



# SCIENCE

## A CLOSER LOOK

Grade 2

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STANDARDS	PAGE REFERENCES
<p><b>STANDARD 1:</b> Students apply the processes of scientific investigation and design, conduct, communicate about, and evaluate such investigations.</p>	
<p>1. use their senses to make and describe careful observations</p>	<p><b>Student Edition:</b> 290-291 <i>Explore</i> 121, 405 <i>Quick Lab</i> 137, 328, 407 <b>Teacher Wraparound Edition:</b> AR 291; BR 290; BS 329C-329D; DI 291; DR 290; E 121, 405; QL 137, 328, 407</p>
<p>2. ask questions and make predictions</p>	<p><b>Student Edition:</b> 8 <i>Explore</i> 23, 103, 237, 331, 385 <i>Quick Lab</i> 199 <i>Talk About It</i> 243 <b>Teacher Wraparound Edition:</b> DI 8, 239; DMI 8; E 23, 103, 237, 331, 385; ELLS 386; FS 235A-235B; QL 198; TAI 243</p>

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<p>3. conduct simple experiments using tools and technology (<i>for example: computers, thermometers, magnifiers, rulers, balances</i>)</p>	<p><b>Student Edition:</b> 304-305, 380-381 <i>Explore</i> 385, 421 <i>Quick Lab</i> 132, 304, 380, 403, 407</p> <p><b>Teacher Wraparound Edition:</b> BS 389A-389B, DI 311, R3; E 385, 421; ELLS R2; FS 403A-403B; IW 389A; QL 132, 304, 380, 403, 407</p>
<p>4. record data, report on findings and explain with reasons</p>	<p><b>Student Edition:</b> 6-7, 9 <i>Explore</i> 11, 201, 223, 231 <i>Quick Lab</i> 132, 371</p> <p><b>Teacher Wraparound Edition:</b> AE 11; DI 8, 311; DMI 6; E 11, 201, 223, 231; FS 299A-299B; IM 299A; QL 132, 370; UV 7</p>
<p><b>STANDARD 2:</b> <b>Physical Science: Students know and understand common properties, forms, and changes in matter and energy. (Focus: Physics and Chemistry)</b></p>	
<p><b>Properties of Materials</b></p>	
<p>1. solids and liquids (matter) can be identified, compared, sorted/classified by their physical properties (<i>for example: size, shape, texture, flexibility, temperature, color and patterns</i>)</p>	<p><b>Student Edition:</b> 296-299, 302-303, 310-311 <i>Art Link</i> 299 <i>Explore</i> 301, 309 <i>Quick Lab</i> 298 <i>Think, Talk, and Write</i> 299, 305, 313 #1 &amp; #3</p> <p><b>Teacher Wraparound Edition:</b> AL 299; DMI 302, 310; DV 297, 298; E 301, 309; ELLS 296, 310; QL 298, 305; URS 299; UV 298, 303</p>
<p>2. mixtures can be created and separated based on physical properties (<i>for example: salt and sand, iron filings and soil, oil and water</i>)</p>	<p><b>Student Edition:</b> 340-341, 344 <i>Health Link</i> 345 <i>Think, Talk, and Write</i> 345 #3</p> <p><b>Teacher Wraparound Edition:</b> DMI 340; ELLS 340; FA 345; HL 345 UV 341</p>

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<u>Position and Motion of Objects</u>	
3. the only way to change the motion of an object is by pushing or pulling on it ( <i>force</i> )	<b>Student Edition:</b> 368-369, 372-373 <i>Read a Diagram</i> 373 <i>Social Studies Link</i> 373 <b>Teacher Wraparound Edition:</b> DI 369; DMI 368; ELLS 368; RD 372; SSL 373; UV 369
<b>STANDARD 3:</b> <b>Life Science: Students know and understand the characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment. (Focus: Biology-- Anatomy, Physiology, Botany, Zoology, Ecology)</b>	
<u>Characteristics of Organisms</u>	
1. an organism (plant, animal) is a living thing that has physical characteristics that help it to survive	<b>Student Edition:</b> 26, 42-43; 70-71, 73, 74 <i>Explore</i> 69 <i>Look and Wonder</i> 68 <i>Quick Lab</i> 73 <i>Read a Diagram</i> 26 <i>Read a Photo</i> 71 <i>Think, Talk, and Write</i> 73 #1 & #3 <b>Teacher Wraparound Edition:</b> DI 71; DMI 42, 70; DV 71; E 69; LAI 74; LW 68; QL 72; RD 26; RP 71; UV 42; WU 68
2. offspring have characteristics that are similar to but not exactly like their parents	<b>Student Edition:</b> 40-41, 78 <i>Explore</i> 61 <i>Look and Wonder</i> 60 <i>Math in Science</i> 75 <i>Think, Talk, and Write</i> 43 #1 <b>Teacher Wraparound Edition:</b> AE 61; DMI 40; DV 41; E 61; ELLS 40; EMI 42; FA 43; MS 75; URS 43
3. fossil evidence helps identify organisms that once lived on Earth but have completely disappeared ( <i>for example: dinosaurs, dodo bird, woolly mammoth and saber tooth tiger</i> )	<b>Student Edition:</b> 108-109 <i>Reading in Science</i> 110-111 <b>Teacher Wraparound Edition:</b> BR 110; BS 109A-109B; DMI 108; DR 110; DV 108

