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STANDARDS	PAGE REFERENCES
<p>SCIENCE AS INQUIRY – The student will develop the abilities to do <i>scientific inquiry</i>, be able to demonstrate how <i>scientific inquiry</i> is applied, and develop understandings about <i>scientific inquiry</i>.</p>	
<p>Benchmark 1: The student will demonstrate abilities necessary to do the processes of <i>scientific inquiry</i>.</p>	
<p>1. ▲ identifies questions that can be answered through scientific investigations.</p>	<p>Student Edition: <i>Lab</i> NOS28-NOS29, 32-33, 74-75, 106-107, 138-139, 182-183, 220-221, 260-261, 298-299, 334-335, 380-381, 416-417, 454-455, 526-527, 562-563, 604-605, 640-641, 676-677, 716-717, 752-753, 788-789 <i>Skill Practice</i> 25, 59, 172, 287, 399, 434, 589, 658, 707, 735 Teacher Edition: L NOS28-NOS28A, 74-74A, 106-106A, 138-138A, 182-182A, 220-220B, 260-260B, 298-298A, 334-334A, 380-380B, 416-416A, 454-454A, 526-526B, 562-562A, 604-604A, 640-640B, 676-676A, 716-716A, 752-752B, 788-788B; SP 25</p>

STANDARDS	PAGE REFERENCES
2. ▲ designs and conducts <i>scientific investigations</i> safely using appropriate tools, mathematics, <i>technology</i> , and techniques to gather, analyze, and interpret data.	Student Edition: <i>Inquiry Extension</i> 75, 183, 605, 677 <i>Lab NOS29</i> , 32-33, 183, 299, 380-381, 562-563, 788-789 Teacher Edition: DI 711; IE 75, 183, 605, 677; L NOS28B, 32A, 182A, 380A-380B, 562-562A, 788-788B
3. ▲ identifies the relationship between evidence and logical conclusions.	Student Edition: <i>Lab NOS29</i> , 75, 107, 139, 183, 221, 299, 335, 381, 455, 527, 563, 605, 641, 677, 753, 789 <i>Skill Practice</i> 287, 365, 372, 507, 658, 707, 735, 779 Teacher Edition: L NOS28B, 74B, 106B, 138B, 182A-183, 220B-221, 298B, 334B, 380B-381, 454B, 527, 562B, 604A, 640B-641, 676B, 752B, 788B-789
4. ▲ communicates scientific procedures, results and explanations.	Student Edition: <i>Lab NOS29</i> , 33, 75, 107, 139, 183, 221, 261, 299, 335, 381, 417, 455, 527, 563, 605, 641, 677, 717, 753 <i>Skill Practice</i> 553, 707 Teacher Edition: L NOS29, 33, 75, 107, 138B-139, 183, 221, 299, 335, 381, 417, 455, 527, 563, 604B, 641, 677, 717, 753
Benchmark 2: The student will apply different kinds of investigations to different kinds of questions.	
1. develops questions and adapts (frames) the inquiry process to guide the appropriate type of investigation.	Student Edition: <i>Lab NOS28-NOS29</i> , 32-33, 74-75, 138-139, 182-183, 220-221, 298-299, 380-381, 416-417, 562-563, 640-641, 676-677, 716-717, 788-789 Teacher Edition: L NOS28-NOS28B, 32-33, 74-75, 138-139, 182-183, 220-221, 298-299, 380-381, 416-417, 562-563, 640-641, 676-677, 716-717, 752-752B, 788-789
2. differentiates between qualitative and quantitative data in an investigation	This could be introduced with classroom discussion along with chapters on Scientific Explanations Student Edition: NOS4-NOS31

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<p>Benchmark 3: The student will analyze how science advances through the interaction of new ideas, scientific investigations, skepticism, and examinations of evidence of varied explanations</p>	
<p>1. after completing an investigation, generates alternative methods of investigation and/or further questions for inquiry.</p>	<p>Student Edition: <i>Inquiry Extension</i> NOS29, 75, 139, 183, 221, 299, 381, 417, 455, 527, 605, 641, 677, 753 <i>Lab</i> 641 <i>Skill Practice</i> 172, 287, 658</p> <p>Teacher Edition: IE NOS29, 75, 139, 183, 221, 299, 381, 417, 455, 527, 605, 641, 677, 753; L 641; ML 209, 345; SP 67</p>
<p>2. ▲ evaluates the work of others to determine evidence which scientifically supports or contradicts the results, identifying faulty reasoning or conclusions that go beyond evidence and/or are not supported by data.</p>	<p>Student Edition: <i>Inquiry Extension</i> 789 <i>Lab</i> 75, 381, 455, 605, 677</p> <p>Teacher Edition: IE 789; L 454B, 604B, 677</p>
<p style="text-align: center;">5th Grade Recommendations Integrated</p>	
<p>2.1.1 ▲ compares and classifies the states of matter; solids, liquids, gases, and plasma</p>	<p>Student Edition: 358-359, 361, 368, 446-447 <i>Figure 8</i> 359 <i>Figure 10</i> 361 <i>Figure 11</i> 368 <i>Figure 18</i> 446 <i>Inquiry</i> 357 <i>Lab</i> 380-381 <i>Launch Lab</i> 349 <i>Skill Practice</i> 365 <i>Table 1</i> 363</p> <p>Teacher Edition: DI 359, 361, 369; E 359, 361, 368; ET 349, 357, 445; I 357; L 380-381; SCB 346F; TT 359, 369, 371</p>

