Northpoint Horizons

CAVS (Content Academic Vocabulary System)
Correlated to the
Florida State Science Content Standards and Benchmarks

Grade 3

This document provides a sampling of the extensive science directives offered throughout the *CAVS* program that meet the Florida Science Content Standards.

Science Content Standard/Benchmarks	***CAVS* Science Grade 3-5 Teacher's Guide Examples/Lessons**
BIG IDEA 1: The Practice of Science	
SC.3.N.1.1 Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.	Each CAVS Science lesson has individual, paired, and small group activities to allow students to work in teams and raise questions, explore, make systematic observations, and generate appropriate explanations. Lesson 9 – TG pp. 49-54:Explore and Learn; Elaborate *What is the water cycle?* Lesson 19 – TG pp. 109-114:Explore and Learn; Elaborate *What makes heat?*
SC.3.N.1.2 Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.	Lesson 3 – TG pp. 13-18 *How do plants reproduce?* Lesson 7 – TG pp. 37-42 *What makes up Earth's atmosphere?*
SC.3.N.1.3 Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.	Each lesson in CAVS Science has students keep records that include pictorial, written, simple charts, and graphs. Lesson 16 – TG pp. 91-96: Record Sheet; Concept Web; Lesson Review *How can matter change?* Lesson 21 – TG pp. 121-126: Record Sheet; Concept Web; Lesson Review *How does electricity move?*

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SC.3.N.1.4 Recognize the importance of communication among scientists.	Students learn to discuss and share information as they learn the process of experimentation and they become "scientists." Lesson 10 – TG pp. 55-60 *What are the layers of the Earth?* Lesson 14 – TG pp. 79-86 *What makes up matter?*
SC.3.N.1.5 Recognize that scientists question, discuss, and check each others' evidence and explanations.	Lesson 18 – TG pp. 103-108 *How do simple machines help things move?* Lesson 22 – TG pp. 127-132 *What is Earth's place in the universe?*
SC.3.N.1.6 Infer based on observation.	Lesson 12 – TG pp. 67-72 *How does Earth's surface change?* Lesson 20 TG pp. 115-120 *How does light energy move?*
SC.3.N.1.7 Explain that empirical evidence is information, such as observations or measurements, that is used to help validate explanations of natural phenomena.	The term "empirical evidence" is not discussed within the CAVS Science lessons, however, there are opportunities to introduce empirical evidence. Lesson 9 – TG pp. 49-54 *What is the water cycle?* Lesson 11 – TG pp. 61-66 *What causes earthquakes and volcanoes?*
BIG IDEA 3: The Role of Theories, Laws, Hypotheses, and Models	
SC.3.N.3.1 Recognize that words in science can have different or more specific meanings than their use in everyday language; for example, energy, cell, heat/cold, and evidence.	Lesson 5 – TG pp. 25-30 *How does energy flow in an ecosystem?* Lesson 15 – TG pp. 85-90 *How do we measure matter?*
SC.3.N.3.2 Recognize that scientists use models to help understand and explain how things work.	Lesson 18 – TG pp. 103-108 *How do simple machines help things move?* Lesson 22 – TG pp. 127-132 *What is Earth's place in the universe?*

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SC.3.N.3.3 Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.	Lesson 9 – TG pp. 49-54 *What is the water cycle?* Lesson 12 – TG pp. 67-72 *How does Earth's surface change?*
BIG IDEA 5: Earth in Space and Time Humans continue to explore Earth's place in space	
SC.3.E.5.1 Explain that stars can be different; some are smaller, some are larger, and some appear brighter than others; all except the Sun are so far away that they look like points of light.	Lesson 22 – TG pp. 127-132 *What is Earth's place in the universe?* Lesson 23 – TG pp. 133-138 *What are patterns in the sky?*
SC.3.E.5.2 Identify the Sun as a star that emits energy; some of it in the form of light.	Lesson 22 – TG pp. 127-132 *What is Earth's place in the universe?* Lesson 23 – TG pp. 133-138 *What are patterns in the sky?*
SC.3.E.5.3 Recognize that the Sun appears large and bright because it is the closest star to Earth.	Lesson 22 – TG pp. 127-132 *What is Earth's place in the universe?*
SC.3.E.5.4 Explore the Law of Gravity by demonstrating that gravity is a force that can be overcome.	Lesson 17 – TG pp. 97-102 *What makes things move?*
SC.3.E.5.5 Investigate that the number of stars that can be seen through telescopes is dramatically greater than those seen by the unaided eye.	Lesson 22 – TG pp. 127-132 *What is Earth's place in the universe?* Lesson 23 – TG pp. 133-138 *What are patterns in the sky?*
BIG IDEA 6: Earth Structures Humans continue to explore the composition and structure of the surface of Earth	
SC.3.E.6.1 Demonstrate that radiant energy from the Sun can heat objects and when the Sun is not present, heat may be lost.	Lesson 19 – TG pp. 109-114 *How does heat energy move?*
BIG IDEA 8: Properties of Matter	
SC.3.P.8.1 Measure and compare temperatures of various samples of solids and liquids.	Lesson 19 – TG pp. 109-114 *How does heat energy move?*
SC.3.P.8.2 Measure and compare the mass and volume of solids and liquids.	Lesson 15 – TG pp. 85-90 *How do we measure matter?*

