



Macmillan/McGraw-Hill

Science Education Standards  
Grades 5-7

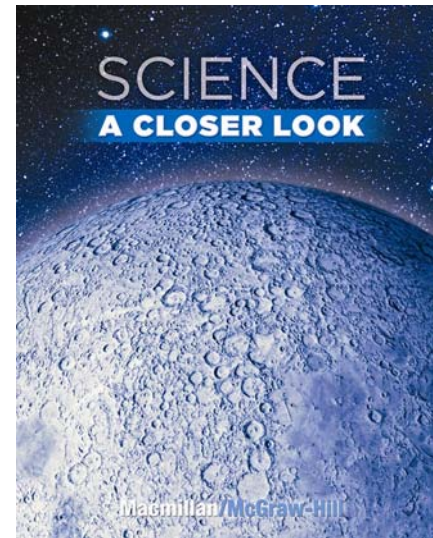
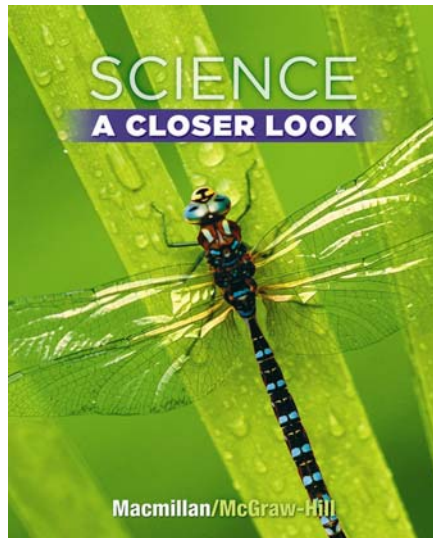
Kansas

# SCIENCE

## A CLOSER LOOK

Grades 5 and 6

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STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>STANDARD 1: SCIENCE AS INQUIRY</b>		
<b>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>.</b>		
<b>Benchmark 1: The student will demonstrate abilities necessary to do the processes of <i>scientific inquiry</i>.</b>		
The student...	<b>Student Edition:</b> 4-5 <i>Be a Scientist: Inquiry Investigation</i> 82-83, 120-121, 192-193, 268-269, 322-323, 604-605, 634-635 <i>Explore</i> 47, 479, 541, 583 <i>Focus on Skills: Skill Builder</i> 376-377 <b>Teacher Wraparound Edition:</b> DMI 5; EMI 5; FA 11; OI 83, 121, 193	<b>Student Edition:</b> 4-5, 36, 244-249, 374, 490-492, 562-563 <i>Look and Wonder</i> 2, 20, 106, 170, 184, 254, 327, 406, 432, 510, 540, 588, 670 <b>Teacher Wraparound Edition:</b> AE 33; DI 36; ES 281; FA 11; SB 4, 244, 562
1. ▲ identifies questions that can be answered through scientific investigations.		
2. ▲ designs and conducts <i>scientific investigations</i> safely using appropriate tools, mathematics, <i>technology</i> , and techniques to gather, analyze, and interpret data.	<b>Student Edition:</b> 6-9 <i>Be a Scientist: Inquiry Investigation</i> 82-83, 120-121, 192-193, 268-269, 322-323, 604-605, 634-635 <i>Explore</i> 47, 167, 479, 541, 553, 583 <i>Focus on Skills</i> 12-13 <i>Focus on Skills: Skill Builder</i> 376-377 <i>Safety Tips</i> 14 <b>Teacher Wraparound Edition:</b> AE 167; DMI 6; IM 82; OI 83, 121, 193	<b>Student Edition:</b> 6-9, 14 <i>Explore</i> 3, 33, 121, 161, 221, 283, 351, 397, 457, 511, 561, 627, 681 <i>Inquiry Investigation</i> 66-67, 168-169, 204-205, 358-359, 442-443, 534-535 <i>Inquiry Skill Builder</i> 12-13, 30-31, 324-325, 378-379, 548-549, 656-657 <b>Teacher Wraparound Edition:</b> IM 13; SB 8

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
3. ▲ identifies the relationship between evidence and logical conclusions.	<p><b>Student Edition:</b> 10-11 <i>Be a Scientist: Inquiry Investigation</i> 82-83, 120-121, 192-193, 268-269, 322-323, 604-605, 634-635 <i>Explore</i> 47, 167, 479, 541, 553, 583 <i>Focus on Skills: Skill Builder</i> 376-377</p> <p><b>Teacher Wraparound Edition:</b> DMI 10; OI 83, 121, 193</p>	<p><b>Student Edition:</b> 10-11, 72-73, 124-125, 144-145, 258-259, 276-277, 410-411, 552-553, 598-599, 606-607 <i>Inquiry Investigation</i> 66-67, 204-205, 306-307, 558-559 <i>Inquiry Skill Builder</i> 92-93, 148-149, 324-325, 378-379, 548-549, 656-657</p> <p><b>Teacher Wraparound Edition:</b> IW 92; SB 4</p>
4. ▲ communicates scientific procedures, results and explanations.	<p>The following pages can be used to meet this standard.</p> <p><b>Student Edition:</b> 11 <i>Be a Scientist: Inquiry Investigation</i> 82-83, 120-121, 192-193, 268-269, 322-323, 604-605, 634-635 <i>Explore</i> 47, 167, 479, 541, 553, 583 <i>Focus on Skills: Skill Builder</i> 376-377</p> <p><b>Teacher Wraparound Edition:</b> DIF 9; HA 10; IM 120</p>	<p><b>Student Edition:</b> 10-11 <i>Inquiry Investigation</i> 104-105, 168-169, 204-205, 306-307, 358-359, 534-535, 708-709 <i>Inquiry Skill Builder</i> 252-253, 430-431 <i>Writing in Science</i> 78-79, 118, 158, 521, 678-679</p> <p><b>Teacher Wraparound Edition:</b> IW 30, 78, 118, 204, 430</p>

