



Science

LEVEL BLUE

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STANDARDS	PAGE REFERENCES
Standard A: Science Connections	
By the end of grade eight, students will:	
<p>A.8.1 Develop their understanding of the science themes by using the themes to frame questions about science-related issues and problems</p>	<p>Student Edition: 6-11, 13-15, 21, 38-39, 44 <i>Applying Science</i> 192, 260, 469 <i>Design Your Own Lab</i> 82-83, 510-511 <i>Integrate Social Studies</i> 7 <i>Lab</i> 140-141, 509 <i>Use the Internet Lab</i> 28-29 Teacher Wraparound Edition: A 8, 21; IM 15</p>
<p>A.8.2 Describe limitations of science systems and give reasons why specific science themes are included in or excluded from those systems</p>	<p>Student Edition: 27, 40-42 <i>Launch Lab</i> 37 <i>Science and Language Arts</i> 30, 456, 484 <i>Science and Society</i> 56, 626, 658 <i>Science Skill Handbook</i> 732 <i>Science Stats</i> 296 Teacher Wraparound Edition: DI 45; FYI 10</p>

STANDARDS	PAGE REFERENCES
<p>A.8.3 Defend explanations and models by collecting and organizing evidence that supports them and critique explanations and models by collecting and organizing evidence that conflicts with them</p>	<p>Student Edition: 16, 44-48, 50-53, 250-255, 257-261, 405-413 <i>Integrate Environment</i> 49 <i>Model and Invent Lab</i> 262-263, 360-361, 482-483 <i>National Geographic</i> 51 <i>Science and Society</i> 56, 658 Teacher Wraparound Edition: D 426; DI 52; FYI 16</p>
<p>A.8.4 Collect evidence to show that models developed as explanations for events were (and are) based on the evidence available to scientists at the time</p>	<p>Student Edition: 52, 182-185, 261, 405-413 <i>Integrate History</i> 681 <i>Model and Invent Lab</i> 262-263 <i>National Geographic</i> 51 <i>Science and History</i> 328, 426 <i>Science and Society</i> 56, 658 Teacher Wraparound Edition: D 151, 426; DI 52, 152, 467; FYI 75; SJ 680</p>
<p>A.8.5 Show how models and explanations, based on systems, were changed as new evidence accumulated (the effects of constancy, evolution, change, and measurement should all be part of these explanations)</p>	<p>Student Edition: 50-53, 182-185, 257-261, 405-413, 434-435 <i>Integrate History</i> 681 <i>National Geographic</i> 152 <i>Science and History</i> 234 <i>Science and Society</i> 56, 658 Teacher Wraparound Edition: D 151, 426; DI 52, 152, 184; FYI 7, 75; SJ 410, 680</p>
<p>A.8.6 Use models and explanations to predict actions and events in the natural world</p>	<p>Student Edition: 16, 47-48, 50-53, 105, 130-135, 218, 219, 226-231, 309-310, 619-620 <i>Applying Math</i> 47 <i>Integrate Life Science</i> 617, 870 <i>Lab</i> 54-55, 287 <i>National Geographic</i> 51, 104 <i>Science and Society</i> 56 Teacher Wraparound Edition: D 26; FYI 16, 47; MM 196; QD 223; R 311</p>

