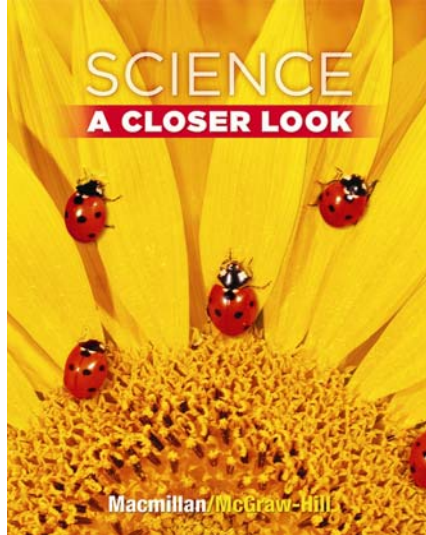




Macmillan/McGraw-Hill

Grade Span Expectations in Science
Grade 1

Vermont



SCIENCE

A CLOSER LOOK

Grade 1

© 2008

STANDARDS	PAGE REFERENCES
<i>Life Science</i>	
LS1 - All living organisms have identifiable structures and characteristics that allow for survival (organisms, populations, & species).	
LS1 (K-4) - INQ+POC –1 <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>	
LS1 (K-2) –1 Students demonstrate an understanding of classification of organisms by ...	
1a distinguishing between living and non-living things	Student Edition: 24-25, 26-27 <i>Explore 23</i> <i>Look and Wonder 22</i> <i>Quick Lab 25</i> <i>Read a Photo 25</i> Teacher Wraparound Edition: AE 23; DMI 24, 26; E 23; ELLS 24; FA 27; LW 22; QL 25; PA 46-47; SB 24; RP 25 Leveled Readers: Grade 1 Approaching Level Reader <i>In the Garden</i> Teacher’s Resources: 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
1b identifying and sorting based on a similar or different external features.	Student Edition: 38-39, 88-89, 90-91, 92-93 <i>Explore 87</i> Teacher Wraparound Edition: DMI 38, 88, 90. 92; E 87; ELLS 38, 88; FA 41; SB 38 Teacher’s Resources: 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

STANDARDS	PAGE REFERENCES
<p>1c observing and recording the external features that make up living things (e.g. roots, stems, leaves, flowers, legs, antennae, tail, shell).</p>	<p>Student Edition: <i>Art Link</i> 93 <i>Explore</i> 29, 37, 133 <i>Math Link</i> 33 <i>Quick Lab</i> 32</p> <p>Teacher Wraparound Edition: AE 29; AL 93; DI 39; E 29, 37,133; ELLS 30; ES 27A-27B, 93A-93B; ML 33; QL 32</p> <p>Leveled Readers: 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>Teacher’s Resources: Activity Lab Book 13-14, 15-16, 17-18; 41, 64</p>
<p>LS1 (K-4) SAE -2 <i>Identify the basic needs of plants and animals in order to stay alive. (i.e., water, air, food, space).</i></p>	
<p>LS1 (K-2)-2 Students demonstrate understanding of structure and function-survival requirements by...</p>	
<p>2a observing that plants need water, air, food, and light to grow; observing that animals need water, air, food and shelter to grow.</p>	<p>Student Edition: 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>Teacher Wraparound Edition: AE 67; BS 71A-71B; DI 97; DMI 24, 26, 96; E 59, 67, 133; RS 42-43; WS 100; WU 58</p> <p>Leveled Readers: Grade 1 Approaching Level Reader <i>What People and Animals Need</i></p> <p>Teacher’s Resources: 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>LS1 (K-4) POC –3 <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>LS1 (K-2)–3 Students demonstrate an understanding of reproduction by ...</p>	
<p>3a 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>Student Edition: <i>Art Link</i> 115 <i>Quick Lab</i> 113</p> <p>Teacher Wraparound Edition: AL 115; DI 111; ELLS 54, 116; FA 115; PA 76-77; QL 113; UV 111; WU 108</p> <p>Teacher’s Resources: Activity Lab Book 56 Assessment 19 Key Concept Cards #10</p>
<p>3b sequencing the life cycle of a plant or animal when given a set of pictures.</p>	<p>Student Edition: <i>Explore</i> 109 <i>Read a Diagram</i> 61, 113</p> <p>Teacher Wraparound Edition: DI 55; E 109; ELLS 60, 112; FA 57; RD 61, 112</p> <p>Teacher’s Resources: Activity Lab Book 53-54 Key Concept Cards #10 Reading and Writing 28, 58 Visual Literacy 5, 10</p>

