

***SRA Life, Earth, and Physical Science Laboratories***  
**correlation to**  
**Idaho Science Content Standards**  
**Grade 6**

*SRA Life, Earth, and Physical Science Laboratories* provide core science content in an alternate reading format. Each *SRA Science Lab* contains 180 Science Cards covering key science concepts and vocabulary. Each lab covers 90 different science topics presented at two different reading levels to meet varied student abilities. The *Teacher's Handbook* includes hands-on inquiry activities as well as vocabulary building exercises. The *Classroom Resource CD-ROM* includes Writing Strategies in Science along with tests and vocabulary games.

**Standard 1: Nature of Science**

**Goal 1.1: Understand Systems, Order, and Organization**

**6.S.1.1.1 Analyze and contrast different systems.**

**Life Science Lab, Level A:** Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Life Science Lab, Level B:** Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Life Science Lab Teacher's Handbook:** Hands-On Activity 1, *Examining Cells*, pages 77-79; Hands-On Activity 4, *Your Cardiovascular System*, pages 89-91; Hands-On Activity 6, *How Much Does Energy Cost?*, pages 97-99; Hands-On Activity 7, *The Effects of Acid Rain*, pages 101-103

**Earth Science Lab, Level A:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Earth Science Lab, Level B:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Earth Science Lab Teacher's Handbook:** Hands-On Activity 1, *Identifying Minerals with the Mohs Scale*, pages 73-75; Hands-On Activity 2, *Plate Boundaries in Action*, pages 77-79; Hands-On Activity 4, *Using Sound Waves*, pages 85-87; Hands-On Activity 6, *Modeling a Tornado*, pages 93-95; Hands-On Activity 8, *Temperature, Salinity, and Water Density*, pages 101-103

**Physical Science Lab, Level A:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Physical Science Lab, Level B:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Physical Science Lab Teacher's Handbook:** Hands-On Activity 1, *Measuring pH of Acids and Bases*, pages 77-79; Hands-On Activity 2, *Chemical Reaction Rates*, pages 81-83; Hands-On Activity 3, *Energy Conversion*, pages 85-87; Hands-On Activity 4, *Reducing Friction*, pages 89-91; Hands-On Activity 5, *Making a Potato Battery*, pages 93-95; Hands-On Activity 6, *Making Sound*, pages 97-99

<b>Standard 1: Nature of Science</b>
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>
<b>6.S.1.2.1 Explain how observations and data are used as evidence on which to base scientific explanations.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>
<b>6.S.1.2.2 Use observations to make inferences.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>
<b>6.S.1.2.3 Use models to explain or demonstrate a concept.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p> <p><b>Classroom Resource CD-ROM:</b> Writing Strategy 20</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.3: Understand Constancy, Change, and Measurement</b>
<b>6.S.1.3.1 Analyze changes that occur in and among systems.</b>
<p><b>Life Science Lab, Level A:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Life Science Lab, Level B:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Earth Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Physical Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.3: Understand Constancy, Change, and Measurement</b>
<b>6.S.1.3.2 Measure in both U.S. Customary and International System of Measurement (metric system) units with an emphasis on the metric system.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.5: Understand Concepts of Form and Function</b>
<b>6.S.1.5.1 Analyze how the shape or form of an object or system is frequently related to its use or function.</b>
<b>Life Science Lab, Level A:</b> Cards 6, 7, 12, 13, 14, 20, 23, 26, 29, 30, 35, 38, 41, 53, 62, 63, 67, 69, 71 <b>Life Science Lab, Level B:</b> Cards 6, 7, 12, 13, 14, 20, 23, 26, 29, 30, 35, 38, 41, 53, 62, 63, 67, 69, 71 <b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity , <i>Examining Cells</i> , pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i> , pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87  <b>Earth Science Lab, Level A:</b> Cards 1, 4, 10 <b>Earth Science Lab, Level B:</b> Cards 1, 4, 10 <b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99  <b>Physical Science Lab, Level A:</b> Cards 3, 4, 5, 7, 21, 22, 23, 24, 25, 26 <b>Physical Science Lab, Level B:</b> Cards 3, 4, 5, 7, 21, 22, 23, 24, 25, 26

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>6.S.1.6.1 Write and analyze questions that can be answered by conducting scientific experiments.</b>
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i> , pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 5, <i>Making Fossils</i> , pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103  <b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i> , pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i> , pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103  <b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i> , pages 93-95; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99  <b>Classroom Resource CD-ROM:</b> Writing Strategy 8, 15

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>6.S.1.6.2 Conduct scientific investigations using a control and a variable. Repeat same experiment using alternative variables.</b>
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103  <b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103  <b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83  <b>Classroom Resource CD-ROM:</b> Writing Strategy 23

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>6.S.1.6.3 Select and use appropriate tools and techniques to gather and display data.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>6.S.1.6.4 Use evidence to analyze descriptions, explanations, predictions, and models.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>6.S.1.6.5 State a hypothesis based on observations.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87</p> <p><b>Classroom Resource CD-ROM:</b> Writing Strategy 8, 15</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>6.S.1.6.6 Communicate scientific procedures and explanations.</b>
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i> , pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 5, <i>Making Fossils</i> , pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
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<b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i> , pages 93-95; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99

