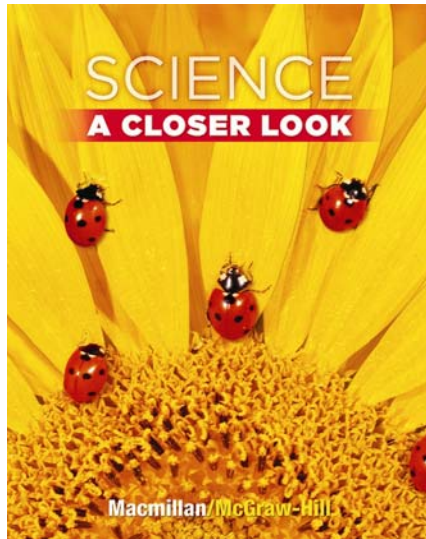
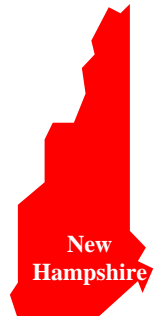




**Macmillan/McGraw-Hill**

Grade Span Expectations in Science  
Grade 1



# SCIENCE

**A CLOSER LOOK**

**Grade 1**

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STANDARDS	PAGE REFERENCES
<i>Life Science</i>	
<b>LS1 - All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, &amp; species).</b>	
<b>LS1 (K-4) - INQ+POC –1</b> <i>Sort /classify different living things using similar and different characteristics. Describe why organisms belong to each group or cite evidence about how they are alike or not alike.</i>	
<b>LS1 (K-2) –1</b> <b>Students demonstrate an understanding of classification of organisms by ...</b>	
<b>1a</b> distinguishing between living and non-living things	<p><b>Student Edition:</b> 24-25, 26-27 <i>Explore</i> 23 <i>Look and Wonder</i> 22 <i>Quick Lab</i> 25 <i>Read a Photo</i> 25</p> <p><b>Teacher Wraparound Edition:</b> AE 23; DMI 24, 26; E 23; ELLS 24; FA 27; LW 22; QL 25; PA 46-47; SB 24; RP 25</p> <p><b>Leveled Readers:</b> Grade 1 Approaching Level Reader <i>In the Garden</i></p> <p><b>Teacher’s Resources:</b> Activity Lab Book 7-8, 9, 10 Assessment 5 # 1 Key Concept Cards #1 Reading and Writing 3-5, 6, 19 School to Home Activities 3-4 Visual Literacy 1</p>
<b>1b</b> identifying and sorting based on a similar or different external features.	<p><b>Student Edition:</b> 38-39, 88-89, 90-91, 92-93 <i>Explore</i> 87</p> <p><b>Teacher Wraparound Edition:</b> DMI 38, 88, 90. 92; E 87; ELLS 38, 88; FA 41; SB 38</p> <p><b>Teacher’s Resources:</b> Activity Lab Book 37-38 Key Concept Cards #3 Reading and Writing 13-15, 42-43, 44 School to Home Activities 23-24 Visual Literacy 3</p>

STANDARDS	PAGE REFERENCES
<p><b>1c</b> observing and recording the external features that make up living things (e.g. roots, stems, leaves, flowers, legs, antennae, tail, shell).</p>	<p><b>Student Edition:</b>  <i>Art Link</i> 93  <i>Explore</i> 29, 37, 133  <i>Math Link</i> 33  <i>Quick Lab</i> 32</p> <p><b>Teacher Wraparound Edition:</b>            AE 29; AL 93; DI 39; E 29, 37,133; ELLS 30;            ES 27A-27B, 93A-93B; ML 33; QL 32</p> <p><b>Leveled Readers:</b>            Grade 1 On Level Reader <i>Good to Eat</i>            Grade 1 English Learner Level Reader <i>Good to Eat</i>            Grade 1 Beyond Level Reader <i>Parts of Plants</i>            Grade 1 On Level Reader <i>A World of Animals</i>            Grade 1 English Learner Level Reader <i>A World of Animals</i></p> <p><b>Teacher’s Resources:</b>            Activity Lab Book 13-14, 15-16, 17-18; 41, 64</p>
<p><b>LS1 (K-4) SAE -2</b>  <i>Identify the basic needs of plants and animals in order to stay alive. (i.e., water, air, food, space).</i></p>	
<p><b>LS1 (K-2)-2</b>  <b>Students demonstrate understanding of structure and function-survival requirements by...</b></p>	
<p><b>2a</b> observing that plants need water, air, food, and light to grow; observing that animals need water, air, food and shelter to grow.</p>	<p><b>Student Edition:</b>            24-25, 26-27, 96-97  <i>Explore</i> 59, 67, 133  <i>Reading in Science</i> 42-43  <i>Writing in Science</i> 100</p> <p><b>Teacher Wraparound Edition:</b>            AE 67; BS 71A-71B; DI 97; DMI 24, 26, 96; E 59, 67, 133; RS 42-43; WS 100; WU 58</p> <p><b>Leveled Readers:</b>            Grade 1 Approaching Level Reader <i>What People and Animals Need</i></p> <p><b>Teacher’s Resources:</b>            Activity Lab Book 10, 27-28, 31-32, 33, 35, 50, 63-64            Assessment 25, 26            Reading and Writing 3-5, 6, 17, 48, 50, 54            School to Home Activities 3-4            Visual Literacy 1</p>