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SC.3.P.8.3 Compare materials and objects according to properties such as size, shape, color, texture, and hardness.	Lesson 8 – TG pp. 43-48 *How are rocks classified?* Lesson 14 – TG pp. 79-84 *What makes up matter?* Lesson 16 – TG pp. 91-96 *How can matter change?*
BIG IDEA 9: Changes in Matter	
SC.3.P.9.1 Describe the changes water undergoes when it changes state through heating and cooling by using familiar scientific terms such as melting, freezing, boiling, evaporation, and condensation.	Lesson 9 – TG pp. 49-54 *What is the water cycle?*
BIG IDEA 10: Forms of Energy	
SC.3.P.10.1 Identify some basic forms of energy such as light, heat, sound, electrical, and mechanical.	Lesson 18 – TG pp. 103-108 *How do simple machines help things move?* Lesson 19 TG pp. 109-114 *How does heat energy move?* Lesson 20 – TG pp. 115-120 *How does light energy move?* Lesson 21 – TG pp. 121-126 *How does electricity move?*
SC.3.P.10.2 Recognize that energy has the ability to cause motion or create change.	Lesson 18 – TG pp. 103-108 *How do simple machines help things move?* Lesson 19 TG pp. 109-114 *How does heat energy move?* Lesson 20 – TG pp. 115-120 *How does light energy move?* Lesson 21 – TG pp. 121-126 *How does electricity move?*
SC.3.P.10.3 Demonstrate that light travels in a straight line until it strikes an object or travels from one medium to another.	Lesson 20 – TG pp. 115-120 *How does light energy move?*

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SC.3.P.10.4 Demonstrate that light can be reflected, refracted, and absorbed.	Lesson 20 – TG pp. 115-120 *How does light energy move?*
BIG IDEA 11: Energy Transfer and Transformations	
SC.3.P.11.1 Investigate, observe, and explain that things that give off light often also give off heat.	Lesson 19 TG pp. 109-114 *How does heat energy move?* Lesson 20 – TG pp. 115-120 *How does light energy move?*
SC.3.P.11.2 Investigate, observe, and explain that heat is produced when one object rubs against another, such as rubbing one's hands together.	Lesson 19 TG pp. 109-114 *How does heat energy move?*
BIG IDEA 14: Organization and Development of Living Organisms	
SC.3.L.14.1 Describe structures in plants and their roles in food production, support, water and nutrient transport, and reproduction.	Lesson 2 – TG pp. 7-12 *How are plant and animal systems different?* Lesson 3 – TG pp. 13-18 *How do plants reproduce?*
SC.3.L.14.2 Investigate and describe how plants respond to stimuli (heat, light, gravity), such as the way plant stems grow toward light and their roots grow downward in response to gravity.	Lesson 2 – TG pp. 7-12 *How are plant and animal systems different?* Lesson 3 – TG pp. 13-18 *How do plants reproduce?*
BIG IDEA 15: Diversity and Evolution of Living Organisms	
SC.3.L.15.1 Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors.	Lesson 1 – TG pp. 1-6 *How are living things classified?*
SC.3.L.15.2 Classify flowering and nonflowering plants into major groups such as those that produce seeds, or those like ferns and mosses that produce spores, according to their physical characteristics.	Lesson 1 – TG pp. 1-6 *How are living things classified?* Lesson 3 – TG pp. 13-18 *How do plants reproduce?*
BIG IDEA 17: Interdependence	

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SC.3.L.17.1 Describe how animals and plants respond to changing seasons.	Lesson 4 – TG pp. 19-24 *What is an ecosystem?* Lesson 5 – TG pp. 25-30 *How does energy flow in an ecosystem?* Lesson 6 – TG pp. 31-36 *What helps an organism live in its ecosystem?*
SC.3.L.17.2 Recognize that plants use energy from the Sun, air, and water to make their own food.	Lesson 2 – TG pp. 7-12 *How are plant and animal systems different?*