<b>Standard 1: Nature of Science</b>
<b>Goal 1.8: Understand Technical Communication</b>
<b>6.S.1.8.1 Read, give, and execute technical instructions.</b>
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i> , pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 5, <i>Making Fossils</i> , pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
<b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i> , pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i> , pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103
<b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i> , pages 93-95; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99

<b>Standard 2: Physical Science</b>
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>
<b>6.S.2.1.1 Compare and contrast the differences among elements, compounds, and mixtures.</b>
<b>Physical Science Lab, Level A:</b> Cards 10, 11, 12, 13
<b>Physical Science Lab, Level B:</b> Cards 10, 11, 12, 13

<b>Standard 2: Physical Science</b>
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>
<b>6.S.2.1.2 Define the properties of matter.</b>
<b>Physical Science Lab, Level A:</b> Cards 1, 2, 5, 6, 71, 74
<b>Physical Science Lab, Level B:</b> Cards 1, 2, 5, 6, 71, 74

<b>Standard 2: Physical Science</b>
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>
<b>6.S.2.1.3 Compare densities of equal volumes of a solid, a liquid, or a gas.</b>
Physical Science Lab, Level A: Card 2 Physical Science Lab, Level B: Card 2

<b>Standard 2: Physical Science</b>
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>
<b>6.S.2.1.4 Describe the effect of temperature on density.</b>
Physical Science Lab, Level A: Cards 2, 5 Physical Science Lab, Level B: Cards 2, 5

<b>Standard 2: Physical Science</b>
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>
<b>6.S.2.1.5 Explain the nature of physical change and how it relates to physical properties (the distance between molecules as water changes from ice to liquid water, and to water vapor).</b>
Physical Science Lab, Level A: Cards 5, 6, 7, 42 Physical Science Lab, Level B: Cards 5, 6, 7, 42

<b>Standard 2: Physical Science</b>
<b>Goal 2.2: Understand Concepts of Motion and Forces</b>
<b>6.S.2.2.1 Describe the effects of different forces (gravity and friction) on the movement, speed, and direction of an object.</b>
Physical Science Lab, Level A: Cards 54, 55, 56, 57, 58, 59 Physical Science Lab, Level B: Cards 54, 55, 56, 57, 58, 59 Physical Science Lab Teacher's Handbook: Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91

<b>Standard 3: Biology</b>
<b>Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things</b>
<b>6.S.3.3.1 Identify the different structural levels of which an organism is comprised (cells, tissues, organs, organ systems, and organisms).</b>
Life Science Lab, Level A: Cards 5, 6, 7, 8, 9, 10, 44, 48, 49, 40, 51, 52, 53, 54, 55, 56, 57, 58 Life Science Lab, Level B: Cards 5, 6, 7, 8, 9, 10, 44, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58 Life Science Lab Teacher's Handbook: Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91

<b>Standard 3: Biology</b>
<b>Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things</b>
<b>6.S.3.3.2 Analyze the structural differences between plant and animal cells.</b>
Life Science Lab, Level A: Cards 6, 7 Life Science Lab, Level B: Cards 6, 7 Life Science Lab Teacher's Handbook: Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79

<b>Standard 3: Biology</b>
<b>Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things</b>
<b>6.S.3.3.3 Describe how traits are passed from parents to offspring.</b>
Life Science Lab, Level A: Cards 58, 60, 61, 62, 63, 64 Life Science Lab, Level B: Cards 58, 60, 61, 62, 63, 64

<b>Standard 4: Earth and Space Systems</b>
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>
<b>6.S.4.1.1 Explain the interactions among the solid earth, oceans, atmosphere, and organisms.</b>
<b>Earth Science Lab, Level A:</b> Cards 1, 2, 9, 10, 11, 12, 13, 14, 15, 17, 22, 23, 24, 25, 26, 27, 28, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 82, 83, 84, 87, 88, 89, 90
<b>Earth Science Lab, Level B:</b> Cards 1, 2, 9, 10, 11, 12, 13, 14, 15, 17, 22, 23, 24, 25, 26, 27, 28, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 82, 83, 84, 87, 88, 89, 90
<b>Earth Science Lab Teacher's Handbook:</b> Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103

<b>Standard 4: Earth and Space Systems</b>
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>
<b>6.S.4.1.2 Explain the water cycle and its relationship to weather and climate.</b>
<b>Earth Science Lab, Level A:</b> Cards 43, 44, 47, 48, 49, 56, 57, 58
<b>Earth Science Lab, Level B:</b> Cards 43, 44, 47, 48, 49, 56, 57, 58

<b>Standard 4: Earth and Space Systems</b>
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>
<b>6.S.4.1.3 Identify cumulus, cirrus, and stratus clouds and how they relate to weather changes.</b>
<b>Earth Science Lab, Level A:</b> Card 48
<b>Earth Science Lab, Level B:</b> Card 48