STANDARDS	PAGE REFERENCES
<p><b>LS1 (K-4) POC –3</b>  <i>Predict, sequence or compare the life stages of organisms – plants and animals (e.g., put images of life stages of an organism in order, predict the next stage in sequence, compare two organisms).</i></p>	
<p><b>LS1 (K-2)–3</b>  <b>Students demonstrate an understanding of reproduction by ...</b></p>	
<p><b>3a</b> observing and scientifically drawing (e.g. recording shapes, prominent features, relative proportions, organizes and differentiates significant parts observed) and labeling the stages in the life cycle of a familiar plant and animal.</p>	<p><b>Student Edition:</b>  <i>Art Link</i> 115  <i>Quick Lab</i> 113</p> <p><b>Teacher Wraparound Edition:</b>  AL 115; DI 111; ELLS 54, 116; FA 115;  PA 76-77; QL 113; UV 111; WU 108</p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 56  Assessment 19  Key Concept Cards #10</p>
<p><b>3b</b> sequencing the life cycle of a plant or animal when given a set of pictures.</p>	<p><b>Student Edition:</b>  <i>Explore</i> 109  <i>Read a Diagram</i> 61, 113</p> <p><b>Teacher Wraparound Edition:</b>  DI 55; E 109; ELLS 60, 112; FA 57; RD 61, 112</p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 53-54  Key Concept Cards #10  Reading and Writing 28, 58  Visual Literacy 5, 10</p>

STANDARDS	PAGE REFERENCES
<p><b>LS1 (K-4) FAF –4</b>  <i>Identify and explain how the physical structures of an organism (plants or animals) allow it to survive in its habitat /environment (e.g., roots for water; nose to smell fire).</i></p>	
<p><b>LS1 (K-2)–4</b>  <b>Students demonstrate understanding of structure and function-survival requirements by...</b></p>	
<p><b>4a</b> identifying the specific functions of the physical structures of a plant or an animal (e.g. roots for water; webbed feet for swimming).</p>	<p><b>Student Edition:</b>  32-33, 88-89, 90-91, 92-93, 104-105, 106-107  <i>Explore</i> 103  <i>Quick Lab</i> 32  <i>Think, Talk, and Write</i> 33 #1, #2; 93 #2</p> <p><b>Teacher Wraparound Edition:</b>  DMI 32, 88, 90, 92, 104, 106; E 103; FA 33, 71;  QL 32</p> <p><b>Leveled Readers:</b>  Grade 1 Beyond Level Reader <i>Amazing Animals</i>  Grade 1 Beyond Level Reader <i>Parts of a Plant</i></p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 16, 47-48, 50  Key Concept Cards #2, #6  Reading and Writing 10, 45, 52-54, 55  School to Home Activities 5-6, 23-24, 27-28  Visual Literacy 5, 9</p>

STANDARDS	PAGE REFERENCES
<b>LS2 - Matter cycles and energy flows through an ecosystem.</b>	
<b>LS2 (K-4) SAE –5</b> <i>Recognize that energy is needed for all organisms to stay alive and grow or identify where a plant or animal gets its energy.</i>	
<b>LS2 (K-2)–5</b> <b>Students demonstrate an understanding of energy flow in an ecosystem by ...</b>	
<b>5a</b> caring for plants and /or animals by identifying and providing for their needs; experimenting with a plant’s growth under different conditions, including light and no light.	<b>Student Edition:</b> <i>Explore</i> 59, 67, 95, 241 <i>Health Link</i> 99 <i>Quick Lab</i> 70 <i>Think, Talk, and Write</i> 27 #2; 99 #2 <i>Writing in Science</i> 100 <b>Teacher Wraparound Edition:</b> AE 67; BS 71A-71B; E 59, 67, 95, 241; ER 43; HL 99; IW 72; QL 70; WS 100; WU 22, 58 <b>Leveled Readers:</b> Grade 1 Approaching Level Reader <i>What People and Animals Need</i> <b>Teacher’s Resources:</b> Activity Lab Book 27-28, 31-32, 33-34, 35, 43-44, 113-114 Reading and Writing 36, 50
<b>LS2 (K-4) SAE –6</b> Describe ways plants and animals depend on each other (e.g., shelter, nesting, food).	
<b>LS2 (K-2)–6</b> <b>Students demonstrate an understanding of food webs in an ecosystem by ...</b>	
<b>6a</b> acting out or constructing simple diagrams (pictures or words) that shows a simple food web.	<b>Student Edition:</b> 144-145 <i>Art Link</i> 147 <i>Quick Lab</i> 144 <i>Read a Diagram</i> 145 <b>Teacher Wraparound Edition:</b> AL 147; DI 145; DMI 144; QL 144; RD144 <b>Teacher’s Resources:</b> Activity Lab Book 70 Visual Literacy 13