STANDARDS	PAGE REFERENCES
A.8.7 Design real or thought investigations to test the usefulness and limitations of a model	<p>Student Edition: 16, 47-48 <i>Communicate Your Data</i> 225 <i>Design Your Own Lab</i> 540-541, 598-599 <i>Lab</i> 54-55 <i>Launch Lab</i> 305, 403 <i>MiniLab</i> 133, 164, 282 <i>Model and Invent Lab</i> 262-263, 360-361 <i>Science and Society</i> 56 <i>Science Skill Handbook</i> 727</p> <p>Teacher Wraparound Edition: QD 310; TPK 226</p>
A.8.8. Use the themes of evolution, equilibrium, and energy to predict future events or changes in the natural world	<p>Student Edition: 47-48, 53, 105, 135, 137-139, 150-153, 190-194, 210-213, 226-231, 498-501 <i>Design Your Own Lab</i> 424-425 <i>Integrate Earth Science</i> 160 <i>Lab</i> 43, 54-55 <i>National Geographic</i> 104, 134 <i>Use the Internet Lab</i> 200-201</p> <p>Teacher Wraparound Edition: D 151, 188; DI 152; R 48</p>
Standard B: Nature of Science	
B.8.1 Describe how scientific knowledge and concepts have changed over time in the earth and space, life and environmental, and physical sciences	<p>Student Edition: 50-53, 182-185, 190-198, 226-231, 257-261, 274-279, 322-325, 388-391, 405-413, 552, 678-680 <i>Accidents in Science</i> 716 <i>Integrate Physics</i> 340 <i>Lab</i> 189 <i>National Geographic</i> 51</p> <p>Teacher Wraparound Edition: D 183; FYI 198; IH 412</p>

STANDARDS	PAGE REFERENCES
<p>B.8.2 Identify and describe major changes that have occurred over time in conceptual models and explanations in the earth and space, life and environmental, and physical sciences and identify the people, cultures, and conditions that led to these developments</p>	<p>Student Edition: 50, 186-188, 195-198, 226-231, 257-261, 274-279, 322-325, 388-391, 405-413, 552, 556-559, 563-568, 678-680 <i>Integrate Physics</i> 340 <i>National Geographic</i> 51 <i>Science and History</i> 328, 426 <i>Science and Society</i> 658 Teacher Wraparound Edition: CD 350; D 183, 357; FYI 187, 198; IH 412; SJ 191</p>
<p>B.8.3 Explain how the general rules of science apply to the development and use of evidence in science investigations, model-making, and applications</p>	<p>Student Edition: 6-11, 13-23, 47-48, 182-185, 196-199, 226-231, 405-413, 533-537, 648-654 <i>Accidents in Science</i> 362, 542 <i>Integrate Life Science</i> 617 <i>Lab</i> 12, 43, 189 <i>Science and History</i> 114, 234, 328, 426 <i>Use the Internet Lab</i> 200-201 Teacher Wraparound Edition: D 8; FYI 187; TPK 13</p>
<p>B.8.4 Describe types of reasoning and evidence used outside of science to draw conclusions about the natural world</p>	<p>Student Edition: 159, 164-165, 261, 306, 370-371, 404 <i>Science and Language Arts</i> 456, 484, 686 Teacher Wraparound Edition: CC 79; DI 274; FF 318; FYI 10</p>
<p>B.8.5 Explain ways in which science knowledge is shared, checked, and extended, and show how these processes change over time</p>	<p>Student Edition: 10-11, 24-27 <i>Accidents in Science</i> 264, 362 <i>Integrate Life Science</i> 30 <i>Science and Language Arts</i> 30 <i>Science and Society</i> 56, 572, 658 <i>Use the Internet Lab</i> 28-29 Teacher Wraparound Edition: D 658; FYI 7, 10; SJ 50</p>