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced</b>
<b>6.S.5.1.1 Identify issues for environmental studies.</b>
<b>Life Science Lab, Level A:</b> Cards 84, 86, 87, 88, 89, 90
<b>Life Science Lab, Level B:</b> Cards 84, 86, 87, 88, 89, 90
<b>Life Science Lab Teacher's Handbook:</b> Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
<b>Earth Science Lab, Level A:</b> Cards 29, 37, 42, 59, 60, 61, 85, 86
<b>Earth Science Lab, Level B:</b> Cards 29, 37, 42, 59, 60, 61, 85, 86
<b>Earth Science Lab Teacher's Handbook:</b> Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.2: Understand the Relationship between Science and Technology</b>
<b>6.S.5.2.1 Describe how science and technology are part of our society.</b>
<b>Life Science Lab, Level A:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90
<b>Life Science Lab, Level B:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90
<b>Earth Science Lab, Level A:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88
<b>Earth Science Lab, Level B:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88
<b>Physical Science Lab, Level A:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90
<b>Physical Science Lab, Level B:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90



<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.2: Understand the Relationship between Science and Technology</b>
<b>6.S.5.2.2 Describe how science and technology are interrelated.</b>
<b>Life Science Lab, Level A:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90 <b>Life Science Lab, Level B:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90
<b>Earth Science Lab, Level A:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88 <b>Earth Science Lab, Level B:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88
<b>Physical Science Lab, Level A:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90 <b>Physical Science Lab, Level B:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them</b>
<b>6.S.5.3.1 Explain the differences between renewable and nonrenewable resources.</b>
<b>Life Science Lab, Level A:</b> Cards 84, 86, 87, 90 <b>Life Science Lab, Level B:</b> Cards 84, 86, 87, 90
<b>Earth Science Lab, Level A:</b> Cards 3, 29, 35, 90 <b>Earth Science Lab, Level B:</b> Cards 3, 29, 35, 90
<b>Physical Science Lab, Level A:</b> Cards 38, 46, 47, 48, 49 <b>Physical Science Lab, Level B:</b> Cards 38, 46, 47, 48, 49

***SRA Life, Earth, and Physical Science Laboratories***  
**correlation to**  
**Idaho Science Content Standards**  
**Grade 7**

*SRA Life, Earth, and Physical Science Laboratories* provide core science content in an alternate reading format. Each *SRA Science Lab* contains 180 Science Cards covering key science concepts and vocabulary. Each lab covers 90 different science topics presented at two different reading levels to meet varied student abilities. The *Teacher's Handbook* includes hands-on inquiry activities as well as vocabulary building exercises. The *Classroom Resource CD-ROM* includes Writing Strategies in Science along with tests and vocabulary games.

**Standard 1: Nature of Science**

**Goal 1.1: Understand Systems, Order, and Organization**

**7.S.1.1.1 Define small systems as a part of a whole system.**

**Life Science Lab, Level A:** Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Life Science Lab, Level B:** Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Life Science Lab Teacher's Handbook:** Hands-On Activity 1, *Examining Cells*, pages 77-79; Hands-On Activity 4, *Your Cardiovascular System*, pages 89-91; Hands-On Activity 6, *How Much Does Energy Cost?*, pages 97-99; Hands-On Activity 7, *The Effects of Acid Rain*, pages 101-103

**Earth Science Lab, Level A:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Earth Science Lab, Level B:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Earth Science Lab Teacher's Handbook:** Hands-On Activity 1, *Identifying Minerals with the Mohs Scale*, pages 73-75; Hands-On Activity 2, *Plate Boundaries in Action*, pages 77-79; Hands-On Activity 4, *Using Sound Waves*, pages 85-87; Hands-On Activity 6, *Modeling a Tornado*, pages 93-95; Hands-On Activity 8, *Temperature, Salinity, and Water Density*, pages 101-103

**Physical Science Lab, Level A:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Physical Science Lab, Level B:** Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**Physical Science Lab Teacher's Handbook:** Hands-On Activity 1, *Measuring pH of Acids and Bases*, pages 77-79; Hands-On Activity 2, *Chemical Reaction Rates*, pages 81-83; Hands-On Activity 3, *Energy Conversion*, pages 85-87; Hands-On Activity 4, *Reducing Friction*, pages 89-91; Hands-On Activity 5, *Making a Potato Battery*, pages 93-95; Hands-On Activity 6, *Making Sound*, pages 97-99

<b>Standard 1: Nature of Science</b>
<b>Goal 1.1: Understand Systems, Order, and Organization</b>
<b>7.S.1.1.2 Determine how small systems contribute to the function of a whole.</b>
<p><b>Life Science Lab, Level A:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Life Science Lab, Level B:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Earth Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Physical Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.1: Understand Systems, Order, and Organization</b>
<b>7.S.1.1.3 Identify different structural levels of an organism (cells, tissues, organs, and organ systems).</b>
<p><b>Life Science Lab, Level A:</b> Cards 5, 6, 7, 8, 9, 10, 44, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58</p> <p><b>Life Science Lab, Level B:</b> Cards 5, 6, 7, 8, 9, 10, 44, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58</p> <p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>
<b>7.S.1.2.1 Describe how observations and data are evidence on which to base scientific explanations and predictions.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>
<b>7.S.1.2.2 Use observations to make defensible inferences.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>
<b>7.S.1.2.3 Use models to explain or demonstrate a concept.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p> <p><b>Classroom Resource CD-ROM:</b> Writing Strategy 20</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.3: Understand Constancy, Change, and Measurement</b>
<b>7.S.1.3.1 Identify concepts of science that have been stable over time.</b>
<b>Life Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 65, 66, 67, 68, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82
<b>Life Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 65, 66, 67, 68, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82
<b>Earth Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 73, 75, 76, 77, 82, 83, 84, 87, 88, 89, 90
<b>Earth Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 73, 75, 76, 77, 82, 83, 84, 87, 88, 89, 90
<b>Physical Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 66, 67, 68, 69, 70, 71, 72, 74, 75, 77, 78, 79, 80, 82, 83, 85, 86, 87, 88, 89, 90
<b>Physical Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 66, 67, 68, 69, 70, 71, 72, 74, 75, 77, 78, 79, 80, 82, 83, 85, 86, 87, 88, 89, 90