STANDARDS	PAGE REFERENCES
<p><b>6b</b> using information about a simple food web to determine how basic needs (e.g. shelter and water) are met by the habitat/environment.</p>	<p><b>Student Edition:</b>            128-129, 130-131, 134-135, 136-137, 142-143  <i>Explore</i> 141  <i>Look and Wonder</i> 140  <i>Science Skills and Ideas</i> 155 #5, #6  <i>Think, Talk, and Write</i> 137 #2</p> <p><b>Teacher Wraparound Edition:</b>            AE 141; DI 143; DMI 128, 130, 134, 136, 142;            E 141; ELLS 142; FA 147; LW 140</p> <p><b>Teacher’s Resources:</b>            Activity Lab Book 60, 66, 67-68            Key Concept Cards 13            Reading and Writing 65-67, 68, 69-70, 71-72,            75-77            School to Home Activities 35-36, 37-38            Visual Literacy 11, 12</p>
<p><b>LS 4 - Humans are similar to other species in many ways, and yet are unique among Earth’s life forms.</b></p>	
<p><b>LS4 (K-4) FAF -8</b>  <i>Identify what the physical structures of humans do (e.g., sense organs – eyes, ears, skin, etc.) or compare physical structures of humans to similar structures of animals.</i></p>	
<p><b>LS4 (K-2)-8</b>  <b>Students demonstrate an understanding of human body systems by ...</b></p>	
<p><b>8a</b> identifying the five senses and using senses to identify objects in the environment,</p>	<p><b>Teacher Wraparound Edition:</b>            DI 5; ELLS 308, 316; ER 409, 27A; FS 27A-27B;            IW 254</p> <p><b>Leveled Readers:</b>            Grade 1 On Level Reader <i>What Sounds Say</i></p> <p><b>Teacher’s Resources:</b>            Activity Lab Book 11            Reading and Writing 142</p>

STANDARDS	PAGE REFERENCES
<p><b>8b</b> observing, identifying, and recording external features of humans and other animals.</p>	<p><b>Student Edition:</b>  88-89, 90-91, 92-93, 104-105, 106-107, 130-131  <i>Art Link</i> 93  <i>Explore</i> 103  <i>Look and Wonder</i> 86  <i>Math in Science</i> 139  <i>Quick Lab</i> 99  <i>Science Skills and Ideas</i> 123 #9  <i>Think, Talk, and Write</i> 93 #1</p> <p><b>Teacher Wraparound Edition:</b>  AL 93; BS 107A-107B; DMI 88, 90, 92, 104, 106, 130; E 103; FS 93A-93B; LW 86; MS 139; QL 98</p> <p><b>Leveled Readers:</b>  Grade 1 Beyond Level Reader <i>Amazing Animals</i>  Grade 1 On Level Reader <i>A World of Animals</i>  Grade 1 English Learner Level Reader <i>A World of Animals</i></p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 40, 41, 46, 47-48, 49, 51  Math 7  Reading and Writing 42-44, 45,  School to Home Activities 23-24, 27-28  Visual Literacy 7</p>
<p><b>8c</b> identifying the senses needed to meet survival needs for a given situation.</p>	<p><b>Student Edition:</b>  <i>Reading In Science</i> 408-409  <i>Talk About It</i> 409</p> <p><b>Teacher Wraparound Edition:</b>  ER 409; RS 408-409; TAI 409</p> <p><b>Leveled Readers:</b>  Grade 1 On Level Reader <i>What Sounds Say</i></p> <p><b>Teacher’s Resources:</b>  Reading and Writing 237</p>

STANDARDS	PAGE REFERENCES
<p><b>LS4 (K-4) POC -9</b>  <i>Distinguish between characteristics of humans that are inherited from parents (i.e., hair color, height, skin color, eye color) and others that are learned (e.g., riding a bike, singing a song, playing a game, reading)</i></p>	
<p><b>LS4 (K-2) –9</b>  <b>Students demonstrate an understanding of human heredity by ...</b></p>	
<p><b>9a</b> observing and comparing their physical features with those of parents, classmates and other organisms.</p>	<p>The following references can be used in classroom discussion of human heredity to meet this standard.</p> <p><b>Student Edition:</b>  60-61, 110-111  <i>Explore</i> 109  <i>Look and Wonder</i> 109  <i>Science Skills and Ideas</i> 123 #7</p> <p><b>Teacher Wraparound Edition:</b>  AE 109; DI 61; DMI 60, 110; E 109; LW 108</p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 53-54, 55  Reading and Writing 56-58</p>
<p><b>9b</b> identifying that some behaviors are learned.</p>	<p>The following references can be used in classroom discussion to meet this standard.</p> <p><b>Student Edition:</b>  112-113</p> <p><b>Teacher Wraparound Edition:</b>  DMI 112</p>