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>Benchmark 2: The student will apply different kinds of investigations to different kinds of questions.</b>		
The student....	<b>Student Edition:</b> 6-7 <i>Be a Scientist: Inquiry Investigation</i> 30-31, 82-83, 120-121, 164-165, 192-193, 268-269, 322-323, 604-605, 634-635 <i>Explore</i> 47, 167, 479, 541, 553, 583 <i>Focus on Skills: Skill Builder</i> 376-377 <b>Teacher Wraparound Edition:</b> DMI 6; HA 10	<b>Student Edition:</b> <i>Inquiry Investigation</i> 66-67, 104-105, 168-169, 204-205, 306-307, 358-359, 394-395, 442-443 <i>Write About It</i> 17, 45, 129, 179, 233, 521, 569, 625, 669 <i>Writing in Science</i> 78-79, 336, 414, 454, 578, 638, 678-679 <b>Teacher Wraparound Edition:</b> ES 568; IW 336
1. develops questions and adapts (frames) the inquiry process to guide the appropriate type of investigation.		
2. differentiates between qualitative and quantitative data in an investigation	The following pages can be used to meet this standard. <b>Student Edition:</b> 7, 8-9 <i>Be a Scientist: Inquiry Investigation</i> 30-31, 82-83, 120-121, 164-165, 192-193, 268-269, 322-323, 604-605, 634-635 <i>Explore</i> 47, 167, 479, 541, 553, 583 <i>Focus on Skills: Skill Builder</i> 376-377 <i>Quick Lab</i> 27, 39, 65, 171, 189 <b>Teacher Wraparound Edition:</b> DMI 6	<b>Student Edition:</b> <i>Explore</i> 21, 85, 185, 297, 469 <i>Inquiry Skill Builder</i> 30-31, 92-93, 148-149, 378-379, 494-495, 548-549, 602-603, 656-657 <i>Math in Science</i> 54-55, 119, 159, 219, 264-265, 337, 415, 455, 509, 639, 690-691 <b>Teacher Wraparound Edition:</b> AE 21, 469; IS 494

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>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.</b>		
The student...	<b>Student Edition:</b> 10 <i>Be a Scientist: Inquiry Investigation</i> 82-83, 120-121, 192-193, 268-269, 322-323, 604-605, 634-635 <i>Explore</i> 47, 167, 479, 541, 553, 583 <i>Focus on Skills: Skill Builder</i> 376-377 <b>Teacher Wraparound Edition:</b> DMI 10; GI 47, 167; SB 4	<b>Student Edition:</b> 10-11 <i>Explore</i> 33, 47, 171, 185, 221, 255, 339, 433, 523, 561, 605, 681 <i>Inquiry Investigation</i> 66-67, 168-169, 394-395, 534-535, 558-559, 612-613 <b>Teacher Wraparound Edition:</b> EX 33, 47; OI 395, 535, 561
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.	The following pages can be used to meet this standard. <b>Student Edition:</b> 11 <i>Be a Scientist: Inquiry Investigation</i> 82-83, 120-121, 192-193, 268-269, 322-323, 604-605, 634-635 <i>Explore</i> 47, 167, 479, 541, 553, 583 <i>Focus on Skills: Skill Builder</i> 376-377 <b>Teacher Wraparound Edition:</b> DMI 11; GI 47, 167	<b>Student Edition:</b> 10-11, 164-166, 172-175, 222-225, 256-259, 344-346, 472-473, 574-575, 598-600, 618-621 <i>Quick Lab</i> 165, 471, 565, 600 <i>Reading in Science</i> 232-233, 280-281, 568-569, 668-669 <b>Teacher Wraparound Edition:</b> ELL 476; HA 176; IR 168, 669; SB 4

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>STANDARD 2: PHYSICAL SCIENCE</b>		
<b>PHYSICAL SCIENCE – The student will apply process skills to develop an understanding of physical science including: properties, changes of properties of matter, motion and forces, and transfer of energy.</b>		
<b>Benchmark 1: The student will observe, compare, and classify properties of matter.</b>		
The student...	<b>Student Edition:</b> 484, 520 <i>Quick Check</i> 485 <i>Writing Link</i> 485 <b>Teacher Wraparound Edition:</b> APK 518; SB 480; TR56	<b>Student Edition:</b> 244, 330-331, 488-489, 512-515, 532 <i>Explore</i> 381, 511 <b>Teacher Wraparound Edition:</b> DMI 489; DV 532; ELL 490; SB 244, 512, 517
1. ▲ compares and classifies the states of matter; solids, liquids, gases, and plasma		
2. compares and contrasts the classes of matter; elements, compounds, and mixtures.	<b>Student Edition:</b> 490-491, 530-531, 542-543 <i>Quick Check</i> 491 <b>Teacher Wraparound Edition:</b> APK 528; DIF 491; DMI 530, 542; WU 488	<b>Student Edition:</b> 90, 498-499, 502-506, 524-532, 552-553, 572-573 <i>Explore</i> 313, 381, 523 <i>Inquiry Investigation</i> 534-535 <b>Teacher Wraparound Edition:</b> DI 553; DMI 572; HA 506