<b>Standard 1: Nature of Science</b>
<b>Goal 1.3: Understand Constancy, Change, and Measurement</b>
<b>7.S.1.3.2 Recognize changes that occur within systems.</b>
<b>Life Science Lab, Level A:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90
<b>Life Science Lab, Level B:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90
<b>Life Science Lab Teacher's Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
<b>Earth Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90
<b>Earth Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90
<b>Earth Science Lab Teacher's Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79; Hands-On Activity 4, <i>Using Sound Waves</i> , pages 85-87; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103
<b>Physical Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90
<b>Physical Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90
<b>Physical Science Lab Teacher's Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i> , pages 93-95; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99

<b>Standard 1: Nature of Science</b>
<b>Goal 1.3: Understand Constancy, Change, and Measurement</b>
<b>7.S.1.3.3 Make metric measurements using appropriate tools.</b>
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
<b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 3, <i>Interpreting a Topographic Map</i> , pages 81-83; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99
<b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>7.S.1.6.1 Identify controls and variables used in scientific investigations.</b>
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
<b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103
<b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83
<b>Classroom Resource CD-ROM:</b> Writing Strategy 23

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>7.S.1.6.2 Use appropriate tools and techniques to gather and display data.</b>
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 2, <i>Culturing Bacteria</i> , pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 5, <i>Making Fossils</i> , pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
<b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 3, <i>Interpreting a Topographic Map</i> , pages 81-83; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103
<b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>7.S.1.6.3 Evaluate data in order to form conclusions.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>7.S.1.6.4 Use evidence and critical thinking to accept or reject a hypothesis.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p> <p><b>Classroom Resource CD-ROM:</b> Writing Strategy 8, 15</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>7.S.1.6.5 Evaluate alternative explanations or predictions.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>7.S.1.6.6 Communicate and defend scientific procedures and explanations.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.8: Understand Technical Communication</b>
<b>7.S.1.8.1 Read and evaluate technical instructions.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>



<b>Standard 2: Physical Science</b>
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>
<b>7.S.2.1.1 Compare and contrast the differences among elements, compounds, and mixtures.</b>
Physical Science Lab, Level A: Cards 10, 11, 12, 13
Physical Science Lab, Level B: Cards 10, 11, 12, 13

<b>Standard 2: Physical Science</b>
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>
<b>7.S.2.1.2 Define the properties of matter.</b>
Physical Science Lab, Level A: Cards 1, 2, 5, 6, 71, 74
Physical Science Lab, Level B: Cards 1, 2, 5, 6, 71, 74

<b>Standard 2: Physical Science</b>
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>
<b>7.S.2.1.3 Compare densities of equal volumes of a solid, a liquid, or a gas.</b>
Physical Science Lab, Level A: Card 2
Physical Science Lab, Level B: Card 2

<b>Standard 2: Physical Science</b>
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>
<b>7.S.2.1.4 Describe the effect of temperature on density.</b>
Physical Science Lab, Level A: Cards 2, 5
Physical Science Lab, Level B: Cards 2, 5

<b>Standard 2: Physical Science</b>
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>
<b>7.S.2.1.5 Explain the nature of physical change and how it relates to physical properties (the distance between molecules as water changes from ice to liquid water, and to water vapor).</b>
Physical Science Lab, Level A: Cards 5, 6, 7, 42
Physical Science Lab, Level B: Cards 5, 6, 7, 42

<b>Standard 2: Physical Science</b>
<b>Goal 2.2: Understand Concepts of Motion and Forces</b>
<b>7.S.2.2.1 Describe the effects of different forces (gravity and friction) on the movement, speed, and direction of an object.</b>
Physical Science Lab, Level A: Cards 54, 55, 56, 57, 58, 59
Physical Science Lab, Level B: Cards 54, 55, 56, 57, 58, 59
Physical Science Lab Teacher's Handbook: Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91

<b>Standard 3: Biology</b>
<b>Goal 3.1: Understand the Theory of Biological Evolution</b>
<b>7.S.3.1.1 Describe how natural selection explains species change over time.</b>
Life Science Lab, Level A: Cards 65, 66, 67, 68
Life Science Lab, Level B: Cards 65, 66, 67, 68

<b>Standard 3: Biology</b>
<b>Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems</b>
<b>7.S.3.2.1 Describe how energy stored in food is primarily derived from the Sun through photosynthesis.</b>
Life Science Lab, Level A: Cards 7, 9, 16, 17, 76, 77
Life Science Lab, Level B: Cards 7, 9, 16, 17, 76, 77