STANDARDS	PAGE REFERENCES
B.8.6 Explain the ways in which scientific knowledge is useful and also limited when applied to social issues	<p>Student Edition: 50-53, 98-101, 105, 159, 274-276 <i>Integrate Career</i> 165 <i>National Geographic</i> 90-91, 104, 518-519, 712 <i>Science and History</i> 114, 234 <i>Science and Language Arts</i> 484 <i>Science and Society</i> 56, 172, 600</p> <p>Teacher Wraparound Edition: A 101; FYI 157, 165</p>
Standard C: Science Inquiry	
C.8.1 Identify* questions they can investigate* using resources and equipment they have available	<p>Student Edition: 13-14 <i>Applying Science</i> 192, 372 <i>Design Your Own Lab</i> 392-393, 424-425 <i>MiniLab</i> 18, 158, 292, 371 <i>Model and Invent Lab</i> 482-483 <i>National Geographic</i> 518-519, 632-633 <i>Science Skill Handbook</i> 724</p> <p>Teacher Wraparound Edition: FYI 14</p>
C.8.2 Identify* data and locate sources of information including their own records to answer the questions being investigated	<p>Student Edition: 8-11, 18-19, 21-23, 99-105 <i>Accidents in Science</i> 362, 716 <i>Applying Math</i> 47 <i>Applying Science</i> 260, 469 <i>Integrate Life Science</i> 30 <i>Lab</i> 43 <i>Science and Society</i> 56, 658 <i>Science Skill Handbook</i> 724-732</p> <p>Teacher Wraparound Edition: FYI 10</p>

STANDARDS	PAGE REFERENCES
<p>C.8.3 Design and safely conduct investigations* that provide reliable quantitative or qualitative data, as appropriate, to answer their questions</p>	<p>Student Edition: 14-19, 21-23 <i>Applying Science</i> 192, 372, 669 <i>Design Your Own Lab</i> 82-83, 510-511, 598-599, 624-625 <i>Lab</i> 43 <i>Model and Invent Lab</i> 262-263, 360-361 <i>National Geographic</i> 20 <i>Science Skill Handbook</i> 728-731 <i>Use the Internet Lab</i> 200-201, 454-455 Teacher Wraparound Edition: FYI 14, 21; IM 15; LD 19</p>
<p>C.8.4 Use inferences* to help decide possible results of their investigations, use observations to check their inferences</p>	<p>Student Edition: 19 <i>Lab</i> 12, 43, 162, 225, 453, 585, 706 <i>MiniLab</i> 9, 211, 345 <i>Science Skill Handbook</i> 732 Teacher Wraparound Edition: USW 10</p>
<p>C.8.5 Use accepted scientific knowledge, models*, and theories* to explain* their results and to raise further questions about their investigations*</p>	<p>Student Edition: 16, 23, 47-48, 50 <i>Lab</i> 12, 326-327, 453, 585, 656-657, 706 <i>MiniLab</i> 9, 211, 345, 496 <i>Model and Invent Lab</i> 360-361 <i>Science Skill Handbook</i> 732 Teacher Wraparound Edition: FYI 16; IM 19</p>
<p>C.8.6 State what they have learned from investigations*, relating their inferences* to scientific knowledge and to data they have collected</p>	<p>Student Edition: 19, 23 <i>Lab</i> 12, 43, 162, 225, 453, 585, 706 <i>MiniLab</i> 9, 211, 345 <i>Science Skill Handbook</i> 732 Teacher Wraparound Edition: TPK 13</p>
<p>C.8.7 Explain* their data and conclusions in ways that allow an audience to understand the questions they selected for investigation* and the answers they have developed</p>	<p>Student Edition: 19, 23 <i>Communicate Your Data</i> 43, 83, 162, 393, 425, 539, 599 <i>Science Skill Handbook</i> 732 Teacher Wraparound Edition: CC 22; CYD 113, 511, 571, 585, 625</p>

