

Northpoint Horizons

**CAVS (Content Academic Vocabulary System) Science K-2
Correlated to the
California State Science Content Standards**

Grade 2

This document provides a correlation of the extensive science directives offered throughout the *CAVS K-2* program that meet the California Science Content Standards. The n/a signifies the standards that are not directly met for this grade level.

Science Content Standard	CAVS Science Grade K-2 Teacher's Guide Lessons
Physical Sciences	
1.0 The motion of objects can be observed and measured. As a basis for understanding this concept:	
a. Students know the position of an object can be described by locating it in relation to another object or to the background.	Lesson 16 – p. 91 <i>How do things move?</i> Lesson 17 – p. 97 <i>How do magnets move things?</i> Lesson 18 – p. 103 <i>What makes light?</i> Lesson 21 – p. 121 <i>What can you see in the day sky?</i> Lesson 22 – p. 127 <i>What can you see in the night sky?</i> Lesson 23 – p. 133 <i>How does Earth move?</i> Lesson 24 – p. 139 <i>What is the solar system?</i>
b. Students know an object's motion can be described by recording the change in position of the object over time.	Lesson 16 – p. 91 <i>How do things move?</i> Lesson 18 – p. 103 <i>What makes light?</i> Lesson 21 – p. 121 <i>What can you see in the day sky?</i> Lesson 22 – p. 127 <i>What can you see in the night sky?</i> Lesson 23 – p. 133 <i>How does Earth move?</i>

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	Lesson 24 – p. 139 <i>What is the solar system?</i>
c. Students know the way to change how something is moving is by giving it a push or a pull. The size of the change is related to the strength, or the amount of force, of the push or pull.	Lesson 16 – p. 91 <i>How do things move?</i> Lesson 17 – p. 97 <i>How do magnets move things?</i>
d. Students know tools and machines are used to apply pushes and pulls (forces) to make things move.	Lesson 16 – p. 91 <i>How do things move?</i> Lesson 17 – p. 97 <i>How do magnets move things?</i>
e. Students know objects fall to the ground unless something holds them up.	Lesson 16 – p. 91 <i>How do things move?</i>
f. Students know magnets can be used to make some objects move without being touched.	Lesson 17 – p. 97 <i>How do magnets move things?</i>
g. Students know sound is made by vibrating objects and can be described by its pitch and volume.	Lesson 20 – p. 115 <i>What makes sound?</i>
Life Sciences	
2.0 Plants and animals have predictable life cycles. As a basis for understanding this concept:	
a. Students know that organisms reproduce offspring of their own kind and that the offspring resemble their parents and one another.	Lesson 1 – p. 1 <i>What are living things?</i> Lesson 3 – p. 13 <i>Which animals have a backbone?</i> Lesson 4 – p. 19 <i>How do frogs grow and change?</i> Lesson 5 – p. 25 <i>How do butterflies grow and change?</i> Lesson 6 – p. 31 <i>How do mammals grow and change?</i>
b. Students know the sequential stages of life cycles are different for different animals, such as butterflies, frogs, and mice.	Lesson 4 – p. 19 <i>How do frogs grow and change?</i> Lesson 5 – p. 25 <i>How do butterflies grow and change?</i> Lesson 6 – p. 31 <i>How do mammals grow and change?</i>

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c. Students know many characteristics of an organism are inherited from the parents. Some characteristics are caused or influenced by the environment.	Lesson 1 – p. 1 <i>What are living things?</i> Lesson 2 – p. 7 <i>What are the parts of a plant?</i> Lesson 3 – p. 13 <i>Which animals have a backbone?</i> Lesson 6 – p. 31 <i>How do mammals grow and change?</i> Lesson 7 – p. 37 <i>Where do plants and animals live?</i>
d. Students know there is variation among individuals of one kind within a population.	Lesson 3 – p. 13 <i>Which animals have a backbone?</i>
e. Students know light, gravity, touch, or environmental stress can affect the germination, growth, and development of plants.	Lesson 1 – p. 1 <i>What are living things?</i> Lesson 2 – p. 7 <i>What are the parts of a plant?</i> Lesson 7 – p. 37 <i>Where do plants and animals live?</i> Lesson 8 – p. 43 <i>How do living things get food?</i>
f. Students know flowers and fruits are associated with reproduction in plants.	Lesson 2 – p. 7 <i>What are the parts of a plant?</i>
Earth Sciences	
3.0 Earth is made of materials that have distinct properties and provide resources for human activities. As a basis for understanding this concept:	
a. Students know how to compare the physical properties of different kinds of rocks and know that rock is composed of different combinations of minerals.	Lesson 11 – p. 61 <i>How does Earth's land change?</i>
b. Students know smaller rocks come from the breakage and weathering of larger rocks.	Lesson 11 – p. 61 <i>How does Earth's land change?</i>
c. Students know that soil is made partly from weathered rock and partly from organic materials and that soils differ in their color, texture, capacity to retain water, and ability to support the growth of many kinds of plants.	n/a

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d. Students know that fossils provide evidence about the plants and animals that lived long ago and that scientists learn about the past history of Earth by studying fossils.	Lesson 13 – p. 73 <i>How do we learn about dinosaurs?</i>
e. Students know rock, water, plants, and soil provide many resources, including food, fuel, and building materials, that humans use.	n/a
Investigation and Experimentation	
4.0 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 will:	
a. Make predictions based on observed patterns and not random guessing.	Lesson 2 – p. 7 <i>What are the parts of a plant?</i> Lesson 3 – p. 13 <i>Which animals have a backbone?</i> Lesson 6 – p. 31 <i>How do mammals grow and change?</i> Lesson 8 – p. 43 <i>How do living things get food?</i> Lesson 9 – p. 49 <i>What is the water cycle?</i> Lesson 14 – p. 79 <i>What is matter?</i> Lesson 17 – p. 97 <i>How do magnets move things?</i> Lesson 19 – p. 109 <i>What makes heat?</i>
b. Measure length, weight, temperature, and liquid volume with appropriate tools and express those measurements in standard metric system units.	Lesson 12 – p. 67 <i>What are seasons?</i> Lesson 14 – p. 79 <i>What is matter?</i> Lesson 15 – p. 85 <i>What forms does matter take?</i> Lesson 19 – p. 109 <i>What makes heat?</i> These lessons allow for discussion of measurements in standard metric system units. As students use the Activity Placemats to

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	make step-by-step discovery, they use tools to measure and calculate amounts.
c. Compare and sort common objects according to two or more physical attributes (e. g., color, shape, texture, size, weight).	Lesson 1 – p. 1 <i>What are living things?</i> Lesson 14 – p. 79 <i>What is matter?</i> Lesson 15 – p. 85 <i>What forms does matter take?</i> Lesson 16 – p. 91 <i>How do things move?</i> Lesson 17 – p. 97 <i>How do magnets move things?</i>
d. Write or draw descriptions of a sequence of steps, events, and observations.	Record Sheets and Concept Webs have students writing and drawing descriptions in every lesson. Using the <i>Radius</i> TM Science Vocabulary Cards, students also draw to verify comprehension.
e. Construct bar graphs to record data, using appropriately labeled axes.	n/a
f. Use magnifiers or microscopes to observe and draw descriptions of small objects or small features of objects.	Lesson 1 – p. 1 <i>What are living things?</i> Lesson 11 – p. 61 <i>How does Earth's land change?</i>
g. Follow oral instructions for a scientific investigation.	In each lesson students respond to oral instructions as they explore scientific investigation.