<b>Standard 3: Biology</b>
<b>Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems</b>
<b>7.S.3.2.2 Describe how the availability of resources (matter and energy) limits the distribution and abundance of organisms.</b>
<b>Life Science Lab, Level A:</b> Card 72
<b>Life Science Lab, Level B:</b> Card 72

<b>Standard 3: Biology</b>
<b>Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems</b>
<b>7.S.3.2.3 Illustrate how atoms and molecules cycle among the living and nonliving components of the biosphere.</b>
<b>Life Science Lab, Level A:</b> Cards 4, 9, 13, 16, 17, 46, 51, 76, 77, 78, 79
<b>Life Science Lab, Level B:</b> Cards 4, 9, 13, 16, 17, 46, 51, 76, 77, 78, 79

<b>Standard 3: Biology</b>
<b>Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems</b>
<b>7.S.3.2.4 Identify how energy flows through ecosystems in one direction, from photosynthetic organisms to herbivores, carnivores, and decomposers.</b>
<b>Life Science Lab, Level A:</b> Cards 16, 17, 73, 76, 77
<b>Life Science Lab, Level B:</b> Cards 16, 17, 73, 76, 77
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99

<b>Standard 3: Biology</b>
<b>Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things</b>
<b>7.S.3.3.1. Explain the relationships among specialized cells, tissues, organs, organ systems, and organisms.</b>
<b>Life Science Lab, Level A:</b> Cards 5, 6, 7, 8, 9, 10, 44, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58
<b>Life Science Lab, Level B:</b> Cards 5, 6, 7, 8, 9, 10, 44, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91

<b>Standard 3: Biology</b>
<b>Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things</b>
<b>7.S.3.3.2 Identify the parts of specialized plant and animal cells.</b>
<b>Life Science Lab, Level A:</b> Cards 6, 7
<b>Life Science Lab, Level B:</b> Cards 6, 7

<b>Standard 3: Biology</b>
<b>Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things</b>
<b>7.S.3.3.3 Identify the functions of cell structures.</b>
<b>Life Science Lab, Level A:</b> Cards 5, 6, 7, 8, 9, 10
<b>Life Science Lab, Level B:</b> Cards 5, 6, 7, 8, 9, 10
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79

<b>Standard 3: Biology</b>
<b>Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things</b>
<b>7.S.3.3.4 Describe cell functions that involve chemical reactions.</b>
<b>Life Science Lab, Level A:</b> Cards 7, 9
<b>Life Science Lab, Level B:</b> Cards 7, 9

<b>Standard 3: Biology</b>
<b>Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things</b>
<b>7.S.3.3.5 Describe how dominant and recessive traits are inherited.</b>
<b>Life Science Lab, Level A:</b> Cards 62, 63
<b>Life Science Lab, Level B:</b> Cards 62, 63

<b>Standard 4: Earth and Space Systems</b>
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>
<b>7.S.4.1.1 Explain the interactions among the solid earth, oceans, atmosphere, and organisms.</b>
<b>Earth Science Lab, Level A:</b> Cards 1, 2, 9, 10, 11, 12, 13, 14, 15, 17, 22, 23, 24, 25, 26, 27, 28, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 82, 83, 84, 87, 88, 89, 90
<b>Earth Science Lab, Level B:</b> Cards 1, 2, 9, 10, 11, 12, 13, 14, 15, 17, 22, 23, 24, 25, 26, 27, 28, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 82, 83, 84, 87, 88, 89, 90
<b>Earth Science Lab Teacher's Handbook:</b> Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103

<b>Standard 4: Earth and Space Systems</b>
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>
<b>7.S.4.1.2 Explain the water cycle and its relationship to weather and climate.</b>
<b>Earth Science Lab, Level A:</b> Cards 43, 44, 47, 48, 49, 56, 57, 58
<b>Earth Science Lab, Level B:</b> Cards 43, 44, 47, 48, 49, 56, 57, 58

<b>Standard 4: Earth and Space Systems</b>
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>
<b>7.S.4.1.3 Identify cumulus, cirrus, and stratus clouds and how they relate to weather changes.</b>
<b>Earth Science Lab, Level A:</b> Card 48
<b>Earth Science Lab, Level B:</b> Card 48

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.2: Understand the Relationship between Science and Technology</b>
<b>7.S.5.2.1 Explain how science and technology are interrelated.</b>
<b>Life Science Lab, Level A:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90
<b>Life Science Lab, Level B:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90
<b>Earth Science Lab, Level A:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88
<b>Earth Science Lab, Level B:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88
<b>Physical Science Lab, Level A:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90
<b>Physical Science Lab, Level B:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.2: Understand the Relationship between Science and Technology</b>
<b>7.S.5.2.2 Explain how science advances technology.</b>
<b>Life Science Lab, Level A:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90 <b>Life Science Lab, Level B:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90
<b>Earth Science Lab, Level A:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88 <b>Earth Science Lab, Level B:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88
<b>Physical Science Lab, Level A:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90 <b>Physical Science Lab, Level B:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them</b>
<b>7.S.5.3.1 Identify alternative sources of energy.</b>
<b>Life Science Lab, Level A:</b> Card 84 <b>Life Science Lab, Level B:</b> Card 84
<b>Earth Science Lab, Level A:</b> Cards 35, 90 <b>Earth Science Lab, Level B:</b> Cards 35, 90
<b>Physical Science Lab, Level A:</b> Cards 34, 38, 45, 46, 47, 48, 49 <b>Physical Science Lab, Level B:</b> Cards 34, 38, 45, 46, 47, 48, 49

