

Science - Kindergarten

Idaho Department of Education Content Standards	Objective	Sub Objectives	Task Analysis	Essential Vocabulary	Assessment	Resources
Cognitive level codes: • B: Memorize • C: Perform procedures • D: Demonstrate understanding • E: Conjecture, generalize, prove • F: Solve non-routine problems, make connections.	Bloom's Equivalent • B = Knowledge • C = Comprehension • D = Comprehension • E = Application and Analysis • F = Synthesis					
Standard 1: Nature of Science						
Goal 1.1: Understand Systems, Order, and Organization	No objectives at this grade level					
Goal 1.2: Understand Concepts and Processes of Evidence, Models, and Explanations	K.S.1.2.1 Make observations and collect data. (528.01.a)	• Make observations and collect data.	<ul style="list-style-type: none"> • Define observation, data, senses • Observe using senses • Explain observations • Draw a representation of the observations. For example: characteristics of plants and animals K.S.3.1.1 • Characteristics of living and non-living things K.S.3.2.1 • Using senses to describe matter K.S.2.1.1 • Natural and man-made things K.S.5.1.1 	observe • draw • data • magnifying glass	<ul style="list-style-type: none"> • Students will make verbal observations about (animals, plants, natural and man-made etc.) objects. • Students will then create an illustration to represent the collected data. 	http://www.sciencenetlinks.com/lessons.cfm?BenchmarkID=1&DocID=487 , http://www.sciencenetlinks.com/lessons.cfm?BenchmarkID=4&DocID=164
Goal 1.3: Understand Constancy, Change, and Measurement	K.S.1.3.1 Measure in non-standard units. (528.02.b)	• Measure in non-standard units.	<ul style="list-style-type: none"> • Define measurement (length, weight, volume, temperature in student friendly terms) • Use correct measurement procedures (no spaces) • Tell how many units of measurement (unifix cubes, bean, etc.) labeled correctly. 	units • measure • equal • balance • length • weight • volume • label • temperature	<ul style="list-style-type: none"> • Students will measure a variety of items in multiple ways in non-standard units. For example: How many paper clips long is this pencil? How many paper clips equal the same weight of this pencil? 	http://www.kindergarten-lessons.com/teaching-measurement.html , http://www.learnnc.org/lp/pages/3748
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	K.S.1.4.1 Apply the concepts of yesterday, today, and tomorrow. (528.03.a)	• Apply the concepts of yesterday, today, and tomorrow.	<ul style="list-style-type: none"> • Define yesterday, today, tomorrow • Use the correct terms while describing events that have occurred on those days. (Yesterday we . . . Today we are... Tomorrow we will...) 	yesterday • today • tomorrow	<ul style="list-style-type: none"> • Students will use the correct terms while describing events that have occurred on those days. (Yesterday we . . . Today we are... Tomorrow we will...) 	http://teachers.net ,
Goal 1.5: Understand Concepts of Form and Function	No objectives at this grade level.					
Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills	K.S.1.6.1 Make observations. (529.01.a)	• Make observations.	<ul style="list-style-type: none"> • Define observation and senses. • Observe using senses • Explain observations for example observe and explain: • Characteristics of plants and animals K.S.3.1.1 • Characteristics of living and non-living things K.S.3.2.1 • Using senses to describe matter K.S.2.1.1 • Natural and man-made things K.S.5.1.1 	observe (using five senses and corresponding adjectives) • magnifying glass	<ul style="list-style-type: none"> • Students will make verbal observations about (animals, plants, natural and man-made etc.) objects. 	http://teachers.net , http://www.sciencenetlinks.com/lessons.cfm?BenchmarkID=1&DocID=487
Goal 1.7: Understand That Interpersonal Relationships Are Important in Scientific Endeavors	K.S.1.7.1 Use cooperation and interaction skills. (538.01.a)	• Use cooperation and interaction skills.	<ul style="list-style-type: none"> • Recognize and discuss acceptable social behaviors • Define and maintain personal space • Use cooperation within groups • Work together on various tasks (may apply to all group sizes and content areas) 	cooperate • share • take turns • personal space	<ul style="list-style-type: none"> • Students will progressively increase their ability to interact cooperatively with minimal intervention. 	http://teachers.net , http://www.sciencenetlinks.com/lessons.cfm?BenchmarkID=7&DocID=293
Goal 1.8: Understand Technical Communication	K.S.1.8.1 Follow instructions. (538.02.a)	• Follow instructions.	<ul style="list-style-type: none"> • Maintain eye contact during instruction (one and two-step) • Listen and repeat instructions • Perform task following instructions (may apply to all group sizes and content areas) 	ordinal numbers 1-5 • next • last	<ul style="list-style-type: none"> • Students will progressively increase their ability to follow simple one and two-step instructions effectively. 	http://teachers.net ,