STANDARDS	PAGE REFERENCES
<b>Earth &amp; Space Science</b>	
<b>ESS1 - The earth and earth materials as we know them today have developed over long periods of time, through continual change processes.</b>	
<b>ESS1 (K-4) INQ –1</b> <i>Given certain earth materials (soils, rocks or minerals) use physical properties to sort, classify, and describe them.</i>	
<b>ESS1 (K-2)–1</b> <b>Students demonstrate an understanding of earth materials by ...</b>	
<b>1a</b> describing, comparing, and sorting rocks and soils by similar or different physical properties (e.g., size, shape, color, texture, smell, weight).	<b>Student Edition:</b> 172-173, 174-175 <i>Explore</i> 171 <i>Look and Wonder</i> 170 <i>Math in Science</i> 185 <i>Quick Lab</i> 173 <i>Read a Photo</i> 173 <i>Think, Talk, and Write</i> 175 #1, #2 <i>Social Studies Link</i> 175 <b>Teacher Wraparound Edition:</b> AE 171; DMI 172, 174; E 171; W 170; MS 185; QL 173; RP 173; SSL 175 <b>Leveled Readers:</b> Grade 1 On Level Reader <i>Look for Rocks</i> Grade 1 English Learner Level Reader <i>Look for Rocks</i> <b>Teacher’s Resources:</b> Activity Lab Book 70, 77-78, 80 Math 9 Reading and Writing 89-90, 92 School to Home Activities 47-48 Visual Literacy 15
<b>1b</b> recording observations/data about physical properties.	<b>Student Edition:</b> <i>Explore</i> 171 <i>Quick Lab</i> 173 <b>Teacher Wraparound Edition:</b> AE 171; E 171; FS 199A-199B; QL173 <b>Teacher’s Resources:</b> Activity Lab Book 77-78, 80, 79, 89

STANDARDS	PAGE REFERENCES
<p><b>1c</b> using attributes of properties to state why objects are grouped together (e.g., rocks that are shiny or not shiny).</p>	<p><b>Student Edition:</b>  <i>Explore</i> 171  <i>Quick Lab</i> 173  <i>Read a Photo</i> 173</p> <p><b>Teacher Wraparound Edition:</b>            AE 171; E 171; QL 173; RP 173</p> <p><b>Teacher’s Resources:</b>            Activity Lab Book 77-78, 79-80            Visual Literacy 15</p>
<p><b>ESS1 (K-4) INQ –2</b>  <i>Use results from an experiment to draw conclusions about how water interacts with earth materials (e.g., percolation, erosion, frost heaves).</i></p>	
<p><b>ESS1 (K-2) –2</b>  <b>Students demonstrate an understanding of processes and change over time within earth systems by ...</b></p>	
<p><b>2a</b> conducting tests on how different soils retain water (e.g., how fast does the water drain through?).</p>	<p><b>Student Edition:</b>  <i>Think, Talk, and Write</i> 175 #2</p> <p><b>Teacher Wraparound Edition:</b>            DI 174; FS 199A-199B</p> <p><b>Teacher’s Resources:</b>            Activity Lab Book 89</p>
<p><b>ESS 1 (K-4) NOS –3</b>  <i>Explain how the use of scientific tools helps to extend senses and gather data about weather. (i.e., weather /wind vane: direction; wind sock: wind intensity; anemometer: speed; thermometer: temperature; meter sticks /rulers: snow depth; rain gauges: rain amount in inches).</i></p>	
<p><b>ESS 1(K-2)–3</b>  <b>Students demonstrate an understanding of how the use of scientific tools helps to extend senses and gather data by...</b></p>	
<p><b>3a</b> using scientific tools to extend senses and gather data about weather (e.g., weather /wind vane: direction; wind sock: wind intensity; anemometer: speed; thermometer: temperature; meter sticks /rulers: snow depth; rain gauges: rain amount in inches).</p>	<p><b>Student Edition:</b>  <i>Explore</i> 229  <i>Quick Lab</i> 232  <i>Read a Photo</i> 232  <i>Think, Talk, and Write</i> 233 #1</p> <p><b>Teacher Wraparound Edition:</b>            BS 239A-239B; E 229; QL 232; RP 232</p> <p><b>Teacher’s Resources:</b>            Activity Lab Book 101-102, 104, 111-112            Visual Literacy 20</p>

STANDARDS	PAGE REFERENCES
<p><b>ESS1 (K-4) INQ+SAE –4</b>  <b>Explain how wind, water, or ice shape and reshape the earth.</b></p>	
<p><b>ESS1 (K-2) –4</b>  <b>Students demonstrate an understanding of processes and change over time within earth systems by ...</b></p>	
<p><b>4a</b> observing and recording seasonal and weather changes throughout the school year.</p>	<p><b>Student Edition:</b>  242-243, 244-245, 250-251, 252-253  <i>Explore</i> 235  <i>I Read to Review</i> 256-259  <i>Quick Lab</i> 251  <i>Read a Diagram</i> 252  <i>Think, Talk, and Write</i> 245 #2, 253 #2  <i>Writing in Science</i> 254</p> <p><b>Teacher Wraparound Edition:</b>  BS 239A-239B; DMI 242, 244, 250, 252; E 235;  IRR 256-259; QL 251; RD 252; SSL 253; WS 254</p> <p><b>Leveled Readers:</b>  Grade 1 Approaching Level Reader <i>The Four Seasons</i>  Grade 1 On Level Reader <i>When the Weather Changes</i>  Grade 1 English Learner Level Reader <i>When the Weather Changes</i></p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 107-108, 111, 116 120  Reading and Writing 124-125, 126, 132-134, 135 138-139, 140, 142  School to Home Activities 69-70, 71-72  Visual Literacy 22-23</p>

