

# SCIENCE

## A CLOSER LOOK

Correlation to Idaho Science Standards

GRADE 6



Macmillan/McGraw-Hill

<b>Standard 1: Nature of Science</b>	
<b>Goal 1.1: Understand Systems, Order, and Organization</b>	
Objective 1	
6.S.1.1.1 Analyze different systems. (618.01.a)	pp. 34-43, 56-65, 66-67, 80, 81, 84-91, 92-93, 96-103, 104-105, 108-115, 184-193, 194-195, 196-203, 204-205, 206-217, 218, 220-231, 234, 235, 327, 330, 353, 420, 424-427, 429, 432-441, 442-443, 444-453, 455, 628-637, 638, 698-707, 708-709
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>	
Objective 1	
6.S.1.2.1 Explain how observations and data are used as evidence on which to base scientific explanations and predictions. (618.02.a)	pp. 12, 21, 27, 37, 47, 51, 63, 69, 85, 89, 92-93, 95, 99, 107, 121, 126, 151, 155, 161, 171, 185, 197, 201, 221, 261, 267, 271, 297, 313, 321, 327, 355, 358, 369, 397, 421, 427, 433, 439, 457, 469, 471, 491, 497, 503, 523, 534, 541, 545, 551, 555, 600, 609, 612, 619, 645, 651, 659, 665, 673
Objective 2	
6.S.1.2.2 Use observations to make inferences. (618.02.b)	pp. 13, 51, 57, 63, 67, 69, 89, 99, 105, 126, 139, 151, 155, 161, 169, 171, 175, 197, 201, 204, 221, 249, 255, 271, 283, 297, 301, 307, 313, 327, 339, 351, 359, 369, 373, 381, 391, 395, 407, 421, 439, 445, 459, 471, 491, 497, 515, 523, 529, 535, 541, 545, 555, 575, 600, 615, 627, 635, 665, 671, 683, 693, 705
Objective 3	
6.S.1.2.3 Use models to explain or demonstrate a concept. (618.02.c)	pp. 12, 69, 75, 145, 161, 175, 197, 207, 215, 243, 261, 267, 271, 301, 327, 331, 355, 421, 427, 433, 439, 442-443, 445, 449, 459, 471, 571, 575, 635, 651, 659
<b>Goal 1.3: Understand Constancy, Change, and Measurement</b>	
Objective 1	
6.S.1.3.1 Analyze changes that occur in and among systems. (618.03.b)	pp. 34-43, 56-65, 81, 88-91, 92-93, 96-103, 104-105, 184-193, 196-203, 204-205, 206-217, 218, 220-231, 234, 235, 327, 330, 353, 420, 424-427, 429, 432-441, 442-443, 444-453, 455, 628-637, 638, 698-707, 708-709
Objective 2	
6.S.1.3.2 Measure in both U.S. Customary and International System of Measurement (metric system) units with an emphasis on the metric system. (618.03.c)	pp. 13, 27, 47, 187, 204, 243, 351, 443, 457, 487, 491, 494-495, 497, 511, 515, 523, 529, 541, 558, 589, 605, 615, 619, 627, 635, 681, 683, 708

**Goal 1.4: Understand the Theory that Evolution is a Process that Relates to the Gradual Changes in the Universe and of Equilibrium as a Physical State**

Objective 1: No objectives at this grade level.

**Goal 1.5: Understand Concepts of Form and Function**

Objective 1

6.S.1.5.1 Analyze how the shape or form of an object or system is frequently related to its use and/or function. (618.05.a)

pp. 34-41, 48-49, 54-55, 64, 65, 392, 402, 414, 422-423, 616, 620-621, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 640, 651, 708-709, R11

**Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills**

Objective 1

6.S.1.6.1 Write and analyze questions that can be answered by conducting scientific experiments. (619.02.a)

pp. 66-67, 104-105, 168-169, 204-205, 306-307, 358-359, 394-395, 442-443, 534-535, 558-559, 612-613, 708-709

Objective 2

6.S.1.6.2 Conduct scientific investigations using a control and variables. Repeat same experiment using alternate variables. (619.02.b)

pp. 13, 33, 66, 69, 121, 187, 306, 324-325, 391, 459, 523, 545, 558, 561, 609, 619, 651, 673, 708

Objective 3

6.S.1.6.3 Select and use appropriate tools and techniques to gather and display data. (619.02.c)

pp. 12-13, 21, 27, 30-31, 37, 47, 51, 57, 63, 66-67, 69, 75, 85, 89, 92-93, 95, 104-105, 107, 121, 139, 151, 161, 168-169, 185, 187, 201, 204-205, 207, 243, 252-253, 255, 267, 297, 313, 321, 327, 331, 351, 355, 358-359, 373, 378-379, 397, 409, 427, 430-431, 439, 442-443, 449, 457, 471, 487, 494-495, 497, 503, 511, 515, 523, 529, 534-535, 541, 545, 548-549, 551, 555, 558-559, 561, 565, 571, 589, 602-603, 605, 615, 619, 627, 635, 645, 659, 665, 671, 673, 681, 683, 705, 708-709, R2-R7

Objective 4

6.S.1.6.4 Use evidence to analyze data in order to develop descriptions, explanations, predictions, and models. (619.2.d)

pp. 12, 21, 47, 104, 107, 151, 155, 161, 165, 171, 201, 207, 252-253, 301, 313, 321, 343, 351, 391, 401, 430-431, 469, 487, 491, 535, 600, 609, 671

