

Idaho Partners - Science Standards for Kindergarten

**The Idaho GLOBE Partnership
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526. SCIENCE STANDARDS - GRADE KINDERGARTEN.

The samples associated with the content standards are meant to illustrate meaning and to represent possible areas of applications. They are not intended to be an exhaustive list, but are samples of applications that would demonstrate learning.

527. UNIFYING CONCEPTS OF SCIENCE.

Standard - The student will:	Content Knowledge and Skills:	GLOBE Applications:
1. Understand concepts and processes of evidence, models, and explanation.	1. Explore the concepts of observation and data collection.	1. GLOBE Atmosphere Protocols 2. Cloud Identification using Cloud Chart

	1. Explore and use various models.	1. Our Home Planet: The GLOBAL View 2. Blue Marble Activity
1. Understand constancy, change, and measurement.	1. Explore changes.	1. Seasons Investigation
	1. Measure in non-standard units.	1. Estimation of Cloud Cover. 2. Comparing height of other trees to themselves.
1. Understand the theory that evolution is a process that relates to the gradual changes in the universe and of equilibrium as a physical state.	1. Understand the concepts of yesterday, today, and tomorrow.	1. Seasons Investigation. 2. Variation in Temperature throughout the year.

29. **CONCEPTS OF SCIENTIFIC INQUIRY.**

Standard - The student will:	Content Knowledge and Skills:	Samples of Applications:
1. Understand scientific inquiry and develop	1. Make observations.	1. Weather observations.

critical thinking skills.		<ol style="list-style-type: none"> 2. Cloud Observation 3. Precipitation Observations 4. Seasons Investigation
	<ol style="list-style-type: none"> 1. Use various tools to gather information. 	<ol style="list-style-type: none"> 1. Cloud Charts 2. Thermometers. 3. Rain Gauge 4. Meter Stick
	<ol style="list-style-type: none"> 1. Communicate observations. 	<ol style="list-style-type: none"> 1. Draw a picture of observation. 2. Classroom graphs of temperature.

30. CONCEPTS OF PHYSICAL SCIENCE.

Standard - The student will:	Content Knowledge and Skills:	Samples of Applications:
<ol style="list-style-type: none"> 1. Understand the structure and function of matter and molecules and their interactions. 	<ol style="list-style-type: none"> 1. Use senses to explore and describe matter. 	<ol style="list-style-type: none"> 1. Water detectives. 2. Soil characterization 3. Just passing through.

31. CELLULAR AND MOLECULAR CONCEPTS.

Cellular and Molecular Concepts standards do not apply at this grade level.

32. INTERDEPENDENCE OF ORGANISMS AND BIOLOGICAL CHANGE.

Standard . The student will:	Content Knowledge and Skills:	Samples of Applications:
01. Understand the theory of biological evolution.	1. Observe and explore the characteristics of plants and animals.	1. Land cover protocols 2. Macro invertebrates
	<ul style="list-style-type: none"> • Sort animals into wild and domestic categories. 	n/a

33. MATTER, ENERGY, AND ORGANIZATION IN LIVING SYSTEMS.

Standard - The student will:	Content Knowledge and Skills:	Samples of Applications:
1. Understand the relationship between matter, energy, and organization to trace matter as it cycles and energy as it flows through living systems and between living systems and the environment.	1. Recognize the difference between living and non-living things.	1. n/a.

34. EARTH AND SPACE SYSTEMS.

Standard . The student will:	Content Knowledge and Skills:	Samples of Applications:
1. Understand scientific theories of origin and subsequent changes in the universe and earth systems.	1. Observe and identify the four seasons.	<ol style="list-style-type: none"> 1. Learn the terms fall, winter, spring, and summer. 2. Use appropriate colors to draw a picture of each season. 3. As a yearlong bulletin board display, dress a paper bear in clothing appropriate for daily weather. 4. GLOBE seasons investigation
	1. Observe different weather conditions.	1. Seasons investigation.

35. TECHNOLOGY.

Standard . The student will:	Content Knowledge and Skills:	Samples of Applications:
1. Understand the relationship between science and technology	1. Distinguish between natural objects and objects	1. Tree versus computer.

<p>and develop the abilities of technological design and application.</p>	<p>made by humans.</p>	
	<p>1. Recognize that people have invented tools for everyday life and for scientific investigations.</p>	<p>1. Classroom walk outside to find natural objects: classroom walk inside to find objects made by humans. 2. Use various writing tools (technological) and discuss their differences, (pencil, chalk, brush, charcoal, markers, mechanical pencil, and computer word processor).</p>
	<p>1. Create a tool to perform a specific function.</p>	<p>1. 1. Build a densitometer 2. Build simple 45 degree clinometer 3.</p>
	<p>1. Use available and appropriate technology.</p>	<p>1. Use the GLOBE website</p>

36. **PERSONAL AND SOCIAL PERSPECTIVES.**

Standard . The student will:	Content Knowledge and Skills:	Samples of Applications:
<p>1. Understand common environmental quality issues, both natural and human induced.</p>	<p>1. 1. Observe and discuss characteristics of the local environment.</p>	<p>1. Take a walk around the school and observe the physical characteristics of surrounding environment. 2. Observe GLOBE Landcover and water sites</p>
<p>1. Understand the importance of natural resources and the need to manage and conserve them.</p>	<p>1. Understand the concept of recycling.</p>	<p>1. Water Water Everywhere</p>
	<p>1. Discuss the conservation of natural resources.</p>	<p>1. Forests (Landcover) 2. Water. (Hydro) 3. Use GLOBE reading literature to illustrate concept. (FSU)</p>

36. HISTORY OF SCIENCE.

Standard . The student will:	Content Knowledge and Skills:	Samples of Applications:
<p>1. Understand the significance of major scientific milestones.</p>	<p>1. 1. 1. 1. Understand major contributions of various scientists and researchers.</p>	<p>I. GLOBE Scientists Corner</p>

36. INTERDISCIPLINARY CONCEPTS.

Standard . The student will:	Content Knowledge and Skills:	Samples of Applications:
<p>1. Understand that interpersonal relationships are important in scientific endeavors.</p>	<p>1. 1. Learn appropriate cooperation and interaction skills.</p>	<p>1. Provide opportunities and settings for the students to work together.</p>
<p>1. Understand technical communication.</p>	<p>1. Understand and follow instructions.</p>	<p>1. Follow protocol directions</p>

539. -- 541. (RESERVED).

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