

SCIENCE

A CLOSER LOOK

Correlation to Idaho Science Standards

GRADE 4



Macmillan/McGraw-Hill

Standard 1: Nature of Science	
Goal 1.1: Understand Systems, Order, and Organization	
Objective 1	
4.S.1.1.1 Explain that a system consists of an organized group of related objects that form a whole. (588.01.a)	pp. 98-105, 106-107, 128-133, 134-135, 136-145, 146-147, 148-157, 160, 161, 322-331, 378-389, 520, 521, 567-569, 580-585, R14-R23
Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations	
Objective 1	
4.S.1.2.1 Make and record observations then analyze and communicate the collected data. (588.02.a)	pp. 12, 21, 30-31, 33, 39, 45, 53, 56, 59, 77, 80, 89, 99, 106, 109, 129, 143, 151, 169, 175, 203, 207, 219, 225, 231, 237, 244, 251, 255, 263, 283, 295, 299, 313, 317, 328, 335, 352, 359, 397, 400, 411, 415, 421, 431, 435, 457, 461, 467, 473, 493, 507, 513, 533, 539, 544, 551, 560, 563, 569, 575
Objective 2	
4.S.1.2.2 Define observations and inferences. (588.02.b)	pp. 13, 21, 45, 56-57, 77, 89, 93, 102, 106-107, 116, 137, 143, 149, 165, 175, 177, 183, 186, 213, 225, 231, 241, 244-245, 251, 255, 263, 270-271, 273, 282-283, 285, 295, 313, 317, 349, 352-353, 363, 369, 373, 379, 393, 400-401, 411, 445, 449, 467, 483, 487, 493, 498, 503, 507, 513, 515, 522-523, 529, 536-537, 544, 551, 557, 560-561, 563, 572-573
Objective 3	
4.S.1.2.3 Make, describe and/or use models. (588.02.c)	pp. 12, 27, 64, 80, 89, 102, 106, 137, 149, 169, 183, 203, 207, 213, 225, 241, 244, 270, 273, 277, 295, 313, 332-333, 359, 369, 373, 384, 397, 400, 483, 529
Goal 1.3: Understand Constancy, Change, and Measurement	
Objective 1	
4.S.1.3.1 Describe how changes occur and can be measured. (588.03.b)	pp. 56-57, 143, 175, 285, 289, 393, 445, 498, 503, 513, 522-523
Objective 2	
4.S.1.3.2 Measure in both U.S. Customary and International System of Measurement (metric system) units. (588.03.c)	pp. 13, 56-57, 64, 93, 129, 143, 149, 175, 177, 186, 270-271, 282-283, 285, 289, 369, 379, 393, 400-401, 421, 425, 428-429, 445, 457, 470, 498, 503, 513, 522-523
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	
4.S.1.5.1 Explain the relationship between shape and use. (588.05.a)	pp. 17, 27, 45, 46, 47, 49, 50, 51, 52, 53, 55, 56-57, 60, 61, 62, 63, 70, 71, 72, 82, 83, 84, 85, 88, 89, 90, 91, 92, 93, 95, 98, 100, 101, 102, 103, 104, 105, 106-107, 110, 120, 121, 124-125, 164, 165, 166, 167, 168, 169, 171, 172-173, 174, 178, 179, 194, 195, 528, 529, R14, R15, R16, R17, R18, R19, R20, R21, R22, TR40, TR41, TR42, TR43
Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills	
Objective 1	
4.S.1.6.1 Write questions that can be answered by conducting scientific tests. (589.01.a)	pp. 57, 107, 245, 271, 283, 353, 401, 473, 523, 561, 573
Objective 2	
4.S.1.6.2 Conduct scientific tests. (589.01.b)	pp. 3, 21, 27, 30-31, 33, 39, 45, 53, 56-57, 59, 64, 77, 80, 86-87, 89, 93, 99, 102, 106-107, 109, 116, 129, 131, 134-135, 137, 143, 149, 151, 165, 169, 172-173, 175, 177, 183, 186, 203, 207, 210-211, 213, 219, 225, 231, 237, 241, 244-245, 251, 255, 260-261, 263, 267, 270-271, 273, 277, 282-283, 285, 289, 295, 299, 313, 317, 323, 328, 332-333, 335, 339, 345, 349, 352-353, 359, 363, 369, 373, 376-377, 379, 384, 393, 397, 400-401, 411, 415, 421, 425, 428-429, 431, 435, 445, 449, 457, 461, 464-465, 467, 470, 472-473, 483, 487, 490-491, 493, 498, 503, 507, 513, 515, 522-523, 529, 533, 536-537, 539, 544, 551, 557, 560-561, 563, 569, 572-573, 575, 580
Objective 3	
4.S.1.6.3 Use appropriate tools and techniques to gather and display data. (589.01.c)	pp. 21, 30-31, 33, 39, 45, 56-57, 64, 93, 99, 106-107, 109, 129, 134-135, 137, 143, 149, 172-173, 175, 177, 186, 237, 241, 251, 260-261, 263, 267, 270-271, 277, 285, 289, 295, 313, 317, 328, 332-333, 352-353, 359, 363, 369, 379, 384, 393, 397, 400-401, 411, 415, 421, 425, 428-429, 431, 445, 449, 461, 464-465, 467, 483, 490-491, 493, 498, 503, 513, 515, 522-523, 529, 536-537, 539, 551, 560-561, 569, 575, 580, R4, R5, R6, R7, R8, R9
Objective 4	
4.S.1.6.4 Use data to construct a reasonable explanation. (589.01.d)	pp. 13, 21, 57, 99, 107, 109, 131, 137, 175, 213, 219, 237, 263, 267, 273, 283, 285, 328, 345, 369, 376-377, 393, 411, 431, 435, 445, 461, 470, 473, 483, 493, 503, 513, 515, 523, 529, 573