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
3. identifies and communicates properties of matter including but not limited to, boiling point, solubility, and density.	<b>Student Edition:</b> 480-483, 490-491, 522-523, 533 <i>Quick Check</i> 483 <b>Teacher Wraparound Edition:</b> DIF 491; ELL 483; UV 481, 491, 523	<b>Student Edition:</b> 328-333, 490-492, 514-515, 532, 684-685 <i>Explore</i> 487, 511 <i>Inquiry Investigation</i> 558-559 <i>Inquiry Skill Builder</i> 494-495 <i>Math in Science</i> 509 <i>Quick Lab</i> 491 <b>Teacher Wraparound Edition:</b> AM 515; DV 330, 514, 532; HA 492; IM 509
<b>Benchmark 2: The student will observe, measure, infer, and classify changes in properties of matter.</b>		
The student...		
1. ▲ understands the relationship of atoms to elements and elements to compounds.	<b>Student Edition:</b> 490-493, 542-543 <i>Lesson Review</i> 549 (#1) <i>Quick Check</i> 491, 543 <i>Quick Lab</i> 493 <b>Teacher Wraparound Edition:</b> APK 488; DMI 490	<b>Student Edition:</b> 90, 498-506, 542-545, 552-553, 562-566 <i>Explore</i> 541, 561 <b>Teacher Wraparound Edition:</b> DI 505; DV 90; ELL 564; HA 506; SB 552
2. ▲ measures and graphs the effects of temperature on matter.	<b>Student Edition:</b> 522-523, 524, 533 <i>Explore</i> 519, 529 <i>Focus on Skills: Skill Builder</i> 526-527, 634-635 <i>Quick Lab</i> 523, 631 <b>Teacher Wraparound Edition:</b> AE 519, 529; DIF 521; OI 519	<b>Student Edition:</b> 372-376, 460-461, 512-518, 529, 532, 544-545, 574-575, 682-688 <i>Explore</i> 397, 511 <i>Look and Wonder</i> 396 <i>Quick Lab</i> 373, 515 <b>Teacher Wraparound Edition:</b> AE 487; AM 515; HA 518

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>Benchmark 3: The student will investigate motion and forces.</b>		
The student...	<b>Student Edition:</b> 422-423, 586-587, 588, 615 <i>Be a Scientist: Inquiry Investigation</i> 604-605 <i>Math in Science</i> 439 <i>Quick Check</i> 587 <i>Writing in Science</i> 438 <b>Teacher Wraparound Edition:</b> DIF 588; DMI 586; ELL 586; EMI 587	<b>Student Edition:</b> 286-287, 374-375, 440, 446-447, 473, 488, 594-597, 606-610, 687, 702-703 <i>Explore</i> 369, 605, 615 <i>Inquiry Investigation</i> 612-613, 708-709 <i>Look and Wonder</i> 588 <b>Teacher Wraparound Edition:</b> DI 595; SB 590
1. identifies the forces that act on an object (e.g., gravity and friction)	<b>Student Edition:</b> 422-423, 586-587, 588, 615 <i>Be a Scientist: Inquiry Investigation</i> 604-605 <i>Math in Science</i> 439 <i>Quick Check</i> 587 <i>Writing in Science</i> 438 <b>Teacher Wraparound Edition:</b> DIF 588; DMI 586; ELL 586; EMI 587	<b>Student Edition:</b> 286-287, 374-375, 440, 446-447, 473, 488, 594-597, 606-610, 687, 702-703 <i>Explore</i> 369, 605, 615 <i>Inquiry Investigation</i> 612-613, 708-709 <i>Look and Wonder</i> 588 <b>Teacher Wraparound Edition:</b> DI 595; SB 590
2. ▲ describes, measures, and represents data on a graph showing the motion of an object (position, direction of motion, speed).	<b>Student Edition:</b> 572-578 <i>Explore</i> 571 <i>Quick Check</i> 573, 575, 577 <i>Quick Lab</i> 575 <b>Teacher Wraparound Edition:</b> AE 571; DMI 574, 576	<b>Student Edition:</b> 590-593, 606-607 <i>Explore</i> 589, 605, 615, 627 <i>Inquiry Investigation</i> 612-613 <i>Quick Lab</i> 600, 619 <b>Teacher Wraparound Edition:</b> DI 593
3. ▲ recognizes and describes examples of Newton's Laws of Motion.	<b>Student Edition:</b> 588-592 <i>Focus on Skills: Skill Builder</i> 594-595 <i>Quick Check</i> 589, 591, 592 <i>Quick Lab</i> 589 <b>Teacher Wraparound Edition:</b> AM 588; DIF 591; DMI 592; UV 591	<b>Student Edition:</b> 600, 606-608 <i>Explore</i> 605 <i>Inquiry Investigation</i> 612-613 <i>Quick Lab</i> 600 <b>Teacher Wraparound Edition:</b> AE 605; ELL 608; HA 610; IW 612; WU 604