STANDARDS	PAGE REFERENCES
<p>LS1 (K-4) FAF –4 <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>LS1 (K-2)–4 Students demonstrate understanding of structure and function-survival requirements by...</p>	
<p>4a 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>Student Edition: 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>Teacher Wraparound Edition: DMI 32, 88, 90, 92, 104, 106; E 103; FA 33, 71; QL 32</p> <p>Leveled Readers: Grade 1 Beyond Level Reader <i>Amazing Animals</i> Grade 1 Beyond Level Reader <i>Parts of a Plant</i></p> <p>Teacher’s Resources: 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
LS2 - Matter cycles and energy flows through an ecosystem.	
LS2 (K-4) SAE –5 <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>	
LS2 (K-2)–5 Students demonstrate an understanding of energy flow in an ecosystem by ...	
5a 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.	Student Edition: <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 Teacher Wraparound Edition: AE 67; BS 71A-71B; E 59, 67, 95, 241; ER 43; HL 99; IW 72; QL 70; WS 100; WU 22, 58 Leveled Readers: Grade 1 Approaching Level Reader <i>What People and Animals Need</i> Teacher’s Resources: Activity Lab Book 27-28, 31-32, 33-34, 35, 43-44, 113-114 Reading and Writing 36, 50
LS2 (K-4) SAE –6 Describe ways plants and animals depend on each other (e.g., shelter, nesting, food).	
LS2 (K-2)–6 Students demonstrate an understanding of food webs in an ecosystem by ...	
6a acting out or constructing simple diagrams (pictures or words) that shows a simple food web.	Student Edition: 144-145 <i>Art Link</i> 147 <i>Quick Lab</i> 144 <i>Read a Diagram</i> 145 Teacher Wraparound Edition: AL 147; DI 145; DMI 144; QL 144; RD144 Teacher’s Resources: Activity Lab Book 70 Visual Literacy 13

STANDARDS	PAGE REFERENCES
<p>6b 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>Student Edition: 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>Teacher Wraparound Edition: AE 141; DI 143; DMI 128, 130, 134, 136, 142; E 141; ELLS 142; FA 147; LW 140</p> <p>Teacher’s Resources: 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>LS 4 - Humans are similar to other species in many ways, and yet are unique among Earth’s life forms.</p>	
<p>LS4 (K-4) FAF -8 <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>LS4 (K-2)-8 Students demonstrate an understanding of human body systems by ...</p>	
<p>8a identifying the five senses and using senses to identify objects in the environment,</p>	<p>Teacher Wraparound Edition: DI 5; ELLS 308, 316; ER 409, 27A; FS 27A-27B; IW 254</p> <p>Leveled Readers: Grade 1 On Level Reader <i>What Sounds Say</i></p> <p>Teacher’s Resources: Activity Lab Book 11 Reading and Writing 142</p>

STANDARDS	PAGE REFERENCES
<p>8b observing, identifying, and recording external features of humans and other animals.</p>	<p>Student Edition: 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>Teacher Wraparound Edition: 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>Leveled Readers: 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>Teacher’s Resources: 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>8c identifying the senses needed to meet survival needs for a given situation.</p>	<p>Student Edition: <i>Reading In Science</i> 408-409 <i>Talk About It</i> 409</p> <p>Teacher Wraparound Edition: ER 409; RS 408-409; TAI 409</p> <p>Leveled Readers: Grade 1 On Level Reader <i>What Sounds Say</i></p> <p>Teacher’s Resources: Reading and Writing 237</p>

STANDARDS	PAGE REFERENCES
<p>LS4 (K-4) POC -9 <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>LS4 (K-2) –9 Students demonstrate an understanding of human heredity by ...</p>	
<p>9a 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>Student Edition: 60-61, 110-111 <i>Explore</i> 109 <i>Look and Wonder</i> 109 <i>Science Skills and Ideas</i> 123 #7</p> <p>Teacher Wraparound Edition: AE 109; DI 61; DMI 60, 110; E 109; LW 108</p> <p>Teacher’s Resources: Activity Lab Book 53-54, 55 Reading and Writing 56-58</p>
<p>9b identifying that some behaviors are learned.</p>	<p>The following references can be used in classroom discussion to meet this standard.</p> <p>Student Edition: 112-113</p> <p>Teacher Wraparound Edition: DMI 112</p>