STANDARDS	PAGE REFERENCES
<p>2.2.2 ▲ measures and graphs the effects of temperature on matter.</p>	<p>Student Edition: 368 <i>Figure 11</i> 368 <i>Figure 20</i> 447 <i>Lab</i> 605-606 <i>Launch Lab</i> 446 <i>Mini Lab</i> 369 Teacher Edition: DI 369; L 605-606; SCB 346F; TT 451</p>
<p>2.3.4 ▲ investigates and explains how simple machines multiply force at the expense of distance.</p>	<p>This could be introduced with classroom discussion and Chapter 19 (page 688)</p>
<p>2.4.1 understands the difference between potential and kinetic energy.</p>	<p>Student Edition: 427-429, 440-441 <i>Figure 2, 3 & 4</i> 428 <i>Figure 5 & 6</i> 429 <i>Figure 14</i> 440 <i>Figure 15</i> 441 <i>Interpret Graphics</i> 433 #7-8 Teacher Edition: E 428-429, 440-441; ET 427; PE 427; SCB 424E; TT 429, 431</p>
<p>2.4.3 ▲ observes and communicates how light (electromagnetic) energy interacts with matter: transmitted, reflected, refracted, and absorbed.</p>	<p>Student Edition: 583 <i>Figure 8</i> 583 Teacher Edition: E 583; TT 583</p>

STANDARDS	PAGE REFERENCES
<p>3.4.1 ▲ recognizes that all populations living together (biotic resources) and the physical factors (abiotic resources) with which they interact compose an ecosystem.</p>	<p>Student Edition: 309-311, 317 <i>Critical Thinking</i> 314, 339 #12 <i>Figure 1</i> 309 <i>Figure 2</i> 310 <i>Get Ready to Read</i> 307 <i>Inquiry</i> 306 <i>Interpret Graphics</i> 314 #8 <i>Mini Lab</i> 311 <i>Review</i> 339 #20 <i>The Big Idea</i> 306</p> <p>Teacher Edition: AF 309; DI 311; E 310-311; ET 309, 317; GRR 307; I 306; P 317; SCB 306E; TBI 306; WE 309</p>
<p>3.4.2 understands how limiting factors determine the carrying capacity of an ecosystem.</p>	<p>Student Edition: 319 <i>Figure 7</i> 319 <i>Mini Lab</i> 318 <i>Skill Practice</i> 323</p> <p>Teacher Edition: DI 319; E 319; SCB 306E; TT 319</p>
<p>3.4.3 ▲ traces the energy flow from the sun (source of radiant energy) to producers (via photosynthesis – chemical energy) to consumers and decomposers in food webs.</p>	<p>Student Edition: 14, 69-72, 325-329 <i>Critical Thinking</i> 339 #18 <i>Figure 6</i> 14 <i>Figure 11</i> 326 <i>Figure 12</i> 327 <i>Figure 13 & 14</i> 328 <i>Figure 15</i> 329 <i>Inquiry</i> 68, 324 <i>Launch Lab</i> 325 <i>Mini Lab</i> 329</p> <p>Teacher Edition: DI 327, 329; E 14-15, 71-72, 326-329; EF 325; ET 69, 325, 773; I 68, 324; OE 325; TT 327</p>

STANDARDS	PAGE REFERENCES
<p>4.3.1 ▲ compares and contrasts the characteristics of stars, planets, moons, comets, and asteroids.</p>	<p>Student Edition: 727, 737-738, 763-766, 773-777 <i>Figure 2</i> 764 <i>Figure 3</i> 766 <i>Figure 4 & 5</i> 768 <i>Figure 6</i> 769 <i>Figure 9</i> 738 <i>Inquiry</i> 736, 760, 762 <i>Launch Lab</i> 727 <i>Lesson 1 Review</i> 770 <i>Mini Lab</i> 765 <i>Skill Practice</i> 779 <i>Table 1</i> 767 <i>The Big Idea</i> 760 Teacher Edition: CLE 773; DI 739, 765, 767, 769; E 738, 764-769, 774-777; ES 727; ET 763, 773; I 736, 760, 762; IWB 760D; OSSS 763; SCB 724E-724F, 760E; SM 737; TBI 760; TT 765, 767, 769, 783</p>
<p>4.3.2 models spatial relationships of the earth/moon/planets/sun system to scale.</p>	<p>Student Edition: <i>Mini Lab</i> 765 Teacher Edition: DI 765; TT 729</p>
<p>4.3.3 identifies past and present methods used to explore space.</p>	<p>Student Edition: 776-777, 781, 785-786 <i>Figure 9</i> 776 <i>Figure 10 & 11</i> 777 <i>Figure 13</i> 782 <i>Figure 16</i> 785 <i>Figure 18</i> 786 <i>Inquiry</i> 772 <i>Science & Society</i> 771 Teacher Edition: DI 783; E 776-777, 782, 784-786; ET 773, 781; Ext 771; I 772; SCB 760E-760F; TEST 781; TT 769, 777, 783</p>

