

Northpoint Horizons

**CAVS
Correlated to the
Texas Essential Knowledge and Skills (TEKS)**

Grade 3

This document provides a sampling of the extensive math directives offered throughout the CAVS program that meet the Texas Essential Knowledge and Skills (TEKS). The n/a signifies the standards that are not directly met for this grade level.

Texas Essential Knowledge and Skills	CAVS Grade 3-5 Teacher's Guide Examples/Lessons
Knowledge and Skills	
3.1 Scientific processes. The student conducts field and laboratory investigations following home and school safety procedures and environmentally appropriate and ethical practices.	
a. demonstrate safe practices during field and laboratory investigations	Lesson 15 – TG pp. 85-90 <i>How do we measure matter?</i> Lesson 21 – TG pp. 121-126 <i>How does electricity move?</i>
b. make wise choices in the use and conservation of resources and the disposal or recycling of materials	Lesson 13 – TG pp. 73-78 <i>What are Earth's natural resources?</i>
3.2 Scientific processes. The student uses scientific inquiry methods during field and laboratory investigations.	
a. plan and implement descriptive investigations including asking well-defined questions, formulating testable hypotheses, and selecting and using equipment and technology	Lesson 2 – TG pp. 7-12 <i>How are plant and animal systems different?</i> Lesson 19 – TG pp. 109-114 <i>How does heat energy move?</i>
b. collect information by observing and measuring	Lesson 14 – TG pp. 79-84 <i>What makes up matter?</i> Lesson 15 – TG pp. 85-90 <i>How do we measure matter?</i>
c. analyze and interpret information to construct reasonable explanations from direct and indirect evidence	Lesson 20 – TG pp. 115-120 <i>How does light energy move?</i> Lesson 21 – TG pp. 121-126 <i>How does electricity move?</i>

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d. communicate valid conclusions	Lesson 10 – TG pp. 55-60 <i>What are the layers of Earth?</i> Lesson 11 – TG pp. 61-66 <i>What causes earthquakes and volcanoes?</i>
e. construct simple graphs, tables, maps, and charts to organize, examine and evaluate information.	Lesson 1 – TG pp. 1-6 <i>How are living things classified?</i> Lesson 3 – TG pp. 13-18 <i>How do plants reproduce?</i> Lesson 22 – TG pp. 127-132 <i>What is Earth's place in the universe?</i>
3.3 Scientific processes. The student knows that information, critical thinking, and scientific problem solving are used in making decisions.	
a. analyze, review, and critique scientific explanations, including hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information	Lesson 17 – TG pp. 97-102 <i>What makes things move?</i> Lesson 19 – TG pp. 109-114 <i>How does heat energy move?</i>
b. draw inferences based on information related to promotional materials for products and services	n/a
c. represent the natural world using models and identify their limitations	Lesson 11 – TG pp. 61-66 <i>What causes earthquakes and volcanoes?</i> Lesson 12 – TG pp. 67-72 <i>How does Earth's surface change?</i> Lesson 22 – TG pp. 127-132 <i>What is Earth's place in the universe?</i>
d. evaluate the impact of research on scientific thought, society, and the environment	Lesson 4 – TG pp. 19-24 <i>What is an ecosystem?</i> Lesson 10 – TG pp. 55-60 <i>What are the layers of Earth?</i> Lesson 13 – TG pp. 73-78 <i>What are Earth's natural resources?</i>
e. connect Grade 3 science concepts with the history of science and contributions of scientists	Lesson 1 – TG pp. 1-6 <i>How are living things classified?</i> Lesson 16 – TG pp. 91-96 <i>How can matter change?</i>

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3.4 Scientific processes. The student knows how to use a variety of tools and methods to conduct science inquiry.	
a. collect and analyze information using tools including calculators, microscopes, cameras, safety goggles, sound recorders, clocks, computers, thermometers, hand lenses, meter sticks, rulers, balances, magnets, and compasses	Lesson 2 – TG pp. 7-12 <i>How are plant and animal systems different?</i> Lesson 16 – TG pp. 91-96 <i>How can matter change?</i> Lesson 20 – TG pp. 115-120 <i>How does light energy move?</i>
b. demonstrate that repeated investigations may increase the reliability of results	Lesson 19 – TG pp. 109-114 <i>How does heat energy move?</i> Lesson 21 – TG pp. 121-126 <i>How does electricity move?</i>
3.5 Science concepts. The student knows that systems exist in the world.	
a. observe and identify simple systems such as a sprouted seed and a wooden toy car	Lesson 3 – TG pp. 13-18 <i>How do plants reproduce?</i> Lesson 14 – TG pp. 79-84 <i>What makes up matter?</i>
b. observe a simple system and describe the role of various parts such as a yo-yo and string	Lesson 17 – TG pp. 97-102 <i>What makes things move?</i> Lesson 18 – TG pp. 103-108 <i>How do simple machines help things move?</i>
3.6 Science concepts. The student knows that forces cause change.	
a. measure and record changes in the position and direction of the motion of an object to which a force such as a push or pull has been applied	Lesson 17 – TG pp. 97-102 <i>What makes things move?</i> Lesson 18 – TG pp. 103-108 <i>How do simple machines help things move?</i>
b. identify that the surface of the Earth can be changed by forces such as earthquakes and glaciers	Lesson 11 – TG pp. 61-66 <i>What causes earthquakes and volcanoes?</i> Lesson 12 – TG pp. 67-72 <i>How does Earth's surface change?</i>
3.7 Science concepts. The student knows that matter has physical properties.	
a. gather information including temperature, magnetism, hardness, and mass using	Lesson 8 – TG pp. 43-48 <i>How are rocks classified?</i>