STANDARDS	PAGE REFERENCES
<p><b>ESS1 (K-4) POC –5</b>  <i>Based on data collected from daily weather observations, describe weather changes or weather patterns.</i></p>	
<p><b>ESS1 (K-2) –5</b>  <b>Students demonstrate an understanding of processes and change over time within earth systems by ...</b></p>	
<p><b>5a</b> observing, recording, and summarizing local weather data.</p>	<p><b>Student Edition:</b>  <i>Explore</i> 229, 235  <i>Quick Lab</i> 232  <i>Think, Talk, and Write</i> 233 #1  <b>Teacher Wraparound Edition:</b>            BS 239A-239B; E 229, 235; QL 232  <b>Teacher’s Resources:</b>  <i>Activity Lab Book</i> 101-102,104, 107-108, 111</p>
<p><b>5b</b> observe how clouds are related to forms of precipitation (e.g., rain, sleet, snow).</p>	<p><b>Student Edition:</b>            236-237, 238-239  <i>Explore</i> 235  <i>Health Link</i> 239  <i>Think, Talk, and Write</i> 239 #1  <b>Teacher Wraparound Edition:</b>            AE 235; DI 237; DMI 236, 238; E 235; HL 239  <b>Teacher’s Resources:</b>  <i>Activity Flipchart</i> 33  <i>Activity Lab Book</i> 107-108, 109-110  <i>Reading and Writing</i> 128-130, 131  <i>School to Home Activities</i> 67-68  <i>Visual Literacy</i> 21</p>
<p><b>ESS1 (K-4) FAF -6</b>  <i>Given information about earth materials explain how their characteristics lend themselves to specific uses</i></p>	
<p><b>ESS1 (K-2) –6</b>  <b>Students demonstrate an understanding of properties of earth materials by...</b></p>	
<p><b>6a</b> identifying which materials are best for different uses (e.g., soils for growing plants, sand for the sand box).</p>	<p><b>Student Edition:</b>            174-175  <i>Reading in Science</i> 312-313  <b>Teacher Wraparound Edition:</b>            DI 174, 197; DMI 174; ER 177; RS 312-313  <b>Teacher’s Resources:</b>  <i>Reading and Writing</i> 92, 177</p>

STANDARDS	PAGE REFERENCES
<p><b>ESS2 - The earth is part of a solar system, made up of distinct parts that have temporal and spatial interrelationships.</b></p>	
<p><b>ESS2 (K-2) –7</b>  <b>Students demonstrate an understanding of temporal or positional relationships between or among the Earth, sun, and moon by ...</b></p>	
<p><b>7a</b> observing that the sun can only be seen in the daytime, but the moon can be seen sometimes at night and sometimes during the day.</p>	<p><b>Student Edition:</b>  266-267  <i>Explore</i> 265  <i>Fact</i> 267  <i>Look and Wonder</i> 264</p> <p><b>Teacher Wraparound Edition:</b>  AE 265; DMI 272; E 265; F 267; LW 264</p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 121-122, 123-124  Reading and Writing 147-149</p>
<p><b>7b</b> observing that the sun and moon appear to move slowly across the sky.</p>	<p><b>Student Edition:</b>  272-273  <i>Explore</i> 271  <i>I Read to Review</i> 286-289  <i>Quick Lab</i> 273  <i>Writing in Science</i> 276</p> <p><b>Teacher Wraparound Edition:</b>  DI 269; DMI 272; E 271; FS 269A-269B;  IW 274A; IRR286-289; QL 273; WS 276; WU 270</p> <p><b>Leveled Readers:</b>  Grade 1 Approaching Level Reader <i>What Goes Around</i></p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 125, 127-128, 130  Reading and Writing 151-153, 155</p>

STANDARDS	PAGE REFERENCES
<p><b>7c</b> observing that the moon looks slightly different from day to day.</p>	<p><b>Student Edition:</b>            280-281  <i>Art Link</i> 283  <i>Explore</i> 279  <i>Look and Wonder</i> 278  <i>Think, Talk, and Write</i> 283 #1</p> <p><b>Teacher Wraparound Edition:</b>            AE 279; AL 283; DMI 280; E 279; FA 283; LW 278; WU 278</p> <p><b>Teacher’s Resources:</b>            Assessment 100            Activity Lab Book 133-134, 135-136            Key Concept Cards #26            Reading and Writing 157-159            Visual Literacy 26</p>
<p><b>ESS3 - The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time</b></p>	
<p><b>ESS3 (K-2) –9</b>  <b>Students demonstrate understanding of processes and change over time within the system of the universe (Scale, Distances, Star Formation, Theories, Instrumentation) by...</b></p>	
<p><b>9a</b> observing that there are more stars in the sky than can easily be counted, but they are not scattered evenly and not all the same in brightness.</p>	<p>The following references can be used in classroom discussion to meet this standard.</p> <p><b>Student Edition:</b>            266-267  <i>Explore</i> 265  <i>Look and Wonder</i> 264</p> <p><b>Teacher Wraparound Edition:</b>            DMI 266; E 265; LW 264; SB 266; WU 264</p> <p><b>Teacher’s Resources:</b>            Activity Lab Book 121-122</p>