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<u>Life Cycles of Organisms</u>	
<p>4. there are similarities and differences in growth and development of organisms (<i>for example: insect, plant, mammal</i>)</p>	<p><b>Student Edition:</b>  34-35, 36, 62-65  <i>Quick Lab</i> 63  <i>Read a Diagram</i> 34, 63  <i>Social Studies Link</i> 65  <i>Think, Talk, and Write</i> 35, 65</p> <p><b>Teacher Wraparound Edition:</b>  BS 65A-65B; DI 34; DMI 34, 62, 64; DV 34;  ELLS 62; FA 35, 65; QL 63; RD 34, 63; SSL 65</p>
<u>Organisms and Environments</u>	
<p>5. organisms interact with each other and with nonliving parts of their habitat to meet their basic needs (<i>for example: food, water, air, shelter, space</i>)</p>	<p><b>Student Edition:</b>  26-27, 90-91, 92-93, 96-99  <i>Art Link</i> 93  <i>Explore</i> 95  <i>Look and Wonder</i> 94  <i>Quick Lab</i> 59, 97  <i>Read a Diagram</i> 92  <i>Think, Talk, and Write</i> 93, 99</p> <p><b>Teacher Wraparound Edition:</b>  AE 89, 95; AL 93; DI 25, 91; DMI 26, 90; E 95;  QL 58, 97; RD 92; SB 96; UV 91</p>
<p><b>STANDARD 4:</b>  <b>Earth and Space Science: Students know and understand the processes and interactions of Earth's systems and the structure and dynamics of Earth and other objects in space. (Focus: Geology, Meteorology, Astronomy, Oceanography)</b></p>	
<u>Properties of the Earth's Materials</u>	
<p>1. there are different types of Earth's materials that come in different shapes and sizes (<i>for example: rocks and soil</i>)</p>	<p><b>Student Edition:</b>  188-189, 196-197  <i>Explore</i> 187  <i>Math Link</i> 191  <i>Quick Lab</i> 191  <i>Think, Talk, and Write</i> 191, 199 #2</p> <p><b>Teacher Wraparound Edition:</b>  DI 189, 197; DMI 196; DV 189; ELLS 188, 196;  FA 191; ML 191; QL 190</p>

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<p>2. there are major features of Earth's surface (<i>for example: mountains, rivers, plains, hills, oceans, plateaus</i>)</p>	<p><b>Student Edition:</b>  156-157, 158-159, 166, 179  <i>Explore</i> 155  <i>Read a Map</i> 159  <i>Science Skills and Ideas</i> 183  <i>Writing in Science</i> 168  <b>Teacher Wraparound Edition:</b>  AE 154; DI 157; DMI 156; E 155; RM 159; UV 157</p>
<p>3. the Earth's materials (<i>rocks, soil, water</i>) provide many of the resources that humans use and reuse</p>	<p><b>Student Edition:</b>  164-165, 167, 189, 202-203, 206-207, 212, 401  <i>Explore</i> 163, 201  <i>Look and Wonder</i> 162  <i>Quick Lab</i> 207  <i>Read a Photo</i> 196-197  <i>Reading in Science</i> 176-177, 306-307  <i>Think, Talk, and Write</i> 167, 199 #3  <b>Teacher Wraparound Edition:</b>  AE 163, 201; DI 203; DMI 164, 188, 202; E 163, 201; EMI 203; LW 162; QL 206; RP 197; UER TR 67; UV 165, 203</p>
<p><b>Earth's Weather</b></p>	
<p>4. our activities are affected by the daily weather and changing seasons (<i>for example: types of clothing, travel plans, recreational activity</i>)</p>	<p><b>Student Edition:</b>  260-261  <i>Explore</i> 259  <i>Quick Lab</i> 261  <i>Writing in Science</i> 264  <b>Teacher Wraparound Edition:</b>  AE 259; AL 263; DI 239, 262; E 259; ELLS 260; FA 263; HL 73; QL 261; UV 261; WS 264</p>

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<u>Objects in the Sky</u>	
5. the Sun is the source of Earth's heat and light	<b>Student Edition:</b> 400, 416 <i>Explore</i> 399 <i>Look and Wonder</i> 414 <i>Think, Talk, and Write</i> 403 #1 <b>Teacher Wraparound Edition:</b> BS 419A-419B; E 399; LW 414; SB 400
6. objects can be readily observed in the daytime and nighttime sky ( <i>for example: the Sun, Moon, stars</i> )	<b>Student Edition:</b> 268-273; 283 <i>Explore</i> 267 <i>Look and Wonder</i> 266 <i>Quick Lab</i> 272 <i>Reading in Science</i> 280-281 <i>Talk About It</i> 281 <i>Think, Talk, and Write</i> 273 <b>Teacher Wraparound Edition:</b> AE 267; DMI 268; E 267; ELLS 280; EMI 271; LW 266; QL 272; TAI 281
<b>STANDARD 5:</b> <b>Students understand that the nature of science involves a particular way of building knowledge and making meaning of the natural world.</b>	
1. basic observable patterns and changes in the world can help to predict future events based on those patterns ( <i>for example: seasonal weather patterns, day/night</i> )	<b>Student Edition:</b> 238-239, 254-255, 260-261 <i>Explore</i> 237 <i>Reading in Science</i> 242-243 <i>Talk About It</i> 243 <i>Think, Talk, and Write</i> 241 #1, 2 <b>Teacher Wraparound Edition:</b> AE 237; DI 239; DMI 254, 260; E 237; PS 242-243; TAI 243