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	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
4. ▲ investigates and explains how simple machines multiply force at the expense of distance.	<b>Student Edition:</b> 608-615 <i>Explore</i> 607 <i>Quick Check</i> 609 <i>Quick Lab</i> 611 <b>Teacher Wraparound Edition:</b> AE 607; APK 606; DIF 613; DMI 608; EMI 613; TR61; UV 614; WU 606	<b>Student Edition:</b> 628-635 <i>Explore</i> 627 <i>Quick Lab</i> 635 <i>Writing in Science</i> 638 <b>Teacher Wraparound Edition:</b> DI 635; ELL 629; HA 636
<b>Benchmark 4: The student will understand and demonstrate the transfer of energy.</b>		
The student...		
1. understands the difference between potential and kinetic energy.	<b>Student Edition:</b> 601-602 <i>Be a Scientist: Inquiry Investigation</i> 604-605 <i>Explore</i> 597 <i>Quick Lab</i> 601 <b>Teacher Wraparound Edition:</b> AE 596; DMI 600; ELL 600; FA 603; TR60	<b>Student Edition:</b> 512, 618-619 <i>Quick Lab</i> 619 <b>Teacher Wraparound Edition:</b> DV 618
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.	<b>Student Edition:</b> 598-602 <i>Quick Check</i> 599, 602 <b>Teacher Wraparound Edition:</b> DMI 598; EMI 601; UV 602	<b>Student Edition:</b> 270, 512-513, 618-621, 683, 704-705 <i>Inquiry Investigation</i> 104-105, 708-709 <i>Quick Lab</i> 683 <b>Teacher Wraparound Edition:</b> HA 622

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
3. ▲ observes and communicates how light (electromagnetic) energy interacts with matter: transmitted, reflected, refracted, and absorbed.	<p><b>Student Edition:</b> 652-660 <i>Explore</i> 651 <i>Math in Science</i> 663 <i>Quick Check</i> 653, 655, 657, 660 <i>Quick Lab</i> 659 <i>Writing in Science</i> 662</p> <p><b>Teacher Wraparound Edition:</b> DIF 654, 657; DMI 656; EMI 654; UV 657, 658; WU 650</p>	<p><b>Student Edition:</b> 660-666, 672-675 <i>Explore</i> 671 <i>Quick Lab</i> 673 <i>Reading in Science</i> 668-669</p> <p><b>Teacher Wraparound Edition:</b> DV 661, 663; HA 666; SB 660, 682</p>
4. ▲ understands that heat energy can be transferred from hot to cold by radiation, convection, and conduction.	<p><b>Student Edition:</b> 628-629 <i>Quick Check</i> 629 <i>Read a Diagram</i> 629</p> <p><b>Teacher Wraparound Edition:</b> DIF 629; DMI 628</p>	<p><b>Student Edition:</b> 257, 374-376, 492, 684-686 <i>Explore</i> 681</p> <p><b>Teacher Wraparound Edition:</b> DV 685; HA 688</p>

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>STANDARD 3: LIFE SCIENCE</b>		
<b>LIFE SCIENCE – The student will apply process skills to explore and understand structure and function in living systems, reproduction and heredity, regulation and behavior, populations and ecosystems, and diversity and adaptations of organisms.</b>		
<b>Benchmark 1: The student will model structures of organisms and relate functions to the structures.</b>		
The student...	<b>Student Edition:</b> 22-23, 24, 26 <i>Explore</i> 21 <b>Teacher Wraparound Edition:</b> DMI 22	<b>Student Edition:</b> 86-87, 108-113 <i>Explore</i> 107 <i>Math in Science</i> 119 <b>Teacher Wraparound Edition:</b> ELL 114; SB 86
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.	<b>Student Edition:</b> 28, 50-55, 74-80 <i>Explore</i> 47 <i>Health Handbook</i> R10 <i>Quick Check</i> 28 <i>Quick Lab</i> 77 <b>Teacher Wraparound Edition:</b> AE 47; DMI R10; FA 81; HA 28; UV 28	<b>Student Edition:</b> 88-90, 96-97 <i>Explore</i> 95 <i>Inquiry Investigation</i> 66-67 <i>Quick Lab</i> 89 <b>Teacher Wraparound Edition:</b> DV 88; ELL 89
2. ▲ relates the structure of cells, organs, tissues, organ systems, and whole organisms to their functions.	<b>Student Edition:</b> 23, 28, 40-41, 48-55, 62-68 <i>Quick Check</i> 23 <b>Teacher Wraparound Edition:</b> DMI 22	<b>Student Edition:</b> 87-88, 122-123 <i>Quick Lab</i> 89 <b>Teacher Wraparound Edition:</b> DV 123
3. compares organisms composed of single cells with organisms that are multi-cellular.		

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
4. concludes that breakdowns in structure or function may be caused by disease, damage, heredity, or aging.	<b>Student Edition:</b> 4-11, 40, 42 <b>Teacher Wraparound Edition:</b> DMI 42; HA 42	<b>Student Edition:</b> 109, 122, 156, 176 <b>Teacher Wraparound Edition:</b> HA 156; SB 108, 154
<b>Benchmark 2: The student will understand the role of reproduction and heredity for all living things.</b>		
The student...		
1. ▲ differentiates between asexual and sexual reproduction of organisms.	<b>Student Edition:</b> 90-94 <i>Explore</i> 89 <i>Quick Lab</i> 92 <b>Teacher Wraparound Edition:</b> AE 89; DIF 91; DMI 90, 94; ELL 92; UV 91	<b>Student Edition:</b> 38-40, 114-115, 124-126 <b>Teacher Wraparound Edition:</b> DI 124; DIM 38, 114
2. understands how hereditary information of each cell is passed from one generation to the next.	<b>Student Edition:</b> 123, 124, 126-127, 128 <i>Look and Wonder</i> 122 <i>Quick Lab</i> 127 <i>Read a Diagram</i> 127 <b>Teacher Wraparound Edition:</b> APK 122; DMI 124, 126; WU 122	<b>Student Edition:</b> 152-155, 162-166 <i>Explore</i> 161 <i>Inquiry Investigation</i> 168-169 <i>Quick Lab</i> 165 <b>Teacher Wraparound Edition:</b> DI 163, 165; DV 153; HA 166