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

STANDARDS	PAGE REFERENCES
<p>1c using attributes of properties to state why objects are grouped together (e.g., rocks that are shiny or not shiny).</p>	<p>Student Edition: <i>Explore</i> 171 <i>Quick Lab</i> 173 <i>Read a Photo</i> 173</p> <p>Teacher Wraparound Edition: AE 171; E 171; QL 173; RP 173</p> <p>Teacher’s Resources: Activity Lab Book 77-78, 79-80 Visual Literacy 15</p>
<p>ESS1 (K-4) INQ –2 <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>ESS1 (K-2) –2 Students demonstrate an understanding of processes and change over time within earth systems by ...</p>	
<p>2a conducting tests on how different soils retain water (e.g., how fast does the water drain through?).</p>	<p>Student Edition: <i>Think, Talk, and Write</i> 175 #2</p> <p>Teacher Wraparound Edition: DI 174; FS 199A-199B</p> <p>Teacher’s Resources: Activity Lab Book 89</p>
<p>ESS 1 (K-4) NOS –3 <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>ESS 1(K-2)–3 Students demonstrate an understanding of how the use of scientific tools helps to extend senses and gather data by...</p>	
<p>3a 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>Student Edition: <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>Teacher Wraparound Edition: BS 239A-239B; E 229; QL 232; RP 232</p> <p>Teacher’s Resources: Activity Lab Book 101-102, 104, 111-112 Visual Literacy 20</p>

STANDARDS	PAGE REFERENCES
<p>ESS1 (K-4) INQ+SAE –4 Explain how wind, water, or ice shape and reshape the earth.</p>	
<p>ESS1 (K-2) –4 Students demonstrate an understanding of processes and change over time within earth systems by ...</p>	
<p>4a observing and recording seasonal and weather changes throughout the school year.</p>	<p>Student Edition: 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>Teacher Wraparound Edition: BS 239A-239B; DMI 242, 244, 250, 252; E 235; IRR 256-259; QL 251; RD 252; SSL 253; WS 254</p> <p>Leveled Readers: 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>Teacher’s Resources: 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>ESS1 (K-4) POC –5 <i>Based on data collected from daily weather observations, describe weather changes or weather patterns.</i></p>	
<p>ESS1 (K-2) –5 Students demonstrate an understanding of processes and change over time within earth systems by ...</p>	
<p>5a observing, recording, and summarizing local weather data.</p>	<p>Student Edition: <i>Explore</i> 229, 235 <i>Quick Lab</i> 232 <i>Think, Talk, and Write</i> 233 #1 Teacher Wraparound Edition: BS 239A-239B; E 229, 235; QL 232 Teacher’s Resources: <i>Activity Lab Book</i> 101-102,104, 107-108, 111</p>
<p>5b observe how clouds are related to forms of precipitation (e.g., rain, sleet, snow).</p>	<p>Student Edition: 236-237, 238-239 <i>Explore</i> 235 <i>Health Link</i> 239 <i>Think, Talk, and Write</i> 239 #1 Teacher Wraparound Edition: AE 235; DI 237; DMI 236, 238; E 235; HL 239 Teacher’s Resources: <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>ESS1 (K-4) FAF -6 <i>Given information about earth materials explain how their characteristics lend themselves to specific uses</i></p>	
<p>ESS1 (K-2) –6 Students demonstrate an understanding of properties of earth materials by...</p>	
<p>6a identifying which materials are best for different uses (e.g., soils for growing plants, sand for the sand box).</p>	<p>Student Edition: 174-175 <i>Reading in Science</i> 312-313 Teacher Wraparound Edition: DI 174, 197; DMI 174; ER 177; RS 312-313 Teacher’s Resources: <i>Reading and Writing</i> 92, 177</p>

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

STANDARDS	PAGE REFERENCES
<p>7c observing that the moon looks slightly different from day to day.</p>	<p>Student Edition: 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>Teacher Wraparound Edition: AE 279; AL 283; DMI 280; E 279; FA 283; LW 278; WU 278</p> <p>Teacher’s Resources: Assessment 100 Activity Lab Book 133-134, 135-136 Key Concept Cards #26 Reading and Writing 157-159 Visual Literacy 26</p>
<p>ESS3 - The origin and evolution of galaxies and the universe demonstrate fundamental principles of physical science across vast distances and time</p>	
<p>ESS3 (K-2) –9 Students demonstrate understanding of processes and change over time within the system of the universe (Scale, Distances, Star Formation, Theories, Instrumentation) by...</p>	
<p>9a 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>Student Edition: 266-267 <i>Explore</i> 265 <i>Look and Wonder</i> 264</p> <p>Teacher Wraparound Edition: DMI 266; E 265; LW 264; SB 266; WU 264</p> <p>Teacher’s Resources: Activity Lab Book 121-122</p>