Objective 5	
4.S.1.6.5 Make predictions based on data. (589.01.e)	pp. 13, 33, 109, 134-135, 165, 237, 255, 335, 339, 345, 425, 449, 487, 533, 551, 557, 580
Objective 6	
4.S.1.6.6 Analyze alternative explanations. (589.01.f)	pp. 5, 13, 59, 131, 270-271, 323, 335, 464-465, 483, 493, 503
Objective 7	
4.S.1.6.7 Communicate the results of tests to others in multiple formats. (589.01.g)	pp. 12, 21, 45, 57, 77, 129, 151, 203, 225, 244, 251, 260-261, 273, 277, 295, 299, 323, 339, 349, 353, 359, 379, 421, 457, 467, 472, 523, 539, 561, 563, 573, 575
Goal 1.7: Understand That Interpersonal Relationships Are Important in Scientific Endeavors	
Objective 1: No objectives at this grade level.	
Goal 1.8: Understand Technical Communication	
Objective 1	
4.S.1.8.1 Analyze and follow multi-step instructions. (598.02.a)	pp. 3, 21, 27, 33, 39, 45, 53, 56-57, 59, 64, 77, 80, 89, 93, 99, 102, 106-107, 109, 116, 129, 131, 137, 143, 149, 151, 165, 169, 175, 177, 183, 186, 203, 207, 213, 219, 225, 231, 237, 241, 244-245, 251, 255, 263, 267, 270-271, 273, 277, 282-283, 285, 289, 295, 299, 313, 317, 323, 328, 335, 339, 345, 349, 352-353, 359, 363, 369, 373, 379, 384, 393, 397, 400-401, 411, 415, 421, 425, 431, 435, 445, 449, 457, 461, 467, 470, 472-473, 483, 487, 493, 498, 503, 507, 513, 515, 522-523, 529, 533, 539, 544, 551, 557, 560-561, 563, 569, 572-573, 575, 580
Standard 2: Physical Science	
Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions	
Objective 1	
4.S.2.1.1 Use instruments to measure properties (590.01.a)	pp. 369, 379, 393, 400-401, 421, 425, 428-429, 445, 457, 470, 498, 503, 513, 522-523
Objective 2	
4.S.2.1.2 Describe the physical properties of solids, liquids, and gases. (590.01.b)	pp. 322, 323, 324, 325, 331, 410, 411, 412, 414, 415, 417, 418, 419, 423, 427, 428-429, 446, 447, 448, 449, 452, 453, 464, 465, 534, 535, TR56, TR58
Objective 3	
4.S.2.1.3 Explain the changes caused by heating and cooling materials. (590.01.c)	pp. 322, 323, 324, 325, 331, 415, 446, 447, 448, 449, 452, 453, 464, 465, 534, 535, TR58

Goal 2.2: Understand Concepts of Motion and Forces	
Objective 1: No objectives at this grade level.	
Goal 2.3: Understand the Total Energy in the Universe is Constant	
Objective 1: No objectives at this grade level.	
Goal 2.4: Understand the Structure of Atoms	
Objective 1: No objectives at this grade level.	
Goal 2.5: Understand Chemical Reactions	
Objective 1: No objectives at this grade level.	
Standard 3: Biology	
Goal 3.1: Understand the Theory of Biological Evolution	
Objective 1	
4.S.3.1.1 Analyze and communicate the adaptations of plants and animals to their environment. (592.01.a)	pp. 47, 52, 53, 58, 59, 62, 63, 64, 65, 68, 69, 72, 94, 108, 109, 110, 111, 112, 113, 114, 115, 117, 118-119, 120, 158, TR41, TR43
Objective 2	
4.S.3.1.2 Describe the difference between vertebrate and invertebrate animals. (592.01.c)	pp. 74B, 74D, 74-75, 76-87, 79, 88B, 88-95
Objective 3	
4.S.3.1.3 Classify the five groups of vertebrates (mammal, reptiles, amphibians, birds, and fish) based on characteristics. (592.01.c)	pp. 32, 33, 34-35, 36-37, 40, 41
Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems	
Objective 1: No objectives at this grade level.	
Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things	
Objective 1: No objectives at this grade level.	
Standard 4: Earth and Space Systems	
Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems	
Objective 1	
4.S.4.1.1 Compare and contrast the basic components of our solar system (planets, sun, moon, asteroids, comets, meteors). (594.01.b)	pp. 356B, 356D, 378B, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389
Objective 2	
4.S.4.1.2 Explain the effect of gravity on orbits and objects. (594.01.c)	pp. 426, 427, R6

Objective 3	
4.S.4.1.3 Explain the effect of moon's gravity on Earth's tides. (594.01.c)	p. 373
Goal 4.2: Understand Geo-chemical Cycles and Energy in the Earth System	
Objective 1: No objectives at this grade level.	
Standard 5: Personal and Social Perspectives; Technology	
Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced	
Objective 1: No objectives at this grade level.	
Goal 5.2: Understand the Relationship between Science and Technology	
Objective 1	
4.S.5.2.1 Identify tools used for space exploration and for scientific investigations. (595.01.b)	pp. 382, 383, 390-391
Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them	
Objective 1: No objectives at this grade level.	