

**IDAHO ACHIEVEMENT STANDARDS  
GRADE 4  
SCIENCE**

**Standard 1: Nature of Science**

Goals:	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6	Objective 7
<b>Goal 1.1: Understand Systems, Order, and Organization</b>	4.S.1.1.1 Explain that a system consists of an organized group of related objects that form a whole. (588.01.a)						
<b>Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations</b>	4.S.1.2.1 Make and record observations then analyze and communicate the collected data. (588.02.a)	4.S.1.2.2 Define observations and inferences. (588.02.b)	4.S.1.2.3 Make, describe and/or use models. (588.02.c)				
<b>Goal 1.3: Understand Constancy, Change, and Measurement</b>	4.S.1.3.1 Describe how changes occur and can be measured. (588.03.b)	4.S.1.3.2 Measure in both U.S. Customary and International System of Measurement (metric system) units. (588.03.c)					
<b>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</b>	No objectives at this grade level.						
<b>Goal 1.5: Understand Concepts of Form and Function</b>	4.S.1.5.1 Explain the relationship between shape and use. (588.05.a)						
<b>Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills</b>	4.S.1.6.1 Write questions that can be answered by conducting scientific tests. (589.01.a)	4.S.1.6.2 Conduct scientific tests. (589.01.b)	4.S.1.6.3 Use appropriate tools and techniques to gather and display data. (589.01.c)	4.S.1.6.4 Use data to construct a reasonable explanation. (589.01.d)	4.S.1.6.5 Make predictions based on data. (589.01.e)	4.S.1.6.6 Analyze alternative explanations. (589.01.f)	4.S.1.6.7 Communicate the results of tests to others in multiple formats. (589.01.g)
<b>Goal 1.7: Understand That Interpersonal Relationships Are Important in Scientific Endeavors</b>	No objectives at this grade level.						
<b>Goal 1.8: Understand Technical Communication</b>	4.S.1.8.1 Analyze and follow multi-step instructions. (598.02.a)						

**Standard 2: Physical Science**

Goals:	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6	Objective 7
<b>Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions</b>	4.S.2.1.1 Use instruments to measure properties (590.01.a)	4.S.2.1.2 Describe the physical properties of solids, liquids, and gases. (590.01.b)	4.S.2.1.3 Explain the changes caused by heating and cooling materials. (590.01.c)				
<b>Goal 2.2: Understand Concepts of Motion and Forces</b>	No objectives at this grade level.						
<b>Goal 2.3: Understand the Total Energy in the Universe is Constant</b>	No objectives at this grade level.						
<b>Goal 2.4: Understand the Structure of Atoms</b>	No objectives at this grade level.						
<b>Goal 2.5: Understand Chemical Reactions</b>	No objectives at this grade level.						

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**Standard 3: Biology**

Goals:	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6	Objective 7
<b>Goal 3.1: Understand the Theory of Biological Evolution</b>	4.S.3.1.1 Analyze and communicate the adaptations of plants and animals to their environment. (592.01.a)	4.S.3.1.2 Describe the difference between vertebrate and invertebrate animals. (592.01.c)	4.S.3.1.3 Classify the five groups of vertebrates (mammal, reptiles, amphibians, birds, and fish) based on characteristics. (592.01.c)				
<b>Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems</b>	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>	No objectives at this grade level.						

**Standard 4: Earth and Space Systems**

Goals:	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6	Objective 7
<b>Goal 4.1: Understand Scientific Theories of Origin and Subsequent Changes in the Universe and Earth Systems</b>	4.S.4.1.1 Compare and contrast the basic components of our solar system (planets, sun, moon, asteroids, comets, meteors). (594.01.b)	4.S.4.1.2 Explain the effect of gravity on orbits and objects. (594.01.c)	4.S.4.1.3 Explain the effect of moon's gravity on Earth's tides. (594.01.c)				
<b>Goal 4.2: Understand Geo-chemical Cycles and Energy in the Earth System</b>	No objectives at this grade level.						

**Standard 5: Personal and Social Perspectives; Technology**

Goals:	Objective 1	Objective 2	Objective 3	Objective 4	Objective 5	Objective 6	Objective 7
<b>Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced</b>	No objectives at this grade level.						
<b>Goal 5.2: Understand the Relationship between Science and Technology</b>	4.S.5.2.1 Identify tools used for space exploration and for scientific investigations. (595.01.b)						
<b>Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them</b>	No objectives at this grade level.						