STANDARDS	PAGE REFERENCES
C.8.8 Use computer software and other technologies to organize, process, and present their data	Student Edition: 9, 27 <i>Communicate Your Data</i> 29, 201, 455, 539 <i>National Geographic</i> 20 <i>Technology Skill Handbook</i> 748-751 Teacher Wraparound Edition: CYD 29, 393, 425, 585; D 26; SJ 9
C.8.9 Evaluate*, explain*, and defend the validity of questions, hypotheses, and conclusions to their investigations*	Student Edition: 21 <i>Applying Science</i> 260, 372, 469 <i>Design Your Own Lab</i> 82-83, 112-113, 510-511, 540-541, 570-571, 598-599, 624-625 <i>Science Skill Handbook</i> 724-732 Teacher Wraparound Edition: A 21
C.8.10 Discuss the importance of their results and implications of their work with peers, teachers, and other adults	Student Edition: 10-11, 19, 23 <i>Communicate Your Data</i> 43, 83, 162, 233, 263, 327, 393, 425, 539, 599, 625, 685 <i>Science Skill Handbook</i> 732 Teacher Wraparound Edition: CYD 113, 511, 571, 585, 625; TPK 13
C.8.11 Raise further questions which still need to be answered	Student Edition: 19, 135, 195, 279, 286, 291, 391 <i>Science and Society</i> 56, 626, 658 Teacher Wraparound Edition: A 8; AIL 82, 424, 510; CC 17
Standard D: Physical Science	
PROPERTIES AND CHANGES OF PROPERTIES IN MATTER	
D.8.1 Observe, describe, and measure physical and chemical properties of elements and other substances to identify* and group* them according to properties such as density, melting points, boiling points, conductivity, magnetic attraction, solubility, and reactions to common physical and chemical tests	Student Edition: 436-437, 441-447, 448-451 <i>Integrate Chemistry</i> 456 <i>Integrate Health</i> 452 <i>Lab</i> 453 <i>MiniLab</i> 435 <i>Science and History</i> 512 <i>Use the Internet Lab</i> 454-455 Teacher Wraparound Edition: IL 446, 476; LD 439; SJ 438, 469

STANDARDS	PAGE REFERENCES
D.8.2 Use the major ideas of atomic theory and molecular theory to describe physical and chemical interactions among substances, including solids, liquids, and gases	<p>Student Edition: 406-409, 416-420, 468-469, 474-476, 492, 533-538 <i>Design Your Own Lab</i> 510-511 <i>Integrate Life Science</i> 445 <i>Lab</i> 509, 539 <i>National Geographic</i> 493 <i>Science and History</i> 512</p> <p>Teacher Wraparound Edition: D 536; DI 494</p>
D.8.3 Understand how chemical interactions and behaviors lead to new substances with different properties	<p>Student Edition: 492, 495 <i>Integrate Life Science</i> 495 <i>Lab</i> 453, 509 <i>Launch Lab</i> 491 <i>MiniLab</i> 76 <i>National Geographic</i> 493</p> <p>Teacher Wraparound Edition: CC 444; DI 494; QD 495</p>
D.8.4 While conducting investigations, use the science themes to develop explanations of physical and chemical interactions and energy exchanges	<p>Student Edition: 407-409, 416-420, 467-469, 472-476, 492, 498-501, 503-508, 533-538 <i>Design Your Own Lab</i> 510-511 <i>Integrate Life Science</i> 445 <i>Lab</i> 509, 539 <i>Launch Lab</i> 491 <i>National Geographic</i> 493, 537 <i>Science and History</i> 512</p> <p>Teacher Wraparound Edition: IM 407; QD 536</p>
MOTIONS AND FORCES	
D.8.5 While conducting investigations, explain the motion of objects by describing the forces acting on them	<p>Student Edition: 550-555, 556-562, 563-568, 580-581 <i>Design Your Own Lab</i> 570-571 <i>Lab</i> 585 <i>Launch Lab</i> 549, 579 <i>MiniLab</i> 567 <i>Science and Society</i> 572</p> <p>Teacher Wraparound Edition: D 560; R 562, 568; TPK 580; VL 566</p>