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appropriate tools to identify physical properties of matter	Lesson 14 – TG pp. 79-84 <i>What makes up matter?</i> Lesson 15 – TG pp. 85-90 <i>How do we measure matter?</i> Lesson 16 – TG pp. 91-96 <i>How can matter change?</i>
b. identify matter as liquids, solids, and gases	Lesson 9 – TG pp. 49-54 <i>What is the water cycle?</i> Lesson 15 – TG pp. 85-90 <i>How do we measure matter?</i> Lesson 16 – TG pp. 91-96 <i>How can matter change?</i>
3.8 Science concepts. The student knows that living organisms need food, water, light, air, a way to dispose of waste, and an environment in which to live.	
a. observe and describe the habitats of organisms within an ecosystem	Lesson 4 – TG pp. 19-24 <i>What is an ecosystem?</i> Lesson 5 – TG pp. 25-30 <i>How does energy flow in an ecosystem?</i> Lesson 6 – TG pp. 31-36 <i>What helps an organism live in its ecosystem?</i>
b. observe and identify organisms with similar needs that compete with one another for resources such as oxygen, water, food, or space	Lesson 4 – TG pp. 19-24 <i>What is an ecosystem?</i> Lesson 5 – TG pp. 25-30 <i>How does energy flow in an ecosystem?</i> Lesson 6 – TG pp. 31-36 <i>What helps an organism live in its ecosystem?</i>
c. describe environmental changes in which some organisms would thrive, become ill, or perish	Lesson 4 – TG pp. 19-24 <i>What is an ecosystem?</i> Lesson 5 – TG pp. 25-30 <i>How does energy flow in an ecosystem?</i> Lesson 6 – TG pp. 31-36 <i>What helps an organism live in its ecosystem?</i>
d. describe how living organisms modify their physical environment to meet their needs such	Lesson 4 – TG pp. 19-24 <i>What is an ecosystem?</i>

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as beavers building a dam or humans building a home.	Lesson 5 – TG pp. 25-30 <i>How does energy flow in an ecosystem?</i> Lesson 6 – TG pp. 31-36 <i>What helps an organism live in its ecosystem?</i> Lesson 13 – TG pp. 73-78 <i>What are Earth's natural resources?</i>
3.9 Science concepts. The student knows that species have different adaptations that help them survive and reproduce in their environment.	
a. observe and identify characteristics among species that allow each to survive and reproduce	Lesson 1 – TG pp. 1-6 <i>How are living things classified?</i> Lesson 2 – TG pp. 7-12 <i>How are plant and animal systems different?</i> Lesson 3 – TG pp. 13-18 <i>How do plants reproduce?</i>
b. analyze how adaptive characteristics help individuals within a species to survive and reproduce	Lesson 1 – TG pp. 1-6 <i>How are living things classified?</i> Lesson 2 – TG pp. 7-12 <i>How are plant and animal systems different?</i> Lesson 3 – TG pp. 13-18 <i>How do plants reproduce?</i>
3.10 Science concepts. The student knows that many likenesses between offspring and parents are inherited from the parents.	
a. identify some inherited traits of plants	Lesson 2 – TG pp. 7-12 <i>How are plant and animal systems different?</i> Lesson 3 – TG pp. 13-18 <i>How do plants reproduce?</i> Lesson 6 – TG pp. 31-36 <i>What helps an organism live in its ecosystem?</i>
b. identify some inherited traits of animals	Lesson 2 – TG pp. 7-12 <i>How are plant and animal systems different?</i> Lesson 5 – TG pp. 25-30 <i>How does energy flow in an ecosystem?</i> Lesson 6 – TG pp. 31-36 <i>What helps an organism live in its ecosystem?</i>

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3.11 Science concepts. The student knows that the natural world includes earth materials and objects in the sky.	
a. identify and describe the importance of earth materials including rocks, soil, water, and gases of the atmosphere in the local area and classify them as renewable, nonrenewable, or inexhaustible resources	Lesson 7 – TG pp. 37-42 <i>What makes up Earth's atmosphere?</i> Lesson 8 – TG pp. 43-48 <i>How are rocks classified?</i> Lesson 9 – TG pp. 49-54 <i>What is the water cycle?</i> Lesson 10 – TG pp. 55-60 <i>What are the layers of Earth?</i> Lesson 12 – TG pp. 67-72 <i>How does Earth's surface change?</i> Lesson 13 – TG pp. 73-78 <i>What are Earth's natural resources?</i>
b. identify and record properties of soils such as color and texture, capacity to retain water, and ability to support the growth of plants	Lesson 10 – TG pp. 55-60 <i>What are the layers of Earth?</i> Lesson 12 – TG pp. 67-72 <i>How does Earth's surface change?</i>
c. identify the planets in our solar system and their position in relation to the Sun	Lesson 22 – TG pp. 127-132 <i>What is Earth's place in the universe?</i> Lesson 23 – TG pp. 133-138 <i>What are patterns in the sky?</i> Lesson 24 – TG pp. 139-144 <i>What patterns does Earth repeat?</i>
d. describe the characteristics of the Sun	Lesson 22 – TG pp. 127-132 <i>What is Earth's place in the universe?</i> Lesson 23 – TG pp. 133-138 <i>What are patterns in the sky?</i> Lesson 24 – TG pp. 139-144 <i>What patterns does Earth repeat?</i>