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
3. infers that the characteristics of an organism result from heredity and interactions with the environment.	<b>Student Edition:</b> 124-125 <i>Explore</i> 123 <b>Teacher Wraparound Edition:</b> DIF 125; UV 125	<b>Student Edition:</b> 140-146, 154-156, 172-176 <i>Explore</i> 151, 171 <i>Inquiry Skill Builder</i> 148-149 <i>Math in Science</i> 159 <i>Quick Lab</i> 145 <i>Reading in Science</i> 178-179 <b>Teacher Wraparound Edition:</b> ELL 144; HA 156, 176; SB 140, 154, 164
<b>Benchmark 3: The student will describe homeostasis, the regulation and balance of internal conditions in response to a changing external environment.</b>		
The student...		
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.	<b>Student Edition:</b> 25, 54-55, 156, 157, 158, 159, 192-193 <i>Be a Scientist</i> 120-121, 193 <i>Explore</i> 155, 195 <i>Focus on Skills</i> 30-31, 204-205 <i>Quick Check</i> 55 <b>Teacher Wraparound Edition:</b> GI 193; OI 193	<b>Student Edition:</b> 70-76, 224-230, 364-365 <i>Explore</i> 33, 69, 121, 185 <i>Writing in Science</i> 78-79 <b>Teacher Wraparound Edition:</b> AE 69; DV 71; HA 76
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.	<b>Student Edition:</b> 25, 27, 50-56, 76-80 <i>Quick Check</i> 80 <b>Teacher Wraparound Edition:</b> DMI 50, 52, 56; FA 81	<b>Student Edition:</b> 36-37, 40-42, 58-64, 100-102, 198-202, 364-365 <i>Explore</i> 33, 47, 57, 185, 197 <i>Inquiry Investigation</i> 66-67, 104-105 <b>Teacher Wraparound Edition:</b> AE 185; ELL 364; HA 64; SB 34

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>Benchmark 4: The student will identify and relate interactions of populations of organisms within an ecosystem.</b>		
The student...	<b>Student Edition:</b> 142-143 <i>Quick Check</i> 143 <i>Read a Photo</i> 143 <b>Teacher Wraparound Edition:</b> DIF 143; DMI 142; UV 143	<b>Student Edition:</b> 186-187, 190-192, 208-216 <i>Explore</i> 207 <i>Inquiry Skill Builder</i> 194-195 <i>Reading in Science</i> 232-233 <i>Writing in Science</i> 218 <b>Teacher Wraparound Edition:</b> DI 215; DV 187
2. understands how limiting factors determine the carrying capacity of an ecosystem.	<b>Student Edition:</b> 156-157 <i>Quick Check</i> 157 <i>Quick Lab</i> 157 <b>Teacher Wraparound Edition:</b> DIF 157; ELL 156	<b>Student Edition:</b> 222-230 <i>Explore</i> 221 <b>Teacher Wraparound Edition:</b> DV 222
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.	<b>Student Edition:</b> 144-147 <i>Explore</i> 141 <i>Lesson Review</i> 151 (#3) <i>Quick Check</i> 145 <b>Teacher Wraparound Edition:</b> DIF 145; DMI 144; UV 145; WU 140	<b>Student Edition:</b> 36-37, 100-102, 188-189, 198-202, 328, 562 <i>Explore</i> 197 <i>Inquiry Investigation</i> 104-105, 204-205 <i>Quick Lab</i> 201 <b>Teacher Wraparound Edition:</b> DV 36; HA 202; SB 198

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>Benchmark 5: The student will observe the diversity of living things and relate their adaptations to their survival or extinction.</b>		
The student...	<b>Student Edition:</b> 22, 56, 90-91, 124, 126 <i>Explore</i> 21 <b>Teacher Wraparound Edition:</b> DMI 22	<b>Student Edition:</b> 22-28, 48-52, 58-64, 96-99, 110-115, 163 <i>Explore</i> 21, 47, 95 <i>Inquiry Investigation</i> 66-67, 104-105 <i>Inquiry Skill Builder</i> 30-31 <i>Math in Science</i> 54-55 <b>Teacher Wraparound Edition:</b> DI 26; DV 49; ELL 114; HA 52; SB 164; WU 20
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.		
2. ▲ understands that adaptations of organisms (changes in structure, function, or behavior that accumulate over successive generations) contribute to biological diversity.	<b>Student Edition:</b> 168-174, 209-213, 222, 318 <i>Art Link</i> 175 <i>Explore</i> 167 <i>Literature</i> 16-17 <i>Reading in Science</i> 176-177 <i>Writing in Science</i> 58 <b>Teacher Wraparound Edition:</b> AE 167; DIF 169, 171, 173; DMI 168, 170, 172; FA 175; UV 169	<b>Student Edition:</b> 70-76, 172-176, 192, 210-211, 224-225 <i>Explore</i> 69, 171 <i>Reading in Science</i> 178-179, 232-233, 520-521 <i>Writing in Science</i> 78-79 <b>Teacher Wraparound Edition:</b> ELL 73; HA 76, 176; SB 172
3. ▲ associates extinction of a species with environmental changes and insufficient adaptive characteristics.	<b>Student Edition:</b> 198 <i>Quick Lab</i> 198 <b>Teacher Wraparound Edition:</b> DMI 198	<b>Student Edition:</b> 173, 224-225, 304 <i>Careers in Science</i> 236 <i>Explore</i> 171 <b>Teacher Wraparound Edition:</b> DI 225; ELL 224