STANDARDS	PAGE REFERENCES
6th Grade Recommendations Integrated	
<p>2.1.1 ▲ compares and classifies the states of matter; solids, liquids, gases, and plasma</p>	<p>Student Edition: 358-359, 361, 368, 446-447 <i>Figure 8</i> 359 <i>Figure 10</i> 361 <i>Figure 11</i> 368 <i>Figure 18</i> 446 <i>Inquiry</i> 357 <i>Lab</i> 380-381 <i>Launch Lab</i> 349 <i>Skill Practice</i> 365 <i>Table 1</i> 363</p> <p>Teacher Edition: DI 359, 361, 369; E 359, 361, 368; ET 349, 357, 445; I 357; L 380-381; SCB 346F; TT 359, 369, 371</p>
<p>2.1.2 compares and contrasts the classes of matter; elements, compounds, and mixtures.</p>	<p>Student Edition: 349-354, 395-396, 481 <i>Critical Thinking</i> 385 #11 <i>Figure 3</i> 351 <i>Figure 4</i> 352, 394-395 <i>Figure 5</i> 395 <i>Figure 6</i> 353, 396 <i>Figure 7</i> 354 <i>Lesson 1 Review</i> 355</p> <p>Teacher Edition: DI 351, 353; E 350-354, 394-395; MG 481; SCB 346E, 388E-388F; TT 351; UM 349</p>

STANDARDS	PAGE REFERENCES
<p>2.1.3 identifies and communicates properties of matter including but not limited to, boiling point, solubility, and density.</p>	<p>Student Edition: 358-363, 374, 401-402, 410, 413-414, 482 <i>Concepts in Motion</i> 362 <i>Figure 2</i> 392 <i>Figure 3</i> 393 <i>Figure 10</i> 361 <i>Inquiry</i> 357, 373, 388 <i>Lab</i> 380-381 <i>Launch Lab</i> 349, 391, 409 <i>Lesson 2 Review</i> 364 <i>Mini Lab</i> 482 <i>Review</i> 385 #20 <i>Science & Society</i> 407 <i>Skill Practice</i> 365, 372 <i>Table 1</i> 362-363</p> <p>Teacher Edition: CP 374; DI 359, 361, 363, 369, 403, 483; E 359-363, 392-393, 402, 410, 413-414, 482; ET 349, 357, 373, 401, 409; Ext 407; I 357, 373, 388; IM 346H, 388H; L 380-381; SCB 346E-346F; TT 355, 359, 361, 363, 403, 483; WM 401</p>
<p>2.2.1 ▲ understands the relationship of atoms to elements and elements to compounds. (Introduction only.)</p>	<p>Student Edition: 349-352, 481 <i>Figure 2</i> 350 <i>Figure 3</i> 351 <i>Figure 4</i> 352 <i>Figure 7</i> 354 <i>Figure 17</i> 376</p> <p>Teacher Edition: DI 351, 377; E 350-352, 354; MG 481; PP 358; SCB 346E; TT 351; UM 349</p>
<p>2.2.2 ▲ measures and graphs the effects of temperature on matter.</p>	<p>Student Edition: 368 <i>Figure 11</i> 368 <i>Figure 20</i> 447 <i>Lab</i> 605-606 <i>Launch Lab</i> 446 <i>Mini Lab</i> 369</p> <p>Teacher Edition: DI 369; L 605-606; SCB 346F; TT 451</p>