STANDARDS	PAGE REFERENCES
<b>Physical Science</b>	
<b>PS1 - All living and nonliving things are composed of matter having characteristic properties that distinguish one substance from another (independent of size or amount of substance).</b>	
<b>PS1 (K-4) INQ –1</b> <i>Collect and organize data about physical properties in order to classify objects or draw conclusions about objects and their characteristic properties (e.g., temperature, color, size, shape, weight, texture, flexibility).</i>	
<b>PS1 (K-2)–1</b> <b>Students demonstrate an understanding of characteristic properties of matter by ...</b>	
<b>1a</b> identifying, comparing, and sorting objects by similar or different physical properties (e.g., size, shape, color, texture, smell, weight).	<b>Student Edition:</b> 300-301, 302-303, 310-311 <i>Explore</i> 53, 171, 299, 307, 381 <i>Quick Lab</i> 173 301, 335 <i>Read a Photo</i> 173 <i>Science Skills and Ideas</i> 325 #5, #8 <i>Think, Talk, and Write</i> 303 #1; 311 #1, #2 <b>Teacher Wraparound Edition:</b> AE 53, 209, 315; DI 383;DMI 300, 302, 310; E 53, 171, 299, 307, 381; ELLS 6; FS 57A-57B; QL 173, 301, 335; RP 173 <b>Teacher’s Resources:</b> <i>Activity Lab Book</i> 21-22, 23, 25, 77-78, 80, 97; 137-138, 140, 141-143, 147, 160, 183-184 <i>Reading and Writing</i> 167-169, 176 <i>School to Home Activities</i> 87-88, 89-90 <i>Visual Literacy</i> 15, 27
<b>1b</b> recording observations /data about physical properties.	<b>Student Edition:</b> <i>Explore</i> 299, 307, 411 <i>Quick Lab</i> 173, 311, 343 <b>Teacher Wraparound Edition:</b> AE 171, 329; BS 371A-371B; E 299, 307, 411; FS 319A-319B; QL 173, 311, 343 <b>Teacher’s Resources:</b> <i>Activity Lab Book</i> 80, 137-138, 141-142, 144, 149; 153, 160, 177, 197-198

STANDARDS	PAGE REFERENCES
<p><b>1c</b> using attributes of properties to state why objects are grouped together (e.g., things that roll, things that are rough).</p>	<p><b>Student Edition:</b>  <i>Explore</i> 307, 381  <i>Quick Lab</i> 301  <i>Think, Talk, and Write</i> 311 #1</p> <p><b>Teacher Wraparound Edition:</b>  E 307, 381; QL 301</p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 140, 141-143, 183-184</p>
<p><b>PS1 (K-4) POC –2</b>  <i>Make a prediction about what might happen to the state of common materials when heated or cooled or categorize materials as solid, liquid, or gas.</i></p>	
<p><b>PS1 (K-2) POC –2</b>  <b>Students demonstrate an understanding of states of matter by ...</b></p>	
<p><b>2a</b> describing properties of solids and liquids.</p>	<p><b>Student Edition:</b>  300-301, 302-303, 308-309, 310-311, 316-317  <i>Explore</i> 307, 315  <i>Look and Wonder</i> 306  <i>Science Skills and Ideas</i> 325 #8  <i>Think, Talk, and Write</i> 303 #2</p> <p><b>Teacher Wraparound Edition:</b>  AE 315; DI 309, 317; DMI 300, 302, 308, 310, 316;  E 307, 315; ELLS 308, 316; FA 303, 311; LW 306</p> <p><b>Leveled Readers:</b>  Grade 1 On Level Reader <i>Solids, Liquids, and Gases</i>  Grade 1 English Learner Reader <i>Solids Liquids, and Gases</i></p> <p><b>Teacher’s Resources:</b>  Assessment 113  Activity Lab Book 140, 141-142, 145-146, 147  Key Concept Cards #27, #28  Reading and Writing 167-169, 170, 173-175, 176  179-180, 181  School to Home Activities 87-88, 89-90  Visual Literacy 28</p>

STANDARDS	PAGE REFERENCES
<p><b>2b</b> identifying and comparing solids and liquids.</p>	<p><b>Student Edition:</b>  308-309, 316-317  <i>Art Link</i> 319  <i>Explore</i> 307  <i>I Read to Review</i> 320-323  <i>Read a Photo</i> 308  <i>Vocabulary</i> 324</p> <p><b>Teacher Wraparound Edition:</b>  AE 315; AL 319; DMI 308, 316; E 307; FA 319;  IRR 320-323; RP 308; V 324</p> <p><b>Leveled Readers:</b>  Grade 1 On Level Reader <i>Solids, Liquids, and Gases</i>  Grade 1 English Learner Level Reader <i>Solids, Liquids, and Gases</i></p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 141-142, 147  Key Concept Cards #29  Reading and Writing 173-174, 175, 179-181  School to Home Activities 93-94</p>
<p><b>2c</b> making logical predictions about the changes in the state of matter when adding or taking away heat (e.g., ice melting, water freezing).</p>	<p><b>Student Edition:</b>  <i>Explore</i> 341, 397  <i>Science Skills and Ideas</i> 353 #6  <i>Think, Talk, and Write</i> 345 #1</p> <p><b>Teacher Wraparound Edition:</b>  AE 397; E 341, 397</p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 161-162, 164, 187-188, 189  Reading and Writing 196-198  Visual Literacy 32</p>