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>STANDARD 4: EARTH AND SPACE SCIENCE</b>		
<b>EARTH AND SPACE SCIENCE – The student will apply process skills to explore and develop an understanding of the structure of the earth system, earth’s history, and earth in the solar system.</b>		
<b>Benchmark 1: The student will understand that the structure of the earth system is continuously changing due to earth’s physical and chemical processes.</b>		
The student...	<b>Student Edition:</b> 184, 242-243, 246, 306-310, 366-369 <i>Fact</i> 246 <i>Quick Check</i> 246 <b>Teacher Wraparound Edition:</b> DMI 184, 246, 366; EMI 367	<b>Student Edition:</b> 314-321, 328-333, 340-343, 376, 408-412 <i>Explore</i> 283, 313, 369, 407 <i>Inquiry Investigation</i> 358-359, 394-395 <i>Math in Science</i> 264-265 <i>Quick Lab</i> 321 <i>Writing in Science</i> 336 <b>Teacher Wraparound Edition:</b> AE 313; DI 320; SB 328, 370, 408
1. ▲ identifies properties of the solid earth, the oceans and fresh water, and the atmosphere.		
2. ▲ models earth’s cycles, constructive and destructive processes, and weather systems.	<b>Student Edition:</b> 184-190, 264-266, 284-291, 306-307, 370-373, 382-387 <i>Art Link</i> 191 <i>Be a Scientist: Inquiry Investigation</i> 268-269 <i>Explore</i> 251 <i>Quick Check</i> 185, 187, 189 <i>Quick Lab</i> 255, 287 <i>Read a Diagram</i> 383 <b>Teacher Wraparound Edition:</b> DIF 185, 371, 387; FA 191; UV 184	<b>Student Edition:</b> 268-278, 284-292, 322, 324, 334, 370-376, 382-392, 398-402 <i>Explore</i> 267, 283, 327, 381, 397 <i>Inquiry Investigation</i> 306-307 <i>Inquiry Skill Builder</i> 324-325, 378-379 <b>Teacher Wraparound Edition:</b> DV 322, 324; HA 376

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>Benchmark 2: The student will understand past and present earth processes and their similarity.</b>		
<p>The student...</p> <p>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 asteroid.</p>	<p>The following pages can be used to meet this standard.</p> <p><b>Student Edition:</b> 252-256, 262-266, 284-291 <i>Be a Scientist: Inquiry Investigation</i> 268-269 <i>Explore</i> 251 <i>Quick Lab</i> 255</p> <p><b>Teacher Wraparound Edition:</b> AE 251; DMI 256; FA 257; IW 268; SB 255</p>	<p><b>Student Edition:</b> 238-239, 256-262, 268-278, 284-291, 412, 452 <i>Explore</i> 255, 283 <i>Inquiry Investigation</i> 306-307 <i>Quick Lab</i> 261, 271 <i>Reading in Science</i> 280-281</p> <p><b>Teacher Wraparound Edition:</b> DI 286; DV 270; ELL 257; HA 412</p>
<b>Benchmark 3: The student will identify and classify stars, planets, and other solar system components.</b>		
<p>The student...</p> <p>1. ▲ compares and contrasts the characteristics of stars, planets, moons, comets, and asteroids.</p>	<p><b>Student Edition:</b> 444-451, 458-461 <i>Quick Check</i> 444, 449, 451 <i>Quick Lab</i> 447</p> <p><b>Teacher Wraparound Edition:</b> AE 441; DIF 449; DMI 446, 448, 450; ELL 444, 451; UV 445</p>	<p><b>Student Edition:</b> 434-435, 446-452; 458-461, 464, 468-471 <i>Explore</i> 445 <i>Writing in Science</i> 454, 466-467</p> <p><b>Teacher Wraparound Edition:</b> DI 460; DV 447; ELL 458; HA 464</p>
<p>2. models spatial relationships of the earth/moon/planets/sun system to scale.</p>	<p><b>Student Edition:</b> <i>Explore</i> 421, 430, 441 <i>Quick Lab</i> 425, 435</p> <p><b>Teacher Wraparound Edition:</b> HA 426; WU 440</p>	<p><b>Student Edition:</b> 446-451 <i>Explore</i> 433 <i>Inquiry Investigation</i> 442-443 <i>Math in Science</i> 455</p> <p><b>Teacher Wraparound Edition:</b> ELL 449</p>