Objective 5

6.S.1.6.5 Test a hypothesis based on observations. (619.02.e)

pp. 5, 12, 548-549, 613, 683, 709

Objective 6

6.S.1.6.6 Communicate scientific procedures and explanations. (619.02.g)

pp. 12, 21, 47, 104, 107, 151, 155, 161, 165, 171, 201, 207, 252-253, 301, 313, 321, 343, 351, 391, 401, 430-431, 469, 487, 491, 535, 600, 609, 671

<b>Goal 1.7: Understand That Interpersonal Relationships Are Important in Scientific Endeavors</b>	
Objective 1: No objectives at this grade level.	
<b>Goal 1.8: Understand Technical Communication</b>	
Objective 1	
6.S.1.8.1 Read, give, and execute technical instructions. (628.01a)	pp. 66-67, 104-105, 168-169, 204-205, 306-307, 358-359, 394-395, 442-443, 534-535, 558-559, 612-613, 708-709
<b>Standard 2: Physical Science</b>	
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>	
Objective 1	
6.S.2.1.1 Compare and contrast the differences among elements, compounds and mixtures. (620.01.a)	pp. 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 522-533, 536, 537, 552, 553, 557, TR56, TR57
Objective 2	
6.S.2.1.2 Define the properties of matter. (620.01.b)	pp. 486, 487, 488, 489, 490, 491, 492, 493, 494, 495
Objective 3	
6.S.2.1.3 Compare densities of equal volumes of a solid, a liquid, or a gas. (619.01.c)	pp. 487, 490, 491, 493, 509
Objective 4	
6.S.2.1.4 Describe the effect of temperature on density. (620.01.c)	pp. 487, 493
Objective 5	
6.S.2.1.5 Explain the nature of physical change and how it relates to physical properties (the distance between molecules as water changes from ice to liquid water, and to water vapor). (620.01.d)	pp. 518, 542
<b>Goal 2.2: Understand Concepts of Motion and Forces</b>	
Objective 1	
6.S.2.2.1 Describe the effects of different forces (gravity and friction) on the movement, speed, and direction of an object. (620.03.d)	pp. 587, 588-589, 594-596, 598-599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 611, 612, 613, 614, 615, 616, 617, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641
<b>Goal 2.3: Understand the Total Energy in the Universe is Constant</b>	
Objective 1: No objectives at this grade level.	
<b>Goal 2.4: Understand the Structure of Atoms</b>	
Objective 1: No objectives at this grade level.	

<b>Goal 2.5: Understand Chemical Reactions</b>	
Objective 1: No objectives at this grade level.	
<b>Standard 3: Biology</b>	
<b>Goal 3.1: Understand the Theory of Biological Evolution</b>	
Objective 1: No objectives at this grade level.	
<b>Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems</b>	
Objective 1: No objectives at this grade level.	
<b>Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things</b>	
Objective 1	
6.S.3.3.1 Identify the different structural levels of which an organism is comprised (cells, tissues, organs, organ systems, and organisms). (621.01.a)	pp. 20-31, 32-45, 46-55, 56-67, 68-79, 82-83, 84-93, 95, 103, 106-117, 118-119, 120-127, 130
Objective 2	
6.S.3.3.2 Analyze the structural differences between plant and animal cells. (621.01.b)	pp. 87, 95, 96-97, 100, 111
Objective 3	
6.S.3.3.3 Describe how traits are passed from parents to offspring. (621.01.c)	pp. 114-117, 138-139, 140-141, 142-146, 147, 148-149, 151-155, 156, 157, 159, 160-169, 170-179, 228
<b>Standard 4: Earth and Space Systems</b>	
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>	
Objective 1	
6.S.4.1.1 Explain the interactions among the solid earth, oceans, atmosphere, and organisms. (624.01.a)	pp. 246-247, 248-249, 250-253, 262, 263, 267, 270, 271, 276-279, 284-289, 293, 304, 306-307, 334
Objective 2	
6.S.4.1.2 Explain the water cycle and its relationship to weather and climate. (624.01.b)	pp. 188, 189, 327, 330, 331, 333, 335, 361, 382-383, 417
Objective 3	
6.S.4.1.3 Identify cumulus, cirrus, and stratus clouds and how they relate to weather changes. (624.01.c)	pp. 188, 367, 384-385, 371, 386-387, 388
<b>Goal 4.2: Understand Geo-chemical Cycles and Energy in the Earth System</b>	
Objective 1: No objectives at this grade level.	

<b>Standard 5: Personal and Social Perspectives; Technology</b>	
<b>Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced</b>	
Objective 1	
6.S.5.1.1 Identify issues for environmental studies. (626.01.a)	pp. 192, 198-199, 200-201, 202, 226-230, 231, 234
<b>Goal 5.2: Understand the Relationship between Science and Technology</b>	
Objective 1	
6.S.5.2.1 Describe how science and technology are part of our society. (625.01.a)	pp. 44-45, 348-349, 404-405, 568-569, 624-625
Objective 2	
6.S.5.2.2 Describe how science and technology are interrelated. (625.01.b)	pp. 44-45, 348-349, 404-405, 568-569, 624-625
<b>Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them</b>	
Objective 1	
6.S.5.3.1 Explain the difference between renewable and nonrenewable resources. (626.03.a)	pp. 340-343, 354, 508, 658-659