STANDARDS	PAGE REFERENCES
<p><b>PS1 (K-4) SAE –3</b>  <i>Use measures of weight (data) to demonstrate that the whole equals the sum of its parts.</i></p>	
<p><b>PS1 (K-2)–3</b>  <b>Students demonstrate an understanding of conservation of matter by ...</b></p>	
<p><b>3a</b> using simple tools (e.g. balance scale, see-saw) to explore the property of weight.</p>	<p><b>Student Edition:</b>  <i>Explore</i> 307  <i>Math in Science</i> 305  <i>Quick Lab</i> 343  <i>Think, Talk, and Write</i> 303 #1  <i>Try It</i> R4</p> <p><b>Teacher Wraparound Edition:</b>            AE 307; DI 302; E 307; EMI 309, R4; MS 305; QL 343</p> <p><b>Teacher’s Resources:</b>            Activity Lab Book 141-142, 143, 164            Math 17</p>
<p><b>PS 2 - Energy is necessary for change to occur in matter. Energy can be stored, transferred, and transformed, but cannot be destroyed.</b></p>	
<p><b>PS2 (K-4) SAE -4</b>  <i>Given a specific example or illustration (e.g., simple closed circuit, rubbing hands together), predict the observable effects of energy (i.e., light bulb lights, a bell rings, hands warm up (e.g., a test item might ask, “what will happen when...?”).</i></p>	
<p><b>PS2 (K-2)-4</b>  <b>Students demonstrate an understanding of energy by...</b></p>	
<p><b>4a</b> describing observable effects of light using a variety of light sources.</p>	<p><b>Student Edition:</b>            412-413, 414-415  <i>Explore</i> 411  <i>Quick Lab</i> 414  <i>Think, Talk, and Write</i> 415 #2  <i>Writing in Science</i> 416</p> <p><b>Teacher Wraparound Edition:</b>            DMI 412, 414; E 411; QL 414; WS 416</p> <p><b>Teacher’s Resources:</b>            Assessment 153            Activity Lab Book 197-198, 200            Reading and Writing 239-241, 242            School to Home Activities 123-124            Visual Literacy 39</p>

STANDARDS	PAGE REFERENCES
<p><b>4b</b> experimenting and describe how vibrating objects make sound (e.g., guitar strings, seeing salt bounce on a drum skin).</p>	<p><b>Student Edition:</b>            404-405, 406-407  <i>Explore</i> 403  <i>Look and Wonder</i> 402  <i>Quick Lab</i> 405</p> <p><b>Teacher Wraparound Edition:</b>            AE 403; DMI 404, 406; E 403; LW 402; QL 405; WU 402</p> <p><b>Leveled Readers:</b>            Grade 1 On Level Reader <i>What Sounds Say</i>            Grade 1 English Learner Level Reader <i>What Sounds Say</i></p> <p><b>Teacher’s Resources:</b>            Assessment 152            Activity Lab Book 193-194, 195-196            Reading and Writing 233-236            School to Home Activities 121-122            Visual Literacy 38</p>
<p><b>4c</b> identifying the sun as a source of heat energy.</p>	<p><b>Student Edition:</b>            268-269  <i>Quick Lab</i> 399  <i>Read a Photo</i> 268  <i>Science Skills and Ideas</i> 291 #6</p> <p><b>Teacher Wraparound Edition:</b>            DI 268, 344; DMI 268; FS 269A-269B; QL 399; RP 268</p> <p><b>Leveled Readers:</b>            Grade 1 Beyond Level Reader <i>Sun Power</i></p> <p><b>Teacher’s Resources:</b>            Activity Lab Book 125, 190            School to Home Activities 77-78            Visual Literacy 24</p>

STANDARDS	PAGE REFERENCES
<p><b>PS 2 - Energy is necessary for change to occur in matter. Energy can be stored, transferred, and transformed, but cannot be destroyed.</b></p>	
<p><b>PS2 (K-4) SAE – 5</b>  <i>Use observations of light in relation to other objects /substances to describe the properties of light (can be reflected, refracted, or absorbed).</i></p>	
<p><b>PS2 (K-2)-5</b>  <b>Students demonstrate an understanding of energy by...</b></p>	
<p><b>5a</b> demonstrating when a shadow will be created using sunny versus cloudy days.</p>	<p>Shadows are discussed on the following pages and may be used to meet this standard.</p> <p><b>Student Edition:</b>  412-413  <i>Explore</i> 271  <i>Look and Wonder</i> 270  <i>Quick Lab</i> 273  <i>Think, Talk, and Write</i> 275 #2  <i>Science Skills and Ideas</i> 429 #8</p> <p><b>Teacher Wraparound Edition:</b>  AE 271; DMI 412; E 271; LW 270; QL 273</p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 127-128, 129  Reading and Writing 239-241</p>
<p><b>PS2 (K-4) SAE+INQ – 6</b>  <i>Experiment, observe, or predict how heat might move from one object to another.</i></p>	
<p><b>PS2 (K-2)–6</b>  <b>Students demonstrate an understanding of energy by...</b></p>	
<p><b>6a</b> describing that the sun warms land and water.</p>	<p><b>Student Edition:</b>  236-237, 242-243, 268-269  Quick Lab 338  Science Skills and Ideas 291 #6</p> <p><b>Teacher Wraparound Edition:</b>  DMI 236, 242, 268 ; FS 269A-269B, QL 238</p> <p><b>Teacher’s Resources:</b>  Activity Flipchart 38  Activity Lab Book 110, 125</p>