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
3. identifies past and present methods used to explore space.	<b>Student Edition:</b> 442-443, 452 <i>Quick Check</i> 443, 452 <i>Reading in Science</i> 454-455 <b>Teacher Wraparound Edition:</b> DIF 442; DMI 452; HA 452, 466; SB 458	<b>Student Edition:</b> 4-9, 422-423, 428, 434, 447, 448, 459, 668-669 <i>Explore</i> 3 <b>Teacher Wraparound Edition:</b> DI 434; SB 6, 446
<b>Benchmark 4: The student will model motions and identify forces that explain earth phenomena.</b>		
The student...		
1. ▲ demonstrates and models object/space/time relationships that explain phenomena such as the day, the month, the year, seasons, phases of the moon, eclipses and tides.	<b>Student Edition:</b> 424-426, 432-436 <i>Explore</i> 431 <i>Quick Check</i> 425, 426, 433, 435 <i>Quick Lab</i> 425, 435 <i>Read a Diagram</i> 425, 435, 436 <b>Teacher Wraparound Edition:</b> DMI 424, 434; FA 437	<b>Student Edition:</b> 372-373, 424-427, 436-440 <i>Explore</i> 433 <i>Quick Lab</i> 427, 439 <b>Teacher Wraparound Edition:</b> DI 438; SB 439
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.	<b>Student Edition:</b> 364-365, 424-425 <i>Explore</i> 363 <i>Look and Wonder</i> 363 <i>Quick Check</i> 365 <i>Quick Lab</i> 424 <i>Read a Diagram</i> 364-365 <b>Teacher Wraparound Edition:</b> DIF 365	<b>Student Edition:</b> 209, 372-373, 408-409, 426-427 <b>Teacher Wraparound Edition:</b> DI 427

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>STANDARD 5: SCIENCE AND TECHNOLOGY</b>		
<b>SCIENCE AND TECHNOLOGY – The student will demonstrate abilities of technological design and understandings about science and technology.</b>		
<b>Benchmark 1: The student will demonstrate abilities of technological design.</b>		
<p>The student...</p> <p>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.</p>	<p>The following pages can be used to meet this standard.</p> <p><b>Student Edition:</b>  <i>Be a Scientist: Inquiry Investigation</i> 513, 648-649, 686-687  <i>Explore</i> 325, 607  <i>Focus on Skills: Skill Builder</i> 376-377, 486-487  <i>Quick Check</i> 452  <i>Quick Lab</i> 611, 681  <i>Reading in Science</i> 295</p> <p><b>Teacher Wraparound Edition:</b>  IR 295, 455; IW 690</p>	<p><b>Student Edition:</b>  6-9  <i>Explore</i> 351, 523  <i>Inquiry Investigation</i> 534-535  <i>Quick Lab</i> 215, 261, 355, 651, 705</p> <p><b>Teacher Wraparound Edition:</b>  DI 7; SB 8; WU 692</p>

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>Benchmark 2: The student will develop understandings of the similarities, differences, and relationships in science and technology.</b>		
The student...	<b>Student Edition:</b> 4-11, 252 <i>Careers in Science</i> 134, 232, 356, 472, 564, 690 <i>Literature</i> 475 <i>Reading in Science</i> 44-45, 176-177, 560-561 <i>Writing in Science</i> 550, 662 <i>Writing Link</i> 403 <b>Teacher Wraparound Edition:</b> IR 45, 581; IW 134, 356, 404, 472, 550, 564, 690; SB 8	<b>Student Edition:</b> 4-5, 164-166 <i>Careers in Science</i> 132, 236, 362, 480, 582, 712 <i>Reading in Science</i> 44-45, 128-129, 178-179, 232-233, 280-281, 404-405, 476-477, 520-521, 568-569, 668-669 <i>Writing in Science</i> 78-79, 118, 158, 218 <b>Teacher Wraparound Edition:</b> DI 7, 165; SB 9
1. compares the work of various types of scientists and engineers.		
2. evaluates benefits, risks, limitations and trade-offs of technological solutions.	<b>Student Edition:</b> 197, 330-336 <i>Literature</i> 475 <i>Quick Check</i> 335 <i>Reading in Science</i> 130-131, 294-295, 352-353 <b>Teacher Wraparound Edition:</b> AM 335; IW 686; UV 333	<b>Student Edition:</b> 134-135 <i>Explore</i> 351 <i>Math in Science</i> 337 <i>Reading in Science</i> 280-281, 348-349, 404-405, 568-569, 624-625 <i>Writing in Science</i> 158, 414, 578 <b>Teacher Wraparound Edition:</b> IW 578; SB 398

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
3. identifies contributions to science and technology by many people and many cultures.	<b>Student Edition:</b> 4-11, 126-127, 252, 442-443, 586 <i>Explore 3</i> <i>Reading in Science</i> 176-177, 500-501, 560-561, 580-581 <i>Social Studies Link</i> 43 <i>Writing Link</i> 129, 467 <b>Teacher Wraparound Edition:</b> CE 446; DIF 125, 443; FA 11; SB 4, 22, 34, 490; TR40	<b>Student Edition:</b> 3-11, 86-87, 142-146, 152-153, 162-165, 172-173, 176, 238-239, 256-257, 424, 428, 434, 461, 499-503, 608-609, 674-675, 699 <i>Reading in Science</i> 44-45, 128-129, 178-179, 232-233, 520-521, 568-569, 668-669 <i>Writing in Science</i> 218 <b>Teacher Wraparound Edition:</b> DI 173; HA 262
<b>STANDARD 6: SCIENCE IN PERSONAL AND ENVIRONMENTAL PERSPECTIVES</b>		
<b>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.</b>		
<b>Benchmark 1: The student will understand scientific knowledge relative to personal health.</b>		
The student...  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.	<b>Student Edition:</b> R13 (the digestive system can be used to stimulate a discussion on individual nutrition)  Also see Macmillan/McGraw-Hill's <i>Heath &amp; Wellness</i> ©2008 Grade 5.	<b>Student Edition:</b> 58-60, 101, 134-135, 166, 202, 292, 564-565, 620-621 <i>Writing in Science</i> 158 <b>Teacher Wraparound Edition:</b> DI 101, 683; HA 42; IR 168

