

<p><i>KINDERGARTEN</i> <i>Overview of the Science Standards</i></p>

I. PHYSICAL SCIENCE

- *Properties of materials can be observed, measured, and predicted.*
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II. LIFE SCIENCES

- *Different types of plants and animals inhabit the earth.*
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III. EARTH SCIENCES

- *Earth is composed of land, air, and water.*
-

IV. INVESTIGATION AND EXPERIMENTATION

- *Scientific progress is made by asking meaningful questions and conducting careful investigations.*

Aligning the Instructional Program with the Grade Level Standards and Benchmarks

In order to align the instructional program with the prescribed content standards for the grade, it is critical that the standards and their affiliated benchmarks are reviewed regularly so that we become very familiar with them. At the outset of each quarter/trimester an initial decision must be made as to which standards and benchmark proficiencies will be included in the instructional program. At the end of each quarter/trimester the teacher should fill out the **response section next to each benchmark**. This activity will serve as a checkpoint and will help gauge what still needs to be taught or what should be re-taught.

Complete the Response Section

ST/B = Standard and Benchmark **P**: Priority benchmark **Q**: Quarter 1 or 2 or 3 or 4

At the start of the quarter/trimester, select the benchmarks you consider to be your “priority benchmarks.” Mark the box under the “P” code.

At the end of each quarter/trimester complete the response section **of the standard/benchmark listings, indicating to what extent students have mastered the benchmark.**

A: Fewer than 20% of the students are proficient

B: About *half* (50%) of the students are proficient

C: 80% or more of the students are proficient

Sample Recording of the Response Form GRADE 2

I. PHYSICAL SCIENCE

The motion of objects can be observed and measured. As a basis for understanding this concept, students in the SECOND GRADE will ...

ST/B	P	ST/B: Standard/Benchmark P: Priority Benchmark Degree of Mastery: % of students at end of each Q: Quarter A= 75% or more B=about half C=fewer than 25%	Q 1	Q 2	Q 3	Q 4
ST1.A	P	<i>know</i> that the position of an object can be described by locating it in relation to another object or to the background.	A	B	B	C
ST1.B		<i>know</i> that an object's motion can be described by recording the change in position of the object over time.	A	A	B	B

KINDERGARTEN

Science Standards and Benchmark Proficiencies

I. PHYSICAL SCIENCE

Properties of materials can be observed, measured, and predicted. As a basis for understanding this concept, students in KINDERGARTEN will...

ST/B	P	ST/B: Standard/Benchmark P: Priority Benchmark Degree of Mastery: % of students at end of each Q: Quarter A= 75% or more B=about half C=fewer than 25%	Q 1	Q 2	Q 3	Q 4
ST1.A		<i>know</i> that objects can be described in terms of the materials they are made of (e.g., clay, cloth, paper) and their physical properties (e.g., color, size, shape, weight, texture, flexibility, attraction to magnets, floating, sinking).				
ST1.B		<i>know</i> that water can be a liquid or a solid and can be made to change back and forth from one form to the other.				
ST1.C		<i>know</i> that water left in an open container evaporates (goes into the air) but water in a closed container does not.				

II. LIFE SCIENCES

Different types of plants and animals inhabit the earth. As a basis for understanding this concept, students in KINDERGARTEN will ...

ST/B.	P	ST/B: Standard/Benchmark P: Priority Benchmark Degree of Mastery: % of students at end of each Q: Quarter A= 75% or more B=about half C=fewer than 25%	Q 1	Q 2	Q 3	Q 4
ST2.A		<i>know</i> how to observe and describe similarities and differences in the appearance and behavior of plants and animals (e.g., seed-bearing plants, birds, fish, insects).				
ST2.B		<i>know</i> that stories sometimes give plants and animals attributes they do not really have.				
ST2.C		<i>know</i> how to identify major structures of common plants and animals (e.g., stems, leaves, roots, arms, wings, legs).				

III. EARTH SCIENCES

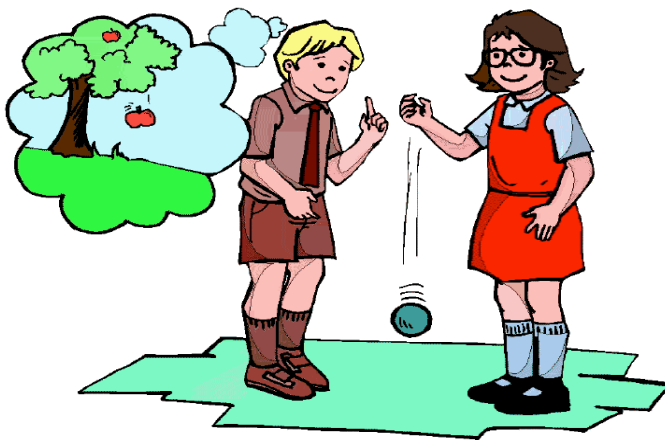
Earth is composed of land, air, and water. As a basis for understanding this concept, students in KINDERGARTEN will ...

ST/B	P	ST/B: Standard/Benchmark P: Priority Benchmark Degree of Mastery: % of students at end of each Q: Quarter A= 75% or more B=about half C=fewer than 25%	Q 1	Q 2	Q 3	Q 4
ST3.A		<i>know</i> the characteristics of mountains, rivers, oceans, valleys, deserts, and local landforms.				
ST3.B		<i>know</i> that changes in weather occur from day to day and across seasons, affecting Earth and its inhabitants.				
ST3.C		<i>know</i> how to identify resources from Earth that are used in everyday life and understand that many resources can be conserved.				

IV. INVESTIGATION AND EXPERIMENTATION

Scientific progress is made by asking meaningful questions and conducting careful investigations. As a basis for understanding this concept and addressing the content in the other three strands, students should develop their own questions and perform investigations. Students in KINDERGARTEN will ...

ST/B.	P	ST/B: Standard/Benchmark P: Priority Benchmark Degree of Mastery: % of students at end of each Q: Quarter A= 75% or more B=about half C=fewer than 25%	Q 1	Q 2	Q 3	Q 4
ST4.A		<i>observe</i> the common objects by using the five senses.				
ST4.B		<i>describe</i> the properties of common objects.				
ST4.C		<i>describe</i> the relative position of objects by using one reference (e.g., above or below).				



KINDERGARTEN STANDARDS BASED VOCABULARY FOR SCIENCE

Physical Sciences

attribute	category	characteristics
color	flexibility	magnetic
property	size	texture
weight	liquid	

Life Sciences

camouflage	carnivore	extinction
gills	habitat	herbivore
mammal		

Earth Sciences

climate	energy	environment
fog	graph	ice
predict	rain	recycle
reflect	snow	weather
wind		