STANDARDS	PAGE REFERENCES
<p>D.8.6 While conducting investigations, explain the motion of objects using concepts of speed, velocity, acceleration, friction, momentum, and changes over time, among others, and apply these concepts and explanations to real-life situations outside the classroom</p>	<p>Student Edition: 522-527, 528-532, 533-538, 550-555, 556-562, 563-568, 580-581 <i>Accidents in Science</i> 542 <i>Design Your Own Lab</i> 540-541, 570-571 <i>Lab</i> 539 <i>Launch Lab</i> 549, 579 <i>Science and Society</i> 572, 600 Teacher Wraparound Edition: CC 531; D 560; IL 526; R 562, 568</p>
<p>D.8.7 While conducting investigations of common physical and chemical interactions occurring in the laboratory and the outside world, use commonly accepted definitions of energy and the idea of energy conservation</p>	<p>Student Edition: 76, 124-125, 136-139, 195, 375, 381-382, 466-467, 498-501, 619-623, 645 <i>Design Your Own Lab</i> 82-83 <i>Integrate Physics</i> 484 Teacher Wraparound Edition: DI 214; FYI 138</p>
TRANSFER OF ENERGY	
<p>D.8.8 Describe and investigate the properties of light, heat, gravity, radio waves, magnetic fields, electrical fields, and sound waves as they interact with material objects in common situations</p>	<p>Student Edition: 670-671, 673-680, 701-705, 708-710 <i>Accidents in Science</i> 716 <i>Integrate Physics</i> 686 <i>Lab</i> 684-685, 706, 714-715 <i>MiniLab</i> 670 Teacher Wraparound Edition: D 709; IL 702</p>
<p>D.8.9 Explain the behaviors of various forms of energy by using the models of energy transmission, both in the laboratory and in real-life situations in the outside world</p>	<p>Student Edition: 137-139, 498-501, 643-645, 654, 701-705, 708-710 <i>Accidents in Science</i> 716 <i>Lab</i> 684-685, 706, 714-715 <i>MiniLab</i> 670 Teacher Wraparound Edition: IL 702; IM 709</p>
<p>D.8.10 Explain how models of the atomic structure of matter have changed over time, including historical models and modern atomic theory</p>	<p>Student Edition: 404-413, 464-467 <i>MiniLab</i> 411 <i>Model and Invent Lab</i> 482-483 Teacher Wraparound Edition: DI 412; FYI 450; MM 405; SJ 410</p>

STANDARDS	PAGE REFERENCES
Standard E: Earth and Space Science	
STRUCTURE OF EARTH SYSTEM	
<p>E.8.1 Using the science themes, explain and predict changes in major features of land, water, and atmospheric systems</p>	<p>Student Edition: 135, 150-153, 159, 163-169, 182-185, 187-188, 190-194, 196-199, 210-218, 285, 292 <i>Integrate Earth Science</i> 160, 202 <i>Lab</i> 189 <i>National Geographic</i> 152 <i>Science and History</i> 234 <i>Use the Internet Lab</i> 200-201 Teacher Wraparound Edition: FYI 165, 184</p>
<p>E.8.2 Describe underlying structures of the earth that cause changes in the earth's surface</p>	<p>Student Edition: 186-188, 190-198, 210-211, 219-224, 226-231, 285, 292 <i>Integrate Earth Science</i> 202 <i>Lab</i> 225 Teacher Wraparound Edition: CD 195; D 183, 188; FYI 198, 222; MM 196; R 229</p>
<p>E.8.3 Using the science themes during the process of investigation, describe climate, weather, ocean currents, soil movements and changes in the forces acting on the earth</p>	<p>Student Edition: 127, 210-211, 221-224, 292 <i>Integrate Earth Science</i> 128, 160 <i>Lab</i> 225 <i>Science Stats</i> 142 Teacher Wraparound Edition: D 127; FF 166, 228; R 128</p>
<p>E.8.4 Using the science themes, analyze the influence living organisms have had on the earth's systems, including their impact on the composition of the atmosphere and the weathering of rocks</p>	<p>Student Edition: 124, 132-133, 135, 151, 281 <i>Integrate Chemistry</i> 281 <i>National Geographic</i> 134 Teacher Wraparound Edition: D 281</p>