STANDARDS	PAGE REFERENCES
<p>3.1.4 concludes that breakdowns in structure or function may be caused by disease, damage, heredity, or aging.</p>	<p>Student Edition: 124-125, 136, 241 <i>Science & Society</i> 253 <i>Table 2</i> 241 <i>The Big Idea</i> 150 Teacher Edition: E 124-125, 136, 241; Ext 253; SCB 190E-190F; TBI 150</p>
<p>3.3.1 ▲ understands that internal and/or environmental conditions affect an organism’s behavior and/or response in order to maintain and regulate stable internal conditions to survive in a continually changing environment.</p>	<p>Student Edition: 12, 205-208, 313 <i>Careers in Science</i> 17 <i>Figure 8</i> 206 <i>Figure 9</i> 207 <i>Lab 74-75</i> <i>The Big Idea</i> 190 Teacher Edition: DI 207; E 12, 205-208, 313; Ext 17; IM 190H; L 74-75; SCB 190E-190F; TBI 190; TT 207</p>
<p>3.3.2 recognizes that the survival of all organisms requires the ingestion of materials, the intake and release of energy, growth, release of wastes and responses to environmental change.</p>	<p>Student Edition: 64-65, 69-72, 206-208, 325-329 <i>Critical Thinking</i> 339 #18 <i>Figure 8</i> 206 <i>Figure 9</i> 207 <i>Figure 11</i> 326 <i>Figure 12</i> 327 <i>Figure 13 & 14</i> 328 <i>Figure 15</i> 69, 329 <i>Figure 16</i> 70 <i>Figure 18</i> 72 <i>Inquiry</i> 68, 324 <i>Lab 74-75</i>, 220-221 <i>Launch Lab</i> 325 <i>Mini Lab</i> 329 Teacher Edition: CR 69; DI 327, 329; E 64-65, 69-72, 206-208, 326-329; EF 325; ET 69, 325, 773; I 68, 324; IM 40H; L 74-75, 220-221; OE 325; SCB 40F, 190F; TT 65, 207, 327</p>

STANDARDS	PAGE REFERENCES
<p>3.5.2 ▲ understands that adaptations of organisms (changes in structure, function, or behavior that accumulate over successive generations) contribute to biological diversity.</p>	<p>Student Edition: 206-208, 213-216, 218 <i>Figure 8</i> 206 <i>Figure 9</i> 207 <i>Figure 14</i> 214 <i>Figure 15 & 16</i> 215 <i>Figure 17</i> 216 <i>Lab</i> 220-221</p> <p>Teacher Edition: DI 207, 209, 215; E 206-208, 214-216, 218; EE 213; L 220-221; TT 207</p>
<p>3.5.3 ▲ associates extinction of a species with environmental changes and insufficient adaptive characteristics.</p>	<p>Student Edition: 198-199, 208, 218 <i>Inquiry</i> 192 <i>Lab</i> 220-221 <i>Mini Lab</i> 199</p> <p>Teacher Edition: E 198-199, 208, 218; I 192; L 220-221; SCB 90E</p>
<p>4.1.1 ▲ identifies properties of the solid earth, the oceans and fresh water, and the atmosphere.</p>	<p>Student Edition: 469-470, 481-488, 541, 573-578, 775 <i>Careers in Science</i> 580 <i>Figure 1</i> 574 <i>Figure 2</i> 471, 574 <i>Figure 3</i> 576 <i>Figure 6 & 7</i> 578 <i>Figure 12</i> 484 <i>Figure 13</i> 485 <i>Figure 14</i> 486 <i>Figure 15</i> 487 <i>Figure 16</i> 488 <i>Launch Lab</i> 481 <i>Table 1</i> 470</p> <p>Teacher Edition: DI 471, 485, 487, 541, 575; E 470-473, 482-488, 541, 574-578, 775; ES 469; ET 469, 481, 573; Ext 580; IEA 573; IM 466H; IWB 466D; MG 481; SCB 466E-466F; TT 485, 489, 575, 577, 775</p>

STANDARDS	PAGE REFERENCES
<p>4.1.2 ▲ models earth's cycles, constructive and destructive processes, and weather systems.</p>	<p>Student Edition: 471-473, 475, 504-505, 509-514, 519-524, 618-619, 626-631 <i>Figure 2 & 3</i> 471 <i>Figure 4</i> 472, 618 <i>Figure 5</i> 504, 619 <i>Figure 6</i> 475, 519 <i>Figure 9</i> 626-627 <i>Figure 10</i> 510, 628 <i>Figure 11</i> 483, 629 <i>Figure 12</i> 512, 630 <i>Figure 13</i> 512 <i>Figure 15 & 16</i> 514 <i>Figure 19 & 20</i> 520 <i>Figure 21</i> 521 <i>Figure 22</i> 524 <i>Inquiry</i> 480 <i>Lab</i> 526-527 <i>Launch Lab</i> 519 <i>Review</i> 495</p> <p>Teacher Edition: DI 473, 485, 505, 521, 541, 619, 627; E 470-473, 483, 504, 510-514, 520-524, 618-619, 626-631; Ea 509; ET 469, 481, 519; I 480; IM 466H, 498H; IWB 498D; L 526-527; SCB 466E, 498E-498F; TT 471, 473, 505, 521, 525, 619, 629; W 579</p>
<p>4.2.1 ▲ understands that earth processes observed today (including movement of lithospheric plates and changes in atmospheric conditions) are similar to those that occurred in the past; earth history is also influenced by occasional catastrophes, such as the impact of a comet or a steroid.</p>	<p>Student Edition: 198, 469, 501-505, 510-511, 514-515, 522-523 <i>Figure 1</i> 501 <i>Figure 2</i> 502 <i>Figure 4</i> 198, 503 <i>Figure 12 & 13</i> 512 <i>Figure 15 & 16</i> 514 <i>Inquiry</i> 498, 500 <i>Lab</i> 526-527 <i>Launch Lab</i> 469 <i>Skill Practice</i> 507 <i>The Big Idea</i> 498</p> <p>Teacher Edition: DI 505; E 198, 502-505, 512-514, 522-523; ES 469; ET 501; I 498, 500; IM 498H; L 526-257; PM 501; SCB 498E-498F; TBI 498; TT 515, 523</p>