STANDARDS	PAGE REFERENCES
<p><b>6b</b> describing that objects change in temperature by adding or subtracting heat.</p>	<p>The effect of heat on states of matter is discussed on the following pages and may be used to meet this standard.</p> <p><b>Student Edition:</b>  342-243, 344-345, 400-401  <i>Explore</i> 341  <i>Fact</i> 342  <i>Health Link</i> 345  <i>Look and Wonder</i> 340  <i>Reading in Science</i> 346</p> <p><b>Teacher Wraparound Edition:</b>  AE 341, 397; DMI 342, 344, 400; E 397;ER 347;  F 343; FA 345, 401; HL 345; LW 340; RS 346;  WU 340, 396</p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 161-162, 163, 187-189  Key Concept Cards #32, #37  Reading and Writing 196-197, 198-199, 211, 231  School to Home Activities 101-102  Visual Literacy 32</p>

STANDARDS	PAGE REFERENCES
<b>PS 3 - The motion of an object is affected by forces.</b>	
<p><b>PS3 (K-4)-INQ+SAE –7</b>  <i>Use data to predict how a change in force (greater /less) might affect the position, direction of motion, or speed of an object (e.g., ramps and balls).</i></p>	
<p><b>PS3 (K-2)-7</b>  <b>Students demonstrate an understanding of motion by...</b></p>	
<p><b>7a</b> showing how pushing /pulling moves or does not move an object.</p>	<p><b>Student Edition:</b>  368-369, 370-371,  <i>Explore</i> 367, 373, 381  <i>Look and Wonder</i> 366  <i>Quick Lab</i> 364, 370  <i>Read a Photo</i> 369  <i>Think, Talk, and Write</i> 365 #2; 371 #2; 385 #2</p> <p><b>Teacher Wraparound Edition:</b>  AE 367; DI 369; DMI 368, 370; E 367, 373, 381;  ELLS 368; LW 366; QL 364, 370; RP 369; WU 366</p> <p><b>Leveled Readers:</b>  Grade 1 Beyond Level Reader <i>Forces at Play</i>  Grade 1 Approaching Level Reader <i>Fun with Magnets</i></p> <p><b>Teacher’s Resources:</b>  Assessment 138  Activity Lab Book 170, 173-174, 176, 179-180, 183-184  Reading and Writing 210-213  School to Home Activities 109-110  Visual Literacy 34</p>
<p><b>7b</b> predicting the direction an object will or will not move if a force is applied to it.</p>	<p><b>Student Edition:</b>  <i>Explore</i> 373  <i>Quick Lab</i> 370, 384  <i>Think, Talk, and Write</i> 371 #2, 385 #1</p> <p><b>Teacher Wraparound Edition:</b>  E 373; QL 370, 384</p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 176, 179-180, 186</p>

STANDARDS	PAGE REFERENCES
<b>Students demonstrate an understanding of force by</b>	
<p><b>7c</b> showing that different objects fall to earth unless something is holding them up.</p>	<p>The following references discuss gravity and can be used to meet this standard.</p> <p><b>Student Edition:</b>  368-369  <i>Explore</i> 373  <i>I Read to Review</i> 388-391  <i>Read a Photo</i> 369  <i>Think, Talk, and Write</i> 371 #1</p> <p><b>Teacher Wraparound Edition:</b>  DMI 368; E 373; FA 371; IRR 388-391; RP 369</p> <p><b>Leveled Readers:</b>  Grade 1 Beyond Level Reader <i>Forces at Play</i></p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 179-180  Key Concept Cards #34  Reading and Writing 210-212  Visual Literacy 34</p>
<p><b>PS3 (K-4) INQ+ SAE –8</b>  <i>Use observations of magnets in relation to other objects to describe the properties of magnetism (i.e., attract or repel certain objects or has no effect)</i></p>	
<p><b>PS3 (K-2)–8</b>  <b>Students demonstrate an understanding of (magnetic) force by ...</b></p>	
<p><b>8a</b> observing and sorting objects that are and are not attracted to magnets.</p>	<p><b>Student Edition:</b>  382-283  <i>Explore</i> 381  <i>Read a Chart</i> 383</p> <p><b>Teacher Wraparound Edition:</b>  AE 381; DI 383; DMI 382; E 381; ELLS 382; IW 386; RC 383; WU 380</p> <p><b>Leveled Readers:</b>  Grade 1 Approaching Level Reader <i>Fun with Magnets</i></p> <p><b>Teacher’s Resources:</b>  Activity Lab Book 183-185  Reading and Writing 220-222, 224  Visual Literacy 36</p>