STANDARDS	PAGE REFERENCES
EARTH'S HISTORY	
<p>E.8.5 Analyze the geologic and life history of the earth, including change over time, using various forms of scientific evidence</p>	<p>Student Edition: 182-188, 190-198, 214-215, 220-221, 224, 229, 247-249, 254-255, 259-261, 272-273, 279, 280-286, 288-293 <i>Lab</i> 189 <i>Science and History</i> 234 Teacher Wraparound Edition: FYI 184, 222; SJ 229</p>
<p>E.8.6 Describe through investigations the use of the earth's resources by humans in both past and current cultures, particularly how changes in the resources used for the past 100 years are the basis for efforts to conserve and recycle renewable and non-renewable resources</p>	<p>Student Edition: 130-131, 132-133, 135, 157-159, 164-165 <i>Integrate Earth Science</i> 160 <i>National Geographic</i> 90-91, 152 <i>Science and Society</i> 172, 658 Teacher Wraparound Edition: CC 151; DI 152; FYI 157; VL 131</p>
EARTH IN THE SOLAR SYSTEM	
<p>E.8.7 Describe the general structure of the solar system, galaxies, and the universe, explaining the nature of the evidence used to develop current models of the universe</p>	<p>Student Edition: 336-337, 338, 342-347, 348-353, 356-359, 372-374, 380-385, 386-391 <i>Accidents in Science</i> 362 <i>Applying Science</i> 372 <i>Design Your Own Lab</i> 392-393 <i>National Geographic</i> 339, 390 <i>Science Stats</i> 394 Teacher Wraparound Edition: CC 373; CD 387; D 357; DI 381, 389; FYI 358, 382; R 385</p>
<p>E.8.8 Using past and current models of the structure of the solar system, explain the daily, monthly, yearly, and long-term cycles of the earth, citing evidence gained from personal observation as well as evidence used by scientists</p>	<p>Student Edition: 306-307, 309-311, 313-316, 336-337, 338, 342-347, 348-353, 354-355, 375-378 <i>Integrate Life Science</i> 307 <i>Integrate Physics</i> 340 <i>Lab</i> 321, 326-327, 379 <i>Launch Lab</i> 305 <i>Model and Invent Lab</i> 360-361 <i>National Geographic</i> 339 <i>Science and History</i> 328 Teacher Wraparound Edition: CD 307; FF 343; FYI 337; QD 310; R 311; SJ 338, 352</p>

STANDARDS	PAGE REFERENCES
F. Life and Environmental Science	
STRUCTURE AND FUNCTION IN LIVING THINGS	
<p>F.8.1 Understand the structure and function of cells, organs, tissues, organ systems, and whole organisms</p>	<p>Student Edition: 64-67, 68-70, 73-75, 77-81 <i>Design Your Own Lab</i> 82-83 <i>Lab</i> 72 <i>Launch Lab</i> 63 <i>National Geographic</i> 69, 638 <i>Science Stats</i> 84 Teacher Wraparound Edition: DI 69, 78; FYI 79; IL 68</p>
<p>F.8.2 Show how organisms have adapted structures to match their functions, providing means of encouraging individual and group survival within specific environments</p>	<p>Student Edition: 40-41, 49-53, 274-276, 293 <i>Lab</i> 43, 54-55 <i>National Geographic</i> 51 Teacher Wraparound Edition: A 276; DI 274; LD 41; R 53; SJ 50, 275</p>
<p>F.8.3 Differentiate between single-celled and multiple-celled organisms (humans) through investigation, comparing the cell functions of specialized cells for each type of organism</p>	<p>Student Edition: 68-71, 73-81 <i>Design Your Own Lab</i> 82-83 <i>Lab</i> 72 <i>National Geographic</i> 69, 638 <i>Science Stats</i> 84 Teacher Wraparound Edition: DI 69; FF 66; UA 70</p>
REPRODUCTION AND HEREDITY	
<p>F.8.4 Investigate and explain that heredity is comprised of the characteristic traits found in genes within the cell of an organism</p>	<p>Student Edition: 38-42, 44-48, 68 <i>Applying Math</i> 47 <i>Lab</i> 54-55 <i>Science and Society</i> 56 Teacher Wraparound Edition: FYI 39; R 42, 48; SJ 46; TPK 38</p>
<p>F.8.5 Show how different structures both reproduce and pass on characteristics of their group</p>	<p>Student Edition: 38-39, 67, 276 Teacher Wraparound Edition: DI 40</p>