***SRA Life, Earth, and Physical Science Laboratories***  
**correlation to**  
**Idaho Science Content Standards**  
**Grade 8**

*SRA Life, Earth, and Physical Science Laboratories* provide core science content in an alternate reading format. Each *SRA Science Lab* contains 180 Science Cards covering key science concepts and vocabulary. Each lab covers 90 different science topics presented at two different reading levels to meet varied student abilities. The *Teacher's Handbook* includes hands-on inquiry activities as well as vocabulary building exercises. The *Classroom Resource CD-ROM* includes Writing Strategies in Science along with tests and vocabulary games.

**Physical Science**

<b>Standard 1: Nature of Science</b>
<b>Goal 1.1: Understand Systems, Order, and Organization</b>
<b>8-9.PS.1.1.1 Explain the scientific meaning of system, order, and organization.</b>
<p><b>Life Science Lab, Level A:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Life Science Lab, Level B:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Life Science Lab Teacher's Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p>
<p><b>Earth Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Earth Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Earth Science Lab Teacher's Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p>
<p><b>Physical Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Physical Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Physical Science Lab Teacher's Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.1: Understand Systems, Order, and Organization</b>
<b>8-9.PS.1.1.2 Apply the concepts of order and organization to a given system.</b>
<p><b>Life Science Lab, Level A:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Life Science Lab, Level B:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Earth Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Physical Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>
<b>8-9.PS.1.2.1 Use observations and data as evidence on which to base scientific explanations.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>
<b>8-9.PS.1.2.2 Develop models to explain concepts or systems.</b>
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 5, <i>Making Fossils</i> , pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99
<b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99
<b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 5, <i>Making a Potato Battery</i> , pages 93-95; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99
<b>Classroom Resource CD-ROM:</b> Writing Strategy 20

<b>Standard 1: Nature of Science</b>
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>
<b>8-9.PS.1.2.3 Develop scientific explanations based on knowledge, logic, and analysis.</b>
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i> , pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i> , pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i> , pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 5, <i>Making Fossils</i> , pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i> , pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
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<b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i> , pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i> , pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i> , pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i> , pages 93-95; Hands-On Activity 6, <i>Making Sound</i> , pages 97-99

<b>Standard 1: Nature of Science</b>
<b>Goal 1.3: Understand Constancy, Change, and Measurement</b>
<b>8-9.PS.1.3.1 Measure changes that can occur in and among systems.</b>
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 4, <i>Your Cardiovascular System</i> , pages 89-91; Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
<b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i> , pages 73-75; Hands-On Activity 3, <i>Interpreting a Topographic Map</i> , pages 81-83; Hands-On Activity 7, <i>Sizes in the Solar System</i> , pages 97-99
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<b>Standard 1: Nature of Science</b>
<b>Goal 1.3: Understand Constancy, Change, and Measurement</b>
<b>8-9.PS.1.3.2 Analyze changes that can occur in and among systems.</b>
<p><b>Life Science Lab, Level A:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Life Science Lab, Level B:</b> Cards 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Earth Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab, Level A:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Physical Science Lab, Level B:</b> Cards 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.3: Understand Constancy, Change, and Measurement</b>
<b>8-9.PS.1.3.3 Measure and calculate using the metric system.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>



<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>8-9.PS.1.6.1 Identify questions and concepts that guide scientific investigations.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>8-9.PS.1.6.2 Utilize the components of scientific problem solving to design, conduct, and communicate results of investigations.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>8-9.PS.1.6.3 Use appropriate technology and mathematics to make investigations.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>8-9.PS.1.6.4 Formulate scientific explanations and models using logic and evidence.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>8-9.PS.1.6.5 Analyze alternative explanations and models.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>8-9.PS.1.6.6 Communicate and defend a scientific argument.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>
<b>8-9.PS.1.6.7 Explain the difference among observations, hypotheses, and theories.</b>
<p><b>Life Science Lab, Level A:</b> Card 5  <b>Life Science Lab, Level B:</b> Card 5  <b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab, Level A:</b> Cards 10, 68, 72, 78  <b>Earth Science Lab, Level B:</b> Cards 10, 68, 72, 78  <b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab, Level A:</b> Cards 3, 53, 59  <b>Physical Science Lab, Level B:</b> Cards 3, 53, 59  <b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 1: Nature of Science</b>
<b>Goal 1.8: Understand Technical Communication</b>
<b>8-9.PS.1.8.1 Analyze technical writing, graphs, charts, and diagrams.</b>
<p><b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Examining Cells</i>, pages 77-79; Hands-On Activity 2, <i>Culturing Bacteria</i>, pages 81-83; Hands-On Activity 3, <i>Investigating Arthropods</i>, pages 85-87; Hands-On Activity 4, <i>Your Cardiovascular System</i>, pages 89-91; Hands-On Activity 5, <i>Making Fossils</i>, pages 93-95; Hands-On Activity 6, <i>How Much Does Energy Cost?</i>, pages 97-99; Hands-On Activity 7, <i>The Effects of Acid Rain</i>, pages 101-103</p> <p><b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Identifying Minerals with the Mohs Scale</i>, pages 73-75; Hands-On Activity 2, <i>Plate Boundaries in Action</i>, pages 77-79; Hands-On Activity 3, <i>Interpreting a Topographic Map</i>, pages 81-83; Hands-On Activity 4, <i>Using Sound Waves</i>, pages 85-87; Hands-On Activity 5, <i>What is in the Air?</i>, pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i>, pages 93-95; Hands-On Activity 7, <i>Sizes in the Solar System</i>, pages 97-99; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i>, pages 101-103</p> <p><b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 1, <i>Measuring pH of Acids and Bases</i>, pages 77-79; Hands-On Activity 2, <i>Chemical Reaction Rates</i>, pages 81-83; Hands-On Activity 3, <i>Energy Conversion</i>, pages 85-87; Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91; Hands-On Activity 5, <i>Making a Potato Battery</i>, pages 93-95; Hands-On Activity 6, <i>Making Sound</i>, pages 97-99</p>