Science - Kindergarten

Idaho Department of Education Content Standards	Objective	Sub Objectives	Task Analysis	Essential Vocabulary	Assessment	Resources
Standard 2: Physical Science						
Goal 2.1: Understand the Structure and Function of Matter and Molecules and Their Interactions	K.S.2.1.1 Use senses to describe matter. (530.01.a)	<ul style="list-style-type: none"> Use senses to describe matter. 	<ul style="list-style-type: none"> Define matter. Define the 5 senses Describe the characteristics of an object/matter using multiple senses as deemed appropriate by the teacher. Aligns with Standard (s): <ul style="list-style-type: none"> K.S.1.2.1, K.S.1.6.1 make observations K.S.1.2.1 collect data 	matter • liquids • solids • feel • taste • see • hear • smell • corresponding adjectives	<ul style="list-style-type: none"> Students will use multiple senses to describe object/matter (for example: Describe a desk using your eyes, ears, nose and fingers.) 	http://teachers.net , http://www.bravemonster.com/lessonplansenses.htm , http://www.typeamon.net/nature-journals-kindergarten-science-activity.html , http://www.scienetlinks.com/lessons.cfm?BenchmarkID=4&DocID=164 , http://www.scienetlinks.com/lessons.cfm?BenchmarkID=4&DocID=164
Goal 2.2: Understand Concepts of Motion and Forces	No objectives at this grade level.					
Goal 2.3: Understand the Total Energy in the Universe is Constant	No objectives at this grade level.					
Goal 2.4: Understand the Structure of Atoms	No objectives at this grade level.					
Goal 2.5: Understand Chemical Reactions	No objectives at this grade level.					
Standard 3: Biology						
Goal 3.1: Understand the Theory of Biological Evolution	K.S.3.1.1 Observe and describe the characteristics of plants and animals. (532.01.a)	<ul style="list-style-type: none"> Observe and describe the characteristics of plants and animals. 	<ul style="list-style-type: none"> Define characteristics Observe a variety of animals in various settings Describe the characteristics observed Observe a variety of plants Describe the characteristics observed Aligns with Standard(s): <ul style="list-style-type: none"> K.S.1.2, K.S.1.6.1 make observations K.S.1.2.1 collect data 	magnifying glass • mobility • animal (paws, feet, claws, fur, feathers, etc.) • immobility • plant (leaves, stems, roots, etc.)	<ul style="list-style-type: none"> Students will make verbal observations about animals and plants. 	http://www.enchantedlearning.com/dictionarysubjects/plants.shtml , http://www.enchantedlearning.com/coloring/northamer.shtml , http://www.atozteacherstuff.com/pages/140.shtml
Goal 3.2: Understand the Relationship between Matter and Energy in Living Systems	K.S.3.2.1 Describe the difference between living and non-living things. (533.01.a)	<ul style="list-style-type: none"> Describe the difference between living and non-living things 	<ul style="list-style-type: none"> Identify living and non-living things Observe the characteristics of living and non-living things. Identify characteristics of living and non-living things Aligns with Standard(s): <ul style="list-style-type: none"> K.S.1.2.1, K.S.1.6.1 make observations K.S.1.2.1 collect data 	living, • non-living • alive • dead (not to be confused with non-living)	<ul style="list-style-type: none"> Students will describe the difference between living and non-living things (growth, consumption of nutrients, mobility, reproduction etc.) For example: Is a pencil living or non-living? Why? It doesn't eat or move or grow	http://www.artvistas.org/kindergarten.html , http://www.enchantedlearning.com/books/general/aliveo/nrot/ , http://www.atozteacherstuff.com/pages/345.shtml
Goal 3.3: Understand the Cell is the Basis of Form and Function for All Living Things	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	K.S.4.1.1 Name the four seasons. (534.01.a)	<ul style="list-style-type: none"> Name the four seasons. 	<ul style="list-style-type: none"> Tell the four seasons 	autumn/fall • winter • spring • summer	<ul style="list-style-type: none"> Students will tell the names of the four seasons. For example: What are the names of all four seasons?	http://teachers.net , http://www.bbc.co.uk/wales/bobinogs/games/shtml?1 http://www.enchantedlearning.com/themes/seasons.shtml
	K.S.4.1.2 Place the four seasons in order. (534.01.a)	<ul style="list-style-type: none"> Place the four seasons in order. 	<ul style="list-style-type: none"> Tell the current season Tell which season will follow (include all four seasons, circular pattern) 		<ul style="list-style-type: none"> Place the four seasons in order. (May be assessed verbally or pictorially beginning with any season.) For example: What season are we now in? Now tell me what season comes next? Continue until all four seasons have been identified in order	http://teachers.net , http://www.atozteacherstuff.com , http://internets-future.com
Goal 4.2: Understand Geo-chemical Cycles and Energy in the Earth System	No objectives at this grade level.					

Science - Kindergarten

Idaho Department of Education Content Standards	Objective	Sub Objectives	Task Analysis	Essential Vocabulary	Assessment	Resources
Standard 5: Personal and Social Perspectives; Technology						
Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced	K.S.5.1.1 Describe characteristics of a man-made environment (home, school...). (536.01.a)	<ul style="list-style-type: none"> Describe characteristics of a man-made environment (home, school...) 	<ul style="list-style-type: none"> Identify man-made objects Identify characteristics of man-made objects Identify natural objects Identify characteristics of natural objects Explain what makes a home or school a man-made environment <p>Aligns with Standard(s):</p> <ul style="list-style-type: none"> K.S.1.2, K.S.1.6.1 make observations K.S.1.2.1 collect data 	man-made • natural • nature • characteristic • identify (mountains, hills, plants, house, school, building)	<ul style="list-style-type: none"> Describe characteristics of a man-made environment (home, school) <p>For example: Students will sort a variety of natural and man-made items into two different categories</p> <ul style="list-style-type: none"> Students will then explain the reasoning they used to sort by describing the characteristics of the man-made objects. <p>For example: Why did you decide this object is man-made? it doesn't grow, it doesn't consume food, etc.</p> <ul style="list-style-type: none"> Students will describe what makes their home or their school is man-made <p>For example: My house is man-made because it is brick. Brick is made from clay, but bricks do not grow, move on its own or eat.</p>	<p>Walking field trip outside; noting natural & man-made objects</p> <p>http://www.sciencenetlinks.com/lessons.cfm?BenchmarkID=11&DocID=247</p> <p>http://www.artvistas.org/kindergarten.html</p>
Goal 5.2: Understand the Relationship between Science and Technology	No objectives at this grade level.					
Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them	No objectives at this grade level.					