STANDARDS	PAGE REFERENCES
REGULATION AND BEHAVIOR	
F.8.6 Understand that an organism is regulated both internally and externally	Student Edition: 79-81 Teacher Wraparound Edition: FYI 79, 80
F.8.7 Understand that an organism's behavior evolves through adaptation to its environment	Student Edition: 40-42, 49-53 <i>Lab</i> 43, 54-55, 287 <i>National Geographic</i> 51 Teacher Wraparound Edition: LD 41; SJ 50
POPULATIONS AND ECOSYSTEMS	
F.8.8 Show through investigations how organisms both depend on and contribute to the balance or imbalance of populations and/or ecosystems, which in turn contribute to the total system of life on the planet	Student Edition: 96, 98-105, 106-110 <i>Applying Science</i> 101 <i>Design Your Own Lab</i> 112-113 <i>National Geographic</i> 104 <i>Science and History</i> 114 Teacher Wraparound Edition: A 101, 104; CU 97; D 100; FYI 102; IM 96; R 105
DIVERSITY AND ADAPTATIONS OF ORGANISMS	
F.8.9 Explain how some of the changes on the earth are contributing to changes in the balance of life and affecting the survival or population growth of certain species	Student Edition: 53, 105, 279, 286 <i>Lab</i> 54-55 <i>National Geographic</i> 104 Teacher Wraparound Edition: A 104; SJ 284
F.8.10 Project how current trends in human resource use and population growth will influence the natural environment, and show how current policies affect those trends	Student Edition: 132-135, 157, 159, 164, 617 <i>Accidents in Science</i> 264 <i>Integrate Earth Science</i> 160 <i>Integrate Environment</i> 15 <i>Science and History</i> 114 <i>Science and Language Arts</i> 30 <i>Science and Society</i> 172, 658 Teacher Wraparound Edition: FF 160; FYI 165; IE 15

STANDARDS	PAGE REFERENCES
Standard G: Science Applications	
<p>G.8.1 Identify* and investigate* the skills people need for a career in science or technology and identify the academic courses that a person pursuing such a career would need</p>	<p>Student Edition: <i>Integrate Career</i> 50, 127, 165, 317, 467, 622 <i>Science and Society</i> 56 <i>Technology Skill Handbook</i> 748-751 Teacher Wraparound Edition: FYI 275; IC 50, 127, 165, 197, 317, 444, 467, 622</p>
<p>G.8.2 Explain* how current scientific and technological discoveries have an influence on the work people do and how some of these discoveries also lead to new careers</p>	<p>Student Edition: 24-27 <i>Accidents in Science</i> 716 <i>Integrate Career</i> 467 <i>Integrate Health</i> 452 <i>National Geographic</i> 90-91, 152, 422, 518-519, 621, 632-633, 712 <i>Science and History</i> 234 <i>Science and Society</i> 56, 172, 600, 658 Teacher Wraparound Edition: D 26; FF 21</p>
<p>G.8.3 Illustrate* the impact that science and technology have had, both good and bad, on careers, systems, society, environment, and quality of life</p>	<p>Student Edition: 24-27 <i>Integrate Career</i> 50, 127, 165, 317, 444, 467, 622 <i>Integrate Environment</i> 15 <i>Integrate Life Science</i> 30, 423, 617 <i>Integrate Social Studies</i> 7, 534 <i>National Geographic</i> 2-3, 518-519, 632-633 <i>Science and History</i> 234, 426 <i>Science and Society</i> 56, 172, 572, 600, 658 Teacher Wraparound Edition: A 26; CD 10; CU 27; FF 17, 25; FYI 7</p>
<p>G.8.4 Propose a design (or re-design) of an applied science model or a machine that will have an impact in the community or elsewhere in the world and show* how the design (or re-design) might work, including potential side-effects</p>	<p>Student Edition: 16 <i>Design Your Own Lab</i> 540-541 <i>Lab</i> 684-685 <i>MiniLab</i> 308 <i>Model and Invent Lab</i> 360-361 Teacher Wraparound Edition: A 8; MM 16</p>