STANDARDS	PAGE REFERENCES
7th Grade Recommendations Integrated	
<p>2.2.1 ▲ understands the relationship of atoms to elements and elements to compounds.</p>	<p>Student Edition: 349-352, 481 <i>Figure 2</i> 350 <i>Figure 3</i> 351 <i>Figure 4</i> 352 <i>Figure 7</i> 354 <i>Figure 17</i> 376 Teacher Edition: DI 351, 377; E 350-352, 354; MG 481; PP 358; SCB 346E; TT 351; UM 349</p>
<p>2.3.1 identifies the forces that act on an object (e.g., gravity and friction)</p>	<p>Student Edition: 505, 702-705, 728, 739, 765 <i>Figure 2</i> 728 <i>Figure 7</i> 505 <i>Figure 10</i> 702 <i>Figure 12 & 13</i> 704 <i>Figure 14 & 15</i> 705 <i>Inquiry</i> 689, 709 <i>Launch Lab</i> 709 <i>Lesson 2 Review</i> 706 <i>Mini Lab</i> 703, 765 <i>Skill Practice</i> 707 <i>The Big Idea</i> 688 Teacher Edition: DI 705, 711, 728; E 505, 702-705, 728; ET 701; I 689, 709; IM 688H, 760H; IWB 688D; SCB 688F, 724E; TBI 688; TT 703, 705</p>
<p>2.3.2 ▲ describes, measures, and represents data on a graph showing the motion of an object (position, direction of motion, speed).</p>	<p>Student Edition: 696-697 <i>Critical Thinking</i> 721 # 11 <i>Figure 7</i> 696 <i>Figure 8</i> 697 <i>Interpret Graphics</i> 698 <i>Launch Lab</i> 691 Teacher Edition: DI 697; E 696-697; ET 691; SCB 688E; TT 697</p>

STANDARDS	PAGE REFERENCES
<p>2.3.3 ▲ recognizes and describes examples of Newton’s Laws of Motion.</p>	<p>Student Edition: 709-714 <i>Figure 16</i> 710 <i>Figure 17 & 18</i> 711 <i>Figure 19</i> 712 <i>Figure 20 & 21</i> 713 Lab 716-717 Lesson 3 Review 715 Mini Lab 710 Table 1 714</p> <p>Teacher Edition: DI 703, 713; E 710-714; ET 709; IM 688H; NL 709; NFL 709; L 716-717; SCB 688F; TT 713, 715</p>
<p>2.4.2 ▲ understands that when work is done energy transforms from one form to another, including mechanical, heat, light, sound, electrical, chemical, and nuclear energy, yet is conserved.</p>	<p>Student Edition: 436-442 <i>Concepts in Motion</i> 441 <i>Critical Thinking</i> 459 #9-10 <i>Figure 10</i> 436 <i>Figure 11</i> 437 <i>Figure 12</i> 439 <i>Figure 13 & 14</i> 440 <i>Figure 15, 16 & 17</i> 441 <i>Inquiry</i> 424, 426 Lab 454-455 Launch Lab 436 Mini Lab 438 Review 459 #16</p> <p>Teacher Edition: DI 437; E 437-442; ET 427, 435; I 424, 426; L 454-455; LCE 436; SCB 424E; TT 439, 441</p>
<p>2.4.4 ▲ understands that heat energy can be transferred from hot to cold by radiation, convection, and conduction.</p>	<p>Student Edition: 449, 503, 585 <i>Critical Thinking</i> 459 #14 <i>Figure 4</i> 503 <i>Figure 11</i> 585 <i>Figure 22</i> 449</p> <p>Teacher Edition: DI 449, 585; E 449, 503, 585; IWB 424D; SCB 424F; TT 449</p>