<b>Standard 2: Physical Science</b>
<b>Goal 2.2: Understand Concepts of Motion and Forces</b>
<b>8-9.PS.2.1.1 Explain motion using Newton’s Laws of Motion.</b>
<p><b>Physical Science Lab, Level A:</b> Cards 54, 55, 56, 57, 58, 59  <b>Physical Science Lab, Level B:</b> Cards 54, 55, 56, 57, 58, 59  <b>Physical Science Lab Teacher’s Handbook:</b> Hands-On Activity 4, <i>Reducing Friction</i>, pages 89-91</p>

<b>Standard 2: Physical Science</b>
<b>Goal 2.3: Understand the Total Energy in the Universe is Constant</b>
<b>8-9.PS.2.3.1 Explain that Energy can be transformed but cannot be created nor destroyed.</b>
Physical Science Lab, Level A: Cards 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49
Physical Science Lab, Level B: Cards 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49

<b>Standard 2: Physical Science</b>
<b>Goal 2.3: Understand the Total Energy in the Universe is Constant</b>
<b>8-9.PS.2.3.2 Classify energy as potential and/or kinetic and as energy contained in a field.</b>
Physical Science Lab, Level A: Cards 36, 37, 38, 39, 40, 41, 42, 66, 74, 75
Physical Science Lab, Level B: Cards 36, 37, 38, 39, 40, 41, 42, 66, 74, 75

<b>Standard 2: Physical Science</b>
<b>Goal 2.4: Understand the Structure of Atoms</b>
<b>8-9.PS.2.4.1 Describe the properties, function, and location of protons, neutrons, and electrons.</b>
Physical Science Lab, Level A: Cards 21, 22, 23, 24, 25, 26, 27
Physical Science Lab, Level B: Cards 21, 22, 23, 24, 25, 26, 27

<b>Standard 2: Physical Science</b>
<b>Goal 2.4: Understand the Structure of Atoms</b>
<b>8-9.PS.2.4.2 Explain the processes of fission and fusion.</b>
Physical Science Lab, Level A: Card 34
Physical Science Lab, Level B: Card 34

<b>Standard 2: Physical Science</b>
<b>Goal 2.4: Understand the Structure of Atoms</b>
<b>8-9.PS.2.4.3 Describe the characteristics of isotopes.</b>
Physical Science Lab, Level A: Cards 17, 33
Physical Science Lab, Level B: Cards 17, 33

<b>Standard 2: Physical Science</b>
<b>Goal 2.4: Understand the Structure of Atoms</b>
<b>8-9.PS.2.4.4 State the basic electrical properties of matter.</b>
Physical Science Lab, Level A: Cards 21, 23, 25, 66, 67, 70
Physical Science Lab, Level B: Cards 21, 23, 25, 66, 67, 70

<b>Standard 2: Physical Science</b>
<b>Goal 2.4: Understand the Structure of Atoms</b>
<b>8-9.PS.2.4.5 Describe the relationships between magnetism and electricity.</b>
Physical Science Lab, Level A: Cards 74, 75, 76
Physical Science Lab, Level B: Cards 74, 75, 76

<b>Standard 2: Physical Science</b>
<b>Goal 2.54: Understand Chemical Reactions</b>
<b>8-9.PS.2.5.1 Explain how chemical reactions may release or consume energy while the quantity of matter remains constant.</b>
Physical Science Lab, Level A: Cards 9, 27, 28, 29, 30
Physical Science Lab, Level B: Cards 9, 27, 28, 29, 30
Physical Science Lab Teacher's Handbook: Hands-On Activity 2, <i>Chemical Reaction Rates</i> , pages 81-83