STANDARDS	PAGE REFERENCES
Physical Science	
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).	
PS1 (K-4) INQ –1 <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>	
PS1 (K-2)–1 Students demonstrate an understanding of characteristic properties of matter by ...	
1a identifying, comparing, and sorting objects by similar or different physical properties (e.g., size, shape, color, texture, smell, weight).	Student Edition: 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 Teacher Wraparound Edition: 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 Teacher’s Resources: <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
1b recording observations /data about physical properties.	Student Edition: <i>Explore</i> 299, 307, 411 <i>Quick Lab</i> 173, 311, 343 Teacher Wraparound Edition: AE 171, 329; BS 371A-371B; E 299, 307, 411; FS 319A-319B; QL 173, 311, 343 Teacher’s Resources: <i>Activity Lab Book</i> 80, 137-138, 141-142, 144, 149; 153, 160, 177, 197-198

STANDARDS	PAGE REFERENCES
<p>1c using attributes of properties to state why objects are grouped together (e.g., things that roll, things that are rough).</p>	<p>Student Edition: <i>Explore</i> 307, 381 <i>Quick Lab</i> 301 <i>Think, Talk, and Write</i> 311 #1</p> <p>Teacher Wraparound Edition: E 307, 381; QL 301</p> <p>Teacher’s Resources: Activity Lab Book 140, 141-143, 183-184</p>
<p>PS1 (K-4) POC –2 <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>PS1 (K-2) POC –2 Students demonstrate an understanding of states of matter by ...</p>	
<p>2a describing properties of solids and liquids.</p>	<p>Student Edition: 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>Teacher Wraparound Edition: AE 315; DI 309, 317; DMI 300, 302, 308, 310, 316; E 307, 315; ELLS 308, 316; FA 303, 311; LW 306</p> <p>Leveled Readers: Grade 1 On Level Reader <i>Solids, Liquids, and Gases</i> Grade 1 English Learner Reader <i>Solids Liquids, and Gases</i></p> <p>Teacher’s Resources: 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>2b identifying and comparing solids and liquids.</p>	<p>Student Edition: 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>Teacher Wraparound Edition: AE 315; AL 319; DMI 308, 316; E 307; FA 319; IRR 320-323; RP 308; V 324</p> <p>Leveled Readers: 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>Teacher’s Resources: 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>2c 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>Student Edition: <i>Explore</i> 341, 397 <i>Science Skills and Ideas</i> 353 #6 <i>Think, Talk, and Write</i> 345 #1</p> <p>Teacher Wraparound Edition: AE 397; E 341, 397</p> <p>Teacher’s Resources: Activity Lab Book 161-162, 164, 187-188, 189 Reading and Writing 196-198 Visual Literacy 32</p>

STANDARDS	PAGE REFERENCES
<p>PS1 (K-4) SAE –3 <i>Use measures of weight (data) to demonstrate that the whole equals the sum of its parts.</i></p>	
<p>PS1 (K-2)–3 Students demonstrate an understanding of conservation of matter by ...</p>	
<p>3a using simple tools (e.g. balance scale, see-saw) to explore the property of weight.</p>	<p>Student Edition: <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>Teacher Wraparound Edition: AE 307; DI 302; E 307; EMI 309, R4; MS 305; QL 343</p> <p>Teacher’s Resources: Activity Lab Book 141-142, 143, 164 Math 17</p>
<p>PS 2 - Energy is necessary for change to occur in matter. Energy can be stored, transferred, and transformed, but cannot be destroyed.</p>	
<p>PS2 (K-4) SAE -4 <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>PS2 (K-2)-4 Students demonstrate an understanding of energy by...</p>	
<p>4a describing observable effects of light using a variety of light sources.</p>	<p>Student Edition: 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>Teacher Wraparound Edition: DMI 412, 414; E 411; QL 414; WS 416</p> <p>Teacher’s Resources: 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>4b experimenting and describe how vibrating objects make sound (e.g., guitar strings, seeing salt bounce on a drum skin).</p>	<p>Student Edition: 404-405, 406-407 <i>Explore</i> 403 <i>Look and Wonder</i> 402 <i>Quick Lab</i> 405</p> <p>Teacher Wraparound Edition: AE 403; DMI 404, 406; E 403; LW 402; QL 405; WU 402</p> <p>Leveled Readers: Grade 1 On Level Reader <i>What Sounds Say</i> Grade 1 English Learner Level Reader <i>What Sounds Say</i></p> <p>Teacher’s Resources: 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>4c identifying the sun as a source of heat energy.</p>	<p>Student Edition: 268-269 <i>Quick Lab</i> 399 <i>Read a Photo</i> 268 <i>Science Skills and Ideas</i> 291 #6</p> <p>Teacher Wraparound Edition: DI 268, 344; DMI 268; FS 269A-269B; QL 399; RP 268</p> <p>Leveled Readers: Grade 1 Beyond Level Reader <i>Sun Power</i></p> <p>Teacher’s Resources: Activity Lab Book 125, 190 School to Home Activities 77-78 Visual Literacy 24</p>