STANDARDS	PAGE REFERENCES
<p>3.1.1 ▲ will understand the cell theory; that all organisms are composed of one or more cells, cells are the basic unit of life, and that cells come from other cells.</p>	<p>Student Edition: 43-44 <i>Interpret Graphics</i> 48 #7 <i>Launch Lab</i> 43 <i>Table 1</i> 44</p> <p>Teacher Edition: DI 45; E 44; ET 43; IM 40H; IWB 40D; SCB 40E; TT 45; UC 43</p>
<p>3.1.2 ▲ relates the structure of cells, organs, tissues, organ systems, and whole organisms to their functions</p>	<p>Student Edition: 45-47, 51-57, 61-64, 69-72, 97-104, 231-239, 245-251, 255-257</p> <p><i>Figure 2</i> 232 <i>Figure 3</i> 46 <i>Figure 4</i> 51, 234 <i>Figure 5</i> 52, 235 <i>Figure 6</i> 53 <i>Figure 7</i> 237 <i>Figure 8</i> 239 <i>Figure 9</i> 55 <i>Figure 10</i> 56, 246 <i>Figure 11</i> 57, 99, 247 <i>Figure 12</i> 100, 248 <i>Figure 13</i> 63, 101 <i>Figure 14</i> 64, 102 <i>Figure 15</i> 69, 104, 251 <i>Figure 16</i> 70, 256 <i>Figure 17</i> 71 <i>Figure 18</i> 72 <i>Inquiry</i> 40, 82 <i>Lab</i> 106-107, 260-261 <i>Launch Lab</i> 51, 61 <i>Mini Lab</i> 63, 103 <i>Review</i> 79 <i>Skill Practice</i> 59 <i>The Big Idea</i> 40, 228</p> <p>Teacher Edition: CR 69; CSM 51; DI 47, 53, 57, 63, 65, 101, 103, 235, 249; E 45-47, 52-57, 62-65, 70-72, 98-104, 232-239, 256-257; ET 43, 51, 61, 69, 97, 231, 245; I 40, 82; IM 40H, 82H, 228H; IWB 40D, 228D; L 106-107, 260-261; LO 97; ML 103; PT 61; RH 255; SCB 40E-40F, 82F, 228E-228F; TBI 40, 228; TBO 231; TT 57</p>

STANDARDS	PAGE REFERENCES
<p>3.1.3 compares organisms composed of single cells with organisms that are multicellular.</p>	<p>Student Edition: 10, 54, 98-104 <i>Figure 10</i> 98 <i>Figure 11</i> 99 <i>Figure 13</i> 101 <i>Figure 14</i> 102 <i>Figure 15</i> 104 <i>Mini Lab</i> 54, 103 <i>The Big Idea</i> 82</p> <p>Teacher Edition: DI 55, 99, 103; E 54, 98-104; ET 97; IM 40H; IWB 40D; ML 103; O 10; SCB 40E, 82F; TBI 82; TT 55</p>
<p>3.2.1 ▲ differentiates between asexual and sexual reproduction of organisms.</p>	<p>Student Edition: 10-11, 117-123, 129-133, 289-295 <i>Figure 1</i> 117 <i>Figure 2</i> 10-11, 120-121 <i>Figure 3</i> 11, 122 <i>Figure 6</i> 130 <i>Figure 9</i> 132 <i>Figure 14</i> 290 <i>Figure 19</i> 293 <i>Figure 21</i> 295 <i>Lab</i> 138-139 <i>Launch Lab</i> 129 <i>Mini Lab</i> 119, 133 <i>Table 2</i> 123</p> <p>Teacher Edition: ARVSR 289; DI 119, 121, 123, 131, 133, 291, 295; E 118-123, 130-133, 290-295; ET 117, 129; IM 114H, 268H; IWB 114D; R 11; L 138-139; SCB 114E-114F, 268F; TT 121, 295; WAR 129; WSR 117</p>

STANDARDS	PAGE REFERENCES
<p>3.2.2 understands how hereditary information of each cell is passed from one generation to the next.</p>	<p>Student Edition: 46, 117-119, 163-165, 174-178 <i>Concepts in Motion</i> 118, 176 <i>Figure 14</i> 176 <i>Figure 15</i> 177 <i>Figure 16</i> 178 <i>Inquiry</i> 150, 173 <i>Lab</i> 182-183 <i>Mini Lab</i> 47, 176 <i>Table 1</i> 118 <i>The Big Idea</i> 150</p> <p>Teacher Edition: DI 175; E 46, 118-119, 164-165, 175-178; ET 117, 163; I 150, 173; IM 150H; IWB 150D; L 182-183; SDNA 174; SCB 82E, 114E-114F, 150F; TBI 150; WCT 163; WSR 117</p>
<p>3.2.3 infers that the characteristics of an organism result from heredity and interactions with the environment.</p>	<p>Student Edition: 85, 154-155, 170 <i>Figure 11</i> 170 <i>Inquiry Extension</i> 139 <i>Lab</i> 220-221, 298-299 <i>Launch Lab</i> 117, 153</p> <p>Teacher Edition: CC 85; DI 155, 165; E 154-155, 170; ET 153, 163; IE 139; IM 150H; IWB 150D; L 220-221, 298-299; SCB 150F</p>
<p>3.4.3 ▲ traces the energy flow from the sun (source of radiant energy) to producers (via photosynthesis – chemical energy) to consumers and decomposers in food webs.</p>	<p>Student Edition: 14, 69-72, 325-329 <i>Critical Thinking</i> 339 #18 <i>Figure 6</i> 14 <i>Figure 11</i> 326 <i>Figure 12</i> 327 <i>Figure 13 & 14</i> 328 <i>Figure 15</i> 329 <i>Inquiry</i> 68, 324 <i>Launch Lab</i> 325 <i>Mini Lab</i> 329</p> <p>Teacher Edition: DI 327, 329; E 14-15, 71-72, 326-329; EF 325; ET 69, 325, 773; I 68, 324; OE 325; TT 327</p>

