **Gas**: | One of the fundamental states of matter in which the molecules do not have a fixed volume or shape. |
| **Habitat**: | A place in an ecosystem where an organism normally lives. |
| **Inference**: | The act of reasoning from factual knowledge or evidence. |
| **Investigation**: | A systematic process that uses various types of data and logic and reasoning to better understand something or answer a question. |
| **Life cycle**: | The entire sequence of events in an organism’s growth, development, and reproduction. |
| **Light**: | Electromagnetic radiation that lies within the visible range. |
| **Liquid**: | One of the fundamental states of matter with a definite volume but no definite shape. |
| **Magnet**: | An object that produces a magnetic field and that has the property, either natural or induced, of attracting iron or steel. |
| **Mass**: | The amount of matter an object contains. |
| **Motion**: | The act or process of changing position and/or direction. |
| **Observation**: | What one has observed using senses or instruments. |
| **Organ**: | A structure containing different tissues that are organized to carry out a specific function of the body (e.g., heart, lungs, brain, etc.) |
| **Power**: | The rate at which work is done, expressed as the amount of work per unit time and commonly measured in units such as the watt and horsepower. |
| **Precipitation**: | In meteorology, a form of water, such as rain, snow, or sleet that condenses from the atmosphere, becomes too heavy to remain suspended, and falls to the Earth’s surface. |
| **Repulsion**: | The tendency of particles or bodies of the same electric charge or magnetic polarity to separate. |
| **Scientist**: | A person with expert knowledge of one or more sciences, that engages in processes to acquire and communicate knowledge. |
| **Season**: | 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. |
| **Sense**: | 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. |
| **Skeleton**: | The internal structure of vertebrate animals, composed of bone or cartilage, that supports the body, serves as a framework for the attachment of muscles, and protects the vital organs and associated structures. |
| **Solid**: | Having a definite shape and a definite volume; one of the fundamental states of matter. |
| **Space**: | The limitless expanse where all objects and events occur. Outer space is the region of the universe beyond Earth’s atmosphere. |
| **Sun**: | The closest star to Earth and the center of our solar system. |
| **Volume**: | A measure of the amount of space an object takes up; also the loudness of a sound or signal. |
| **Weight**: | 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. |