

<p style="text-align: center;">GRADE 1 <i>Overview of the Science Standards</i></p>
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I. PHYSICAL SCIENCE

- *Materials come in different forms (states), including solids, liquids, and gases.*
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II. LIFE SCIENCES

- *Plants and animals meet their needs in different ways.*
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III. EARTH SCIENCES

- *Weather can be observed, measured, and described.*
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IV. INVESTIGATION AND EXPERIMENTATION

- *Scientific progress is made by asking meaningful questions and conducting careful investigations.*
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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 as to 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: More than 75% of the students are proficient

B: About half of the students are proficient

C: fewer than 25% 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

GRADE 1

Science Standards and Benchmark Proficiencies

I. PHYSICAL SCIENCE

Materials come in different forms (states), including solids, liquids, and gases. As a basis for understanding this concept, students in the FIRST GRADE will ...

ST/B	P	ST/B: Standard/Benchmark Degree of Mastery: % of students at end of each Q: Quarter A= 75% or more B=about half C=fewer than 25%	P: Priority Benchmark	Q 1	Q 2	Q 3	Q 4
ST1.A		<i>know</i> that solids, liquids, and gases have different properties.					
ST1.B		<i>know</i> that the properties of substances can change when the substances are mixed, cooled, or heated.					

II. LIFE SCIENCES

Plants and animals meet their needs in different ways. As a basis for understanding this concept, students in the FIRST GRADE will ...

ST/B.	P	ST/B: Standard/Benchmark Degree of Mastery: % of students at end of each Q: Quarter A= 75% or more B=about half C=fewer than 25%	P: Priority Benchmark	Q 1	Q 2	Q 3	Q 4
ST2.A		<i>know</i> that different plants and animals inhabit different kinds of environments and have external features that help them thrive in different kinds of places.					
ST2.B		<i>know</i> that both plants and animals need water, animals need food, and plants need light.					
ST2.C		<i>know</i> that animals eat plants or other animals for food and may also use plants or even other animals for shelter and nesting.					
ST2.D		<i>know</i> how to infer what animals eat from the shapes of their teeth (e.g., sharp teeth: eats meat; flat teeth: eats plants).					
ST2.E		<i>know</i> that roots are associated with the intake of water and soil nutrients and green leaves are associated with making food from sunlight.					

III. EARTH SCIENCES

Weather can be observed, measured, and described as a basis for understanding this concept students in the FIRST GRADE will ...

ST/B	P	ST/B: Standard/Benchmark Degree of Mastery: % of students at end of each Q: Quarter A= 75% or more B=about half C=fewer than 25%	P: Priority Benchmark	Q 1	Q 2	Q 3	Q 4
ST3.A		<i>know</i> how to use simple tools (e. g., thermometer, wind vane) to measure weather conditions and record changes from day to day and across the seasons.					
ST3.B		<i>know</i> that the weather changes from day to day but that trends in temperature or of rain (or snow) tend to be predictable during a season.					
ST3.C		<i>know</i> that the sun warms the land, air, and water.					

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 the FIRST GRADE will

ST/B	P	ST/B: Standard/Benchmark Degree of Mastery: % of students at end of each Q: Quarter A= 75% or more B=about half C=fewer than 25%	P: Priority Benchmark	Q 1	Q 2	Q 3	Q 4
ST4.A		<i>draw</i> pictures that portray some features of the thing being described.					
ST4.B		<i>record</i> observations and data with pictures, numbers, or written statements.					
ST4.C		<i>record</i> observations on a bar graph.					
ST4.D		<i>describe</i> the relative position of objects by using two references (e. g., above and next to, below and left of).					
ST4.E		<i>make</i> new observations when discrepancies exist between two descriptions of the same object or phenomenon.					

**GRADE ONE
STANDARDS BASED VOCABULARY FOR SCIENCE**

Physical Sciences

atom	attributes	centigrade
characteristics	experiment	Fahrenheit
gas	investigation	liquid
opaque	solid	translucent
transparent	Celsius	

Life Sciences

data	external	food chain
fossil	internal	nutrient
environment		

Earth Sciences

air pressure	pollution	temperature
weather	wind	