

Northpoint Horizons

**CAVS (Content Academic Vocabulary System)
Correlated to the
New York State Science Assessment Standards**

Elementary 3-5

This document provides a sampling of the extensive math directives offered throughout the CAVS program that meet the New York State Science Assessment Standards.

New York State Science Assessment Standards	CAVS Science 3-5 Teacher's Guide Examples/Lessons
PHYSICAL SETTING	
1. The Earth and celestial phenomena can be described by principles of relative motion and perspective.	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>
1.1 Describe patterns of daily, monthly, and seasonal changes in their environment	Lesson 7 – TG pp. 37-42 <i>What makes up Earth's atmosphere?</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>
2. Many of the phenomena that we observe on Earth involve interactions among components of air, water, and land.	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>

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	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>
2.1 Describe the relationships among air, water, and land on Earth	Lesson 7 – TG pp. 37-42 <i>What makes up Earth's atmosphere?</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 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. Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.	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>
3.1 Observe and describe properties of materials using appropriate tools	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>
3.2 Describe chemical and physical changes, including changes in states of matter	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>
4. Energy exists in many forms, and when these forms change, energy is conserved.	Lesson 19 – TG pp. 109-114 <i>How does heat energy move?</i>

New York State Science Assessment Standards	CAVS Science 3-5 Teacher's Guide Examples/Lessons
	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>
4.1 Describe a variety of forms of energy (e.g., heat, chemical, light) and the changes that occur in objects when they interact with those forms of energy	Lesson 19 – TG pp. 109-114 <i>How does heat energy move?</i> 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>
4.2 Observe the way one form of energy can be transformed into another form of energy present in common situations (e.g., mechanical to heat energy, mechanical to electrical energy, chemical to heat energy)	Lesson 16 – TG pp. 91-96 <i>How can matter change?</i> Lesson 19 – TG pp. 109-114 <i>How does heat energy move?</i> 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>
5. Energy and matter interact through forces that result in changes in motion.	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> 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> Lesson 19 – TG pp. 109-114 <i>How does heat energy move?</i> Lesson 20 – TG pp. 115-120 <i>How does light energy move?</i>

New York State Science Assessment Standards	CAVS Science 3-5 Teacher's Guide Examples/Lessons
	Lesson 21 – TG pp. 121-126 <i>How does electricity move?</i>
5.1 Describe the effects of common forces (pushes and pulls) on objects, such as those caused by gravity, magnetism, and mechanical forces	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>
5.2 describe how forces can operate across distances	Lesson 19 – TG pp. 109-114 <i>How does heat energy move?</i> 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>
THE LIVING ENVIRONMENT	
1. Living things are both similar to and different from each other and nonliving things.	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> 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> Lesson 8 – TG pp. 43-48 <i>How are rocks classified?</i>
1.1 Describe the characteristics of and variations between living and nonliving things	Lesson 1 – TG pp. 1-6 <i>How are living things classified?</i> Lesson 8 – TG pp. 43-48 <i>How are rocks classified?</i>

New York State Science Assessment Standards	CAVS Science 3-5 Teacher's Guide Examples/Lessons
1.2 Describe the life processes common to all living things	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>
2. Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring.	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 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>
2.1 Recognize that traits of living things are both inherited and acquired or learned	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 4 – TG pp. 19-24 <i>What is an ecosystem?</i> Lesson 6 – TG pp. 31-36 <i>What helps an organism live in its ecosystem?</i>
2.2 Recognize that for humans and other living things there is genetic continuity between generations	Lesson 2 – TG pp. 7-12 <i>How are plant and animal systems different?</i> 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>
3. Individual organisms and species change over time.	CAVS Science K-2 Lesson 4 – TG pp. 19-24

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New York State Science Assessment Standards	CAVS Science 3-5 Teacher's Guide Examples/Lessons
	<p><i>How do frogs grow and change?</i> Lesson 5 – TG pp. 25-30</p> <p><i>How do butterflies grow and change?</i> Lesson 6 – TG pp. 31-36</p> <p><i>How do mammals grow and change?</i> CAVS Science 3-5</p> <p>Lesson 4 – TG pp. 19-24</p> <p><i>What is an ecosystem?</i> Lesson 5 – TG pp. 25-30</p> <p><i>How does energy flow in an ecosystem?</i> Lesson 6 – TG pp. 31-36</p> <p><i>What helps an organism live in its ecosystem?</i></p>
3.1 Describe how the structures of plants and animals complement the environment of the plant or animal	<p>Lesson 2 – TG pp. 7-12</p> <p><i>How are plant and animal systems different?</i> Lesson 4 – TG pp. 19-24</p> <p><i>What is an ecosystem?</i> Lesson 5 – TG pp. 25-30</p> <p><i>How does energy flow in an ecosystem?</i> Lesson 6 – TG pp. 31-36</p> <p><i>What helps an organism live in its ecosystem?</i></p>
3.2 Observe that differences within a species may give individuals an advantage in surviving and reproducing	<p>Lesson 6 – TG pp. 31-36</p> <p><i>What helps an organism live in its ecosystem?</i></p>
4. The continuity of life is sustained through reproduction and development.	<p>Lesson 2 – TG pp. 7-12</p> <p><i>How are plant and animal systems different?</i> Lesson 3 – TG pp. 13-18</p> <p><i>How do plants reproduce?</i> Lesson 4 – TG pp. 19-24</p> <p><i>What is an ecosystem?</i> Lesson 5 – TG pp. 25-30</p> <p><i>How does energy flow in an ecosystem?</i></p>

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New York State Science Assessment Standards	CAVS Science 3-5 Teacher's Guide Examples/Lessons
4.1 Describe the major stages in the life cycles of selected plants and animals	<p>CAVS Science K-2 Lesson 4 – TG pp. 19-24 <i>How do frogs grow and change?</i> Lesson 5 – TG pp. 25-30 <i>How do butterflies grow and change?</i> Lesson 6 – TG pp. 31-36 <i>How do mammals grow and change?</i></p> <p>CAVS Science 3-5 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></p>
4.2 Describe evidence of growth, repair, and maintenance, such as nails, hair, and bone, and the healing of cuts and bruises	Lesson 2 – TG pp. 7-12 <i>How are plant and animal systems different?</i> Lesson 6 – TG pp. 31-36 <i>What helps an organism live in its ecosystem?</i>
5. Organisms maintain a dynamic equilibrium that sustains life.	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 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>
5.1 Describe basic life functions of common living specimens (guppy, mealworm, gerbil)	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>
5.2 Describe some survival behaviors of common living specimens	Lesson 4 – TG pp. 19-24 <i>What is an ecosystem?</i>

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	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>
5.3 Describe the factors that help promote good health and growth in humans	Lesson 6 – TG pp. 31-36 <i>What helps an organism live in its ecosystem?</i>
6. Plants and animals depend on each other and their physical environment.	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 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> Lesson 13 – TG pp. 73-78 <i>What are Earth's natural resources?</i>
6.1 Describe how plants and animals, including humans, depend upon each other and the nonliving environment	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>
6.3 Describe the relationship of the sun as an energy source for living and nonliving cycles	Lesson 2 – TG pp. 7-12 <i>How are plant and animal systems different?</i> Lesson 13 – TG pp. 73-78 <i>What are Earth's natural resources?</i>
7. Human decisions and activities have had a profound impact on the physical and living environment.	Lesson 13 – TG pp. 73-78 <i>What are Earth's natural resources?</i>
7.1 Identify ways in which humans have changed their environment and the effects of those changes	Lesson 13 – TG pp. 73-78 <i>What are Earth's natural resources?</i>