STANDARDS	PAGE REFERENCES
<p>G.8.5 Investigate* a specific local problem to which there has been a scientific or technological solution, including proposals for alternative courses of action, the choices that were made, reasons for the choices, any new problems created, and subsequent community satisfaction</p>	<p>Student Edition: 7-11, 14-15 <i>Accidents in Science</i> 716 <i>Lab</i> 12 <i>Science and History</i> 234, 512 <i>Science and Society</i> 172, 572, 600, 658 <i>Use the Internet Lab</i> 454-455 Teacher Wraparound Edition: FYI 7</p>
<p>G.8.6 Use current texts, encyclopedias, source books, computers, experts, the popular press, or other relevant sources to identify* examples of how scientific discoveries have resulted in new technology</p>	<p>Student Edition: 9, 24-25, 446-447 <i>Accidents in Science</i> 716 <i>Integrate Health</i> 452 <i>Integrate Physics</i> 450 <i>National Geographic</i> 2-3, 400-401, 422, 518-519, 632-633, 712 <i>Science and History</i> 234, 426, 512 <i>Science and Society</i> 56, 172, 572, 600 <i>Science Skill Handbook</i> 724 <i>Technology Skill Handbook</i> 748-751 Teacher Wraparound Edition: CC 444; D 26; FF 21, 25; FYI 78; SJ 9</p>
<p>G.8.7 Show* evidence* of how science and technology are interdependent, using some examples drawn from personally conducted investigations*</p>	<p>Student Edition: 9, 24-25 <i>Applying Science</i> 669 <i>Design Your Own Lab</i> 540-541, 598-599 <i>Lab</i> 189, 379, 585, 684-685 <i>Model and Invent Lab</i> 360-361 <i>Use the Internet Lab</i> 200-201, 454-455 Teacher Wraparound Edition: A 8; D 26; FYI 16; VL 9</p>
<p>Standard H: Science in Personal and Social Perspectives</p>	
<p>H.8.1 Evaluate the scientific evidence used in various media (for example, television, radio, Internet, popular press, and scientific journals) to address a social issue, using criteria of accuracy, logic, bias, relevance of data, and credibility of sources</p>	<p>Student Edition: 10-11 <i>Integrate Environment</i> 15 <i>Integrate History</i> 507 <i>Integrate Life Science</i> 30, 617 <i>National Geographic</i> 90-91, 518-519 <i>Science and Society</i> 56, 172, 572, 600, 658 Teacher Wraparound Edition: FYI 10; TPK 6</p>

STANDARDS	PAGE REFERENCES
<p>H.8.2 Present a scientific solution to a problem involving the earth and space, life and environmental, or physical sciences and participate in a consensus-building discussion to arrive at a group decision</p>	<p>Student Edition: <i>Design Your Own Lab</i> 540-541 <i>Integrate Life Science</i> 30 <i>MiniLab</i> 18 <i>National Geographic</i> 712 <i>Science and History</i> 234 <i>Science and Society</i> 172, 658 Teacher Wraparound Edition: IL 25</p>
<p>H.8.3 Understand the consequences of decisions affecting personal health and safety</p>	<p>Student Edition: 217-218, 653-654 <i>Design Your Own Lab</i> 540-541 <i>Launch Lab</i> 209 <i>Science and History</i> 234 <i>Science and Society</i> 572 <i>Science Skill Handbook</i> 733-735 Teacher Wraparound Edition: FYI 653, SJ 217</p>