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.2: Understand the Relationship between Science and Technology</b>
<b>8-9.S.5.2.1 Explain how science advances technology.</b>
<b>Life Science Lab, Level A:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90 <b>Life Science Lab, Level B:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90
<b>Earth Science Lab, Level A:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88 <b>Earth Science Lab, Level B:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88
<b>Physical Science Lab, Level A:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90 <b>Physical Science Lab, Level B:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.2: Understand the Relationship between Science and Technology</b>
<b>8-9.S.5.2.2 Explain how technology advances science.</b>
<b>Life Science Lab, Level A:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90 <b>Life Science Lab, Level B:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90
<b>Earth Science Lab, Level A:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88 <b>Earth Science Lab, Level B:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88
<b>Physical Science Lab, Level A:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90 <b>Physical Science Lab, Level B:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.2: Understand the Relationship between Science and Technology</b>
<b>8-9.S.5.2.3 Explain how science and technology are pursued for different purposes.</b>
<b>Life Science Lab, Level A:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90 <b>Life Science Lab, Level B:</b> Cards 5, 46, 49, 59, 64, 69, 83, 87, 88, 89, 90
<b>Earth Science Lab, Level A:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88 <b>Earth Science Lab, Level B:</b> Cards 16, 20, 31, 37, 51, 54, 70, 79, 80, 81, 88
<b>Physical Science Lab, Level A:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90 <b>Physical Science Lab, Level B:</b> Cards 33, 35, 63, 64, 72, 76, 81, 84, 90

## Earth Science

**Standard 1: Nature of Science (See Physical Science)**

<b>Standard 4: Earth and Space Systems</b>
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>
<b>8-9.ES.4.1.1 Explain the current scientific theory that suggests that the solar system formed from a nebular cloud of dust and gas.</b>
<b>Earth Science Lab, Level A:</b> Card 78 <b>Earth Science Lab, Level B:</b> Card 78

<b>Standard 4: Earth and Space Systems</b>
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>
<b>8-9.ES.4.1.2 Identify methods used to estimate geologic time.</b>
<b>Earth Science Lab, Level A:</b> Cards 30, 31, 32, 33, 34 <b>Earth Science Lab, Level B:</b> Cards 30, 31, 32, 33, 34

<b>Standard 4: Earth and Space Systems</b>
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>
<b>8-9.ES.4.1.3 Show how interactions among the solid earth, oceans, atmosphere, and organisms have changed the earth system over time.</b>
<b>Earth Science Lab, Level A:</b> Cards 1, 2, 9, 10, 11, 12, 13, 14, 15, 17, 22, 23, 24, 25, 26, 27, 28, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 82, 83, 84, 87, 88, 89, 90
<b>Earth Science Lab, Level B:</b> Cards 1, 2, 9, 10, 11, 12, 13, 14, 15, 17, 22, 23, 24, 25, 26, 27, 28, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 82, 83, 84, 87, 88, 89, 90
<b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79; Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95; Hands-On Activity 8, <i>Temperature, Salinity, and Water Density</i> , pages 101-103

<b>Standard 4: Earth and Space Systems</b>
<b>Goal 4.2: Understand Geochemical Cycles and Energy in the Earth System</b>
<b>8-9.ES.4.2.1 Explain the internal and external energy sources of the earth.</b>
<b>Earth Science Lab, Level A:</b> Cards 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 22, 24, 25, 26, 27, 28, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 90
<b>Earth Science Lab, Level B:</b> Cards 1, 2, 10, 11, 12, 13, 14, 15, 16, 17, 22, 24, 25, 26, 27, 28, 36, 37, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 52, 53, 54, 90
<b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 2, <i>Plate Boundaries in Action</i> , pages 77-79; Hands-On Activity 6, <i>Modeling a Tornado</i> , pages 93-95

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.1: Understand Common Environmental Quality Issues , Both Natural and Human Induced</b>
<b>8-9.ES.5.1.1 Analyze environmental issues such as water and air quality, hazardous waste, and depletion of natural resources.</b>
<b>Life Science Lab, Level A:</b> Cards 84, 85, 86, 87, 88, 89, 90
<b>Life Science Lab, Level B:</b> Cards 84, 85, 86, 87, 88, 89, 90
<b>Life Science Lab Teacher’s Handbook:</b> Hands-On Activity 7, <i>The Effects of Acid Rain</i> , pages 101-103
<b>Earth Science Lab, Level A:</b> Cards 29, 35, 37, 42, 59, 60, 61, 85, 86, 90
<b>Earth Science Lab, Level B:</b> Cards 29, 35, 37, 42, 59, 60, 61, 85, 86, 90
<b>Earth Science Lab Teacher’s Handbook:</b> Hands-On Activity 5, <i>What is in the Air?</i> , pages 89-91
<b>Physical Science Lab, Level A:</b> Cards 34, 38, 46, 47, 48, 49
<b>Physical Science Lab, Level B:</b> Cards 34, 38, 46, 47, 48, 49

<b>Standard 5: Personal and Social Perspectives; Technology</b>
<b>Goal 5.3: Understand the Importance of natural Resources and the Need to Manage and Conserve Them</b>
<b>8-9.ES.5.3.1 Describe the different between renewable and nonrenewable resources.</b>
<b>Life Science Lab, Level A:</b> Cards 84, 86, 87, 90
<b>Life Science Lab, Level B:</b> Cards 84, 86, 87, 90
<b>Earth Science Lab, Level A:</b> Cards 3, 29, 35, 90
<b>Earth Science Lab, Level B:</b> Cards 3, 29, 35, 90
<b>Physical Science Lab, Level A:</b> Cards 38, 46, 47, 48, 49
<b>Physical Science Lab, Level B:</b> Cards 38, 46, 47, 48, 49