STANDARDS	PAGE REFERENCES
<p>3.5.1 concludes that species of animals, plants, and microorganisms may look dissimilar on the outside but have similarities in internal structures, developmental characteristics, chemical processes, and genomes.</p>	<p>Student Edition: 164-165, 213-218 <i>Figure 13</i> 213 <i>Figure 14</i> 214 <i>Figure 15 & 16</i> 215 <i>Figure 17</i> 216 <i>Figure 18</i> 217 <i>Figure 19</i> 218 <i>Inquiry</i> 42 <i>Lesson 3 Review</i> 219 <i>Mini Lab</i> 165, 217</p> <p>Teacher Edition: DI 215, 217; E 164-165, 214-218; EE 213; ET 153, 213; I 42; SCB 150F, 190F</p>
<p>4.4.1 ▲ demonstrates and models object/space/time relationships that explain phenomena such as the day, the month, the year, season</p>	<p>Student Edition: 729, 731, 733, 739-740, 765 <i>Critical Thinking</i> 757 #12 <i>Figure 3</i> 729 <i>Figure 6</i> 731 <i>Figure 7</i> 732 <i>Figure 11</i> 739 <i>Figure 12</i> 741 <i>Mini Lab</i> 765 <i>Skill Practice</i> 735</p> <p>Teacher Edition: DI 729, 731; E 729, 731, 765; IM 724H; SCB 724E; TT 729, 731</p>
<p>4.4.2 describes how the angle of incidence of solar energy striking earth's surface affects the amount of heat energy absorbed at earth's surface.</p>	<p>Student Edition: 661-663, 730-731 <i>Figure 4 & 5</i> 730 <i>Figure 6</i> 731 <i>Figure 7</i> 732 <i>Figure 8</i> 661 <i>Figure 9</i> 662 <i>Figure 10</i> 663 <i>Launch Lab</i> 660 <i>Skill Practice</i> 658, 735</p> <p>Teacher Edition: DI 731, 733; E 661-663, 730-733; TT 661, 731</p>

STANDARDS	PAGE REFERENCES
SCIENCE AND TECHNOLOGY – The student will demonstrate abilities of technological design and understandings about science and technology.	
Benchmark 1: The student will demonstrate abilities of technological design.	
1. identifies appropriate problems for technological design, designs a solution or product, implements the proposed design, evaluates the product, and communicates the process of technological design.	Student Edition: <i>Inquiry Extension</i> NOS29 <i>Lab</i> NOS28-NOS29, 716-717, 788-789 <i>Mini Lab</i> 345, 687 Teacher Edition: L NOS28-NOS29, 716-717, 788-789; ML 345, 687
Benchmark 2: The student will develop understandings of the similarities, differences, and relationships in science and technology.	
1. compares the work of various types of scientists and engineers.	Student Edition: NOS20-NOS21, 27 <i>Careers in Science</i> 17, 211, 517, 667 <i>Figure 11</i> 27 <i>Green Science</i> 479 <i>Nature of Science</i> 345, 686-687 Teacher Edition: DM 27; ET 501; Ext 17, 211, 479, 517, 667; SCB 534F; T 686; TT NOS9, 31, 89, 101, 179, 217, 237, 249, 251, 285
2. evaluates benefits, risks, limitations and trade-offs of technological solutions.	Student Edition: 27-30, 474, 548-549, 551, 686-687 <i>Figure 2</i> 686 <i>Figure 5</i> 474 <i>Figure 8</i> 477 <i>Figure 9</i> 548 <i>Figure 10</i> 549 <i>Figure 12</i> 28 <i>Figure 13</i> 29 <i>Green Science</i> 444, 545 <i>Inquiry</i> 26 <i>It's Your Turn</i> 49 <i>Mini Lab</i> 30, 687 <i>Nature of Science</i> 686-687 <i>Science & Society</i> 95, 771 Teacher Edition: DI 441, 475, 687; DM 27; E 28-30, 474, 477, 548-549, 551; Ext 95, 444, 545, 771; I 26; SCB 6F; ML 687; TT 441, 475, 477, 549, 785