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>Benchmark 2: The student will understand the impact of human activity on resources and environment.</b>		
<p>The student...</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><b>Student Edition:</b> 197, 292, 319, 320, 336, 344-350 <i>Literature</i> 475 <i>Quick Check</i> 197, 292 <i>Reading in Science</i> 130-131, 294-295 <i>Writing Link</i> 351</p> <p><b>Teacher Wraparound Edition:</b> DIF 475; DMI 196; UV 345</p>	<p><b>Student Edition:</b> 134-135, 164-166, 176, 223-224, 230, 292, 344-346, 352-356, 364-365 <i>Inquiry Investigation</i> 204-205, 394-395 <i>Math in Science</i> 219 <i>Quick Lab</i> 215 <i>Reading in Science</i> 44-45, 404-405 <i>Writing in Science</i> 118, 336, 414</p> <p><b>Teacher Wraparound Edition:</b> DI 165, 189; HA 230, 356; SB 340, 352, 408</p>
<b>Benchmark 3: The student will understand that natural hazards are dynamic examples of earth processes which cause us to evaluate risks.</b>		
<p>The student...</p> <p>1. recognizes patterns of natural processes and/or human activities that may cause and/or contribute to natural hazards.</p>	<p><b>Student Edition:</b> 272-273, 286, 394-401 <i>Explore</i> 393 <i>Literature</i> 359 <i>Look and Wonder</i> 270, 392</p> <p><b>Teacher Wraparound Edition:</b> DIF 401; DMI 272; SB 287; WU 270</p>	<p><b>Student Edition:</b> 222-223, 230, 270-275, 278, 334, 388-391 <i>Explore</i> 221, 283 <i>Inquiry Investigation</i> 394-395 <i>Inquiry Skill Builder</i> 194-195 <i>Reading in Science</i> 404-405 <i>Writing in Science</i> 294-295</p> <p><b>Teacher Wraparound Edition:</b> AE 221; DI 270; HA 230; IR 194; SB 408</p>

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
2. evaluates risks and defines appropriate actions associated with the natural hazard.	<b>Student Edition:</b> 278, 395, 397, 398, 401 <i>Fact</i> 278 <i>Literature</i> 359 <i>Quick Check</i> 278 <i>Social Studies Link</i> 403 <i>Writing in Science</i> 404 <b>Teacher Wraparound Edition:</b> DIF 397; DMI 278; ELL 358; WU 392	<b>Student Edition:</b> 274-275, 334, 388-392 <i>Reading in Science</i> 280-281, 404-405 <b>Teacher Wraparound Edition:</b> DI 391; SB 382
<b>STANDARD 7: HISTORY AND NATURE OF SCIENCE</b>		
<b>HISTORY AND NATURE OF SCIENCE – The student will examine and develop an understanding of science as a historical human endeavor.</b>		
<b>Benchmark 1: The student will develop scientific habits of mind.</b>		
The student...  1. practices intellectual honesty, demonstrates skepticism appropriately, displays open-mindedness to new ideas, and bases decisions on evidence.	The following pages can be used to meet this standard. <b>Student Edition:</b> 4-11 <i>Be a Scientist: Inquiry Investigation</i> 82-83, 120-121, 192-193, 322-323, 604-605, 634-635 <b>Teacher Wraparound Edition:</b> DIF 9; HA 256; OI 83, 121, 193; SB 4	<b>Student Edition:</b> 10-11, 134-135, 164-166, 172-176, 256-262, 344-346, 352-356, 388-392 <i>Inquiry Investigation</i> 168-169 <i>Inquiry Skill Builder</i> 12-13 <i>Math in Science</i> 337 <i>Quick Lab</i> 165 <i>Reading in Science</i> 280-281 <i>Writing in Science</i> 78-79, 158, 336 <b>Teacher Wraparound Edition:</b> DI 135, 165, 175; HA 262; IR 168; SB 4, 398

STANDARDS	PAGE REFERENCES	
	<i>Science: A Closer Look</i> Grade 5	<i>Science: A Closer Look</i> Grade 6
<b>Benchmark 2: The student will research contributions to science throughout history.</b>		
<p>The student...</p> <p>▲ 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.</p>	<p><b>Student Edition:</b> 4-11, 126, 252-253, 442-443, 586, 588-592 <i>Explore</i> 3 <i>Reading in Science</i> 176-177, 454-455, 500-501, 580-581 <b>Teacher Wraparound Edition:</b> FA 11; SB 4, 22, 34; TR40</p>	<p><b>Student Edition:</b> 10-11, 86-87, 142-145, 162-163, 172-173, 176, 256-257, 424, 461, 502-503, 608-609, 674-675, 699 <i>Reading in Science</i> 44-45, 128-129, 178-179, 232-233, 520-521, 568-569, 668-669 <b>Teacher Wraparound Edition:</b> DI 143, 173; HA 262</p>