STANDARDS	PAGE REFERENCES
<p>PS 2 - Energy is necessary for change to occur in matter. Energy can be stored, transferred, and transformed, but cannot be destroyed.</p>	
<p>PS2 (K-4) SAE – 5 <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>PS2 (K-2)-5 Students demonstrate an understanding of energy by...</p>	
<p>5a 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>Student Edition: 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>Teacher Wraparound Edition: AE 271; DMI 412; E 271; LW 270; QL 273</p> <p>Teacher’s Resources: Activity Lab Book 127-128, 129 Reading and Writing 239-241</p>
<p>PS2 (K-4) SAE+INQ – 6 <i>Experiment, observe, or predict how heat might move from one object to another.</i></p>	
<p>PS2 (K-2)–6 Students demonstrate an understanding of energy by...</p>	
<p>6a describing that the sun warms land and water.</p>	<p>Student Edition: 236-237, 242-243, 268-269 Quick Lab 338 Science Skills and Ideas 291 #6</p> <p>Teacher Wraparound Edition: DMI 236, 242, 268 ; FS 269A-269B, QL 238</p> <p>Teacher’s Resources: Activity Flipchart 38 Activity Lab Book 110, 125</p>

STANDARDS	PAGE REFERENCES
<p>6b 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>Student Edition: 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>Teacher Wraparound Edition: 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>Teacher’s Resources: 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
PS 3 - The motion of an object is affected by forces.	
PS3 (K-4)-INQ+SAE –7 <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>	
PS3 (K-2)-7 Students demonstrate an understanding of motion by...	
7a showing how pushing /pulling moves or does not move an object.	Student Edition: 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 Teacher Wraparound Edition: AE 367; DI 369; DMI 368, 370; E 367, 373, 381; ELLS 368; LW 366; QL 364, 370; RP 369; WU 366 Leveled Readers: Grade 1 Beyond Level Reader <i>Forces at Play</i> Grade 1 Approaching Level Reader <i>Fun with Magnets</i> Teacher’s Resources: 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
7b predicting the direction an object will or will not move if a force is applied to it.	Student Edition: <i>Explore</i> 373 <i>Quick Lab</i> 370, 384 <i>Think, Talk, and Write</i> 371 #2, 385 #1 Teacher Wraparound Edition: E 373; QL 370, 384 Teacher’s Resources: Activity Lab Book 176, 179-180, 186

STANDARDS	PAGE REFERENCES
Students demonstrate an understanding of force by	
<p>7c 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>Student Edition: 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>Teacher Wraparound Edition: DMI 368; E 373; FA 371; IRR 388-391; RP 369</p> <p>Leveled Readers: Grade 1 Beyond Level Reader <i>Forces at Play</i></p> <p>Teacher’s Resources: Activity Lab Book 179-180 Key Concept Cards #34 Reading and Writing 210-212 Visual Literacy 34</p>
<p>PS3 (K-4) INQ+ SAE –8 <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>PS3 (K-2)–8 Students demonstrate an understanding of (magnetic) force by ...</p>	
<p>8a observing and sorting objects that are and are not attracted to magnets.</p>	<p>Student Edition: 382-283 <i>Explore</i> 381 <i>Read a Chart</i> 383</p> <p>Teacher Wraparound Edition: AE 381; DI 383; DMI 382; E 381; ELLS 382; IW 386; RC 383; WU 380</p> <p>Leveled Readers: Grade 1 Approaching Level Reader <i>Fun with Magnets</i></p> <p>Teacher’s Resources: Activity Lab Book 183-185 Reading and Writing 220-222, 224 Visual Literacy 36</p>