STANDARDS	PAGE REFERENCES
<p>3. identifies contributions to science and technology by many people and many cultures.</p>	<p>Student Edition: NOS21, 27, 153-154, 203, 397, 626 <i>Careers in Science</i> 211, 315, 517, 667 <i>Figure 7</i> 397 <i>Figure 9</i> NOS21 <i>Figure 11</i> 27 <i>How Nature Works</i> 49 <i>Science & Society</i> 161, 743 <i>Unit 1</i> 2-3 <i>Unit 2</i> 146-147 <i>Unit 3</i> 342-343 <i>Unit 4</i> 462-463 <i>Unit 5</i> 684-685</p> <p>Teacher Edition: B NOS21; CD 203; DI 29; DM 27; E 154, 397; Ext 49, 161, 211, 315, 517, 667, 743; TT 45, 57, 73, 93, 119, 205, 395, 397, 765, 769, 785, 787</p>
<p>SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES – The student will apply process skills to explore and develop an understanding of issues of personal health, population, resources and environment, and natural hazards.</p>	
<p>Benchmark 1: The student will understand scientific knowledge relative to personal health.</p>	
<p>1. ▲ identifies individual nutrition, exercise, and a rest needs based on science and uses a scientific approach to thinking critically about personal health, lifestyle choices, risks and benefits.</p>	<p>Student Edition: 233 <i>Figure 3</i> 233 <i>Mini Lab</i> 234</p> <p>Teacher Edition: DI 233; E 233; TT 233, 235</p>

STANDARDS	PAGE REFERENCES
<p>Benchmark 2: The student will understand the impact of human activity on resources and environment.</p>	
<p>1. ▲ investigates the effects of human activities on the environment and analyzes decisions based on the knowledge of benefits and risks.</p>	<p>Student Edition: NOS 26-NOS27, 538-543, 547-551, 555-560, 598-599 <i>Figure 3</i> 539 <i>Figure 5</i> 542 <i>Figure 6 & 7</i> 543 <i>Figure 9</i> 548 <i>Figure 11</i> 551 <i>Figure 14</i> NOS26, 558 <i>Green Science</i> 545 <i>Inquiry</i> 534, 546 <i>Lab</i> 562-563 <i>Launch Lab</i> 598 <i>Skill Practice</i> 553</p> <p>Teacher Edition: DI 539, 543, 549, 551, 557, 559, 599, 601; E NOS26, 539-543, 548-551, 556-560, 599; ET 537, 555; I 534, 546; IM 534H; IWB 534D; L 562-563; MHIE 555; SCB 534E-534F; TT 541, 549, 551, 599, 601; WP 547</p>
<p>Benchmark 3: The student will understand that natural hazards are dynamic examples of earth processes which cause us to evaluate risks.</p>	
<p>1. recognizes patterns of natural processes and/or human activities that may cause and/or contribute to natural hazards.</p>	<p>Student Edition: 313, 510-511, 513-514, 547, 670-672 <i>Figure 9 & 10</i> 510 <i>Figure 11</i> 511 <i>Figure 14</i> 513, 670 <i>Figure 15 & 16</i> 514, 671 <i>Figure 17</i> 672 <i>Inquiry</i> 668 <i>Mini Lab</i> 511, 550 <i>Science & Society</i> 621</p> <p>Teacher Edition: DI 671; E 313, 510-511, 513, 670-672; ET 509, 547, 669; Ext 621; I 668; SCB 498E-498F; TT 511, 515, 549, 551, 665, 671, 673; WP 547</p>

STANDARDS	PAGE REFERENCES
2. evaluates risks and defines appropriate actions associated with the natural hazard.	Student Edition: 631 <i>Critical Thinking</i> 632 #10 Teacher Edition: D 631; E 631; ET 509, 623; TT 631
HISTORY AND NATURE OF SCIENCE – The student will examine and develop an understanding of science as a historical human endeavor.	
Benchmark 1: The student will develop scientific habits of mind.	
1. practices intellectual honesty, demonstrates skepticism appropriately, displays open-mindedness to new ideas, and bases decisions on evidence.	Student Edition: NOS10 <i>Critical Thinking</i> NOS11 <i>Inquiry Extension</i> NOS29, 563 <i>Lab</i> 381, 455, 563, 677 <i>Science Skill Handbook</i> SR-10 Teacher Edition: DI 449; E NOS10; IE 563; L 677; SCB NOS2E
Benchmark 2: The student will research contributions to science throughout history.	
1. ▲ recognizes that new knowledge leads to new questions and new discoveries, replicates historic experiments to understand principles of science, and relates contributions of men and women to the fields of science.	Student Edition: 153-155, 159, 392-393, 397 <i>Careers in Science</i> 127, 211, 667 <i>Green Science</i> 444 <i>Science & Society</i> 161 <i>Unit 1</i> 2-3 <i>Unit 2</i> 146-147 <i>Unit 3</i> 342-343 <i>Unit 4</i> 462-463 <i>Unit 5</i> 684-685 Teacher Edition: E 154-155, 159, 392-393, 397; EIAH 153; ET NOS5; Ext 127, 161, 211, 444, 667; TL 2, 146, 342, 462, 684; TT 393, 397