

# Flagler County Grade 6/ Comprehensive Science 1

## 2023-2024 Scope and Sequence based on HMH Florida Science

Year at a glance: Please note that the map is based on a 180-day schedule.

HMH Unit	Benchmark/ Standards
<b>Quarter 1: August 10, 2023- October 11, 2023</b>	
<p><b>HMH Unit 1:</b> Nature of Science</p> <p><b>HMH Unit 5:</b> Energy, Motion, and Forces</p>	<p><b><u>SC.6.N.1.1</u></b> Define a problem from the sixth grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.</p> <p><b><u>SC.6.N.1.2</u></b> Explain why scientific investigations should be replicable.</p> <p><b><u>SC.6.N.1.3</u></b> Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each.</p> <p><b><u>SC.6.N.1.4</u></b> Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation.</p> <p><b><u>SC.6.N.1.5</u></b> Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence.</p> <p><b><u>SC.6.N.2.1</u></b> Distinguish science from other activities involving thought.</p> <p><b><u>SC.6.N.2.2</u></b> Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered.</p> <p><b><u>SC.6.N.2.3</u></b> Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals.</p> <p><b><u>SC.6.N.3.1</u></b> Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life.</p>

# Flagler County Grade 6/ Comprehensive Science 1

## 2023-2024 Scope and Sequence based on HMH Florida Science

Year at a glance: Please note that the map is based on a 180-day schedule.

	<p><b><u>SC.6.N.3.2</u></b> Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws.</p> <p><b><u>SC.6.N.3.3</u></b> Give several examples of scientific laws.</p> <p><b><u>SC.6.N.3.4</u></b> Identify the role of models in the context of the sixth grade science benchmarks.</p> <p><b><u>SC.6.P.11.1</u></b> Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa.</p> <p><b><u>SC.6.P.12.1</u></b> Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship.</p> <p><b><u>SC.6.P.13.1</u></b> Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational.</p> <p><b><u>SC.6.P.13.2</u></b> Explore the Law of Gravity by recognizing that every object exerts gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are.</p> <p><b><u>SC.6.P.13.3</u></b> Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both.</p>
<b>Quarter 2: October 12, 2023- December 22, 2023</b>	
<p><b>HMH Unit 2:</b> Weathering, Erosion, Deposition, and landforms</p>	<p><b><u>SC.6.E.6.1</u></b> Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition.</p> <p><b><u>SC.6.E.6.2</u></b> Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.</p>

# Flagler County Grade 6/ Comprehensive Science 1

## 2023-2024 Scope and Sequence based on HMH Florida Science

Year at a glance: Please note that the map is based on a 180-day schedule.

<p><b>HMH Unit 3:</b> Earth in the Earth System</p> <p><b>HMH Unit 4:</b> Weather and Climate</p>	<p><b><u>SC.6.E.7.4</u></b> Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere.</p> <p><b><u>SC.6.E.7.9</u></b> Describe how the composition and structure of the atmosphere protects life and insulates the planet.</p> <p><b><u>SC.6.E.7.1</u></b> Differentiate among radiation, conduction, and convection, the three mechanisms by which heat is transferred through Earth's system.</p> <p><b><u>SC.6.E.7.5</u></b> Explain how energy provided by the sun influences global patterns of atmospheric movement and the temperature differences between air, water, and land.</p> <p><b><u>SC.6.E.7.3</u></b> Describe how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation.</p> <p><b><u>SC.6.E.7.2</u></b> Investigate and apply how the cycling of water between the atmosphere and hydrosphere has an effect on weather patterns and climate.</p> <p><b><u>SC.6.E.7.7</u></b> Investigate how natural disasters have affected human life in Florida.</p> <p><b><u>SC.6.E.7.6</u></b> Differentiate between weather and climate.</p> <p><b><u>SC.6.E.7.8</u></b> Describe ways human beings protect themselves from hazardous weather and sun exposure.</p> <p><b>Revisit:</b> <u>SC.6.N.3.4</u> <u>SC.6.N.1.1</u> <u>SC.6.N.3.1</u> <u>SC.6.N.2.3</u></p>
<p><b>Quarter 3: January 6, 2024- March 14, 2024</b></p>	
<p><b>HMH Unit 6:</b> The Cell</p>	<p><b><u>SC.6.L.14.1</u></b> Describe and identify patterns in the hierarchical organization of organisms from atoms to molecules and cells to tissues to organs to organ systems to organisms.</p> <p><b><u>SC.6.L.14.2</u></b> Investigate and explain the components of the scientific theory of cells (cell theory): all organisms are composed of cells (single-celled or multicellular), all cells come from pre-existing cells, and cells are the basic unit of life.</p> <p><b><u>SC.6.L.14.3</u></b></p>

# Flagler County Grade 6/ Comprehensive Science 1

## 2023-2024 Scope and Sequence based on HMH Florida Science

Year at a glance: Please note that the map is based on a 180-day schedule.

	<p>Recognize and explore how cells of all organisms undergo similar processes to maintain homeostasis, including extracting energy from food, getting rid of waste, and reproducing.</p> <p><b><u>SC.6.L.14.4</u></b></p> <p>Compare and contrast the structure and function of major organelles of plant and animal cells, including cell wall, cell membrane, nucleus, cytoplasm, chloroplasts, mitochondria, and vacuoles.</p> <p><b><u>SC.L.15.1</u></b></p> <p>Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains.</p> <p><b>Revisit:</b> <a href="#"><u>SC.6.N.3.4</u></a> <a href="#"><u>SC.6.N.1.1</u></a> <a href="#"><u>SC.6.N.2.2</u></a></p>
<b>Quarter 4: March 18, 2024- May 23, 2024</b>	
<p><b>HMH Unit 7:</b> Human Body Systems</p> <p><b>HMH Unit 8:</b> Immunity, Disease, and Disorders</p>	<p><b><u>SC.6.L.14.5</u></b></p> <p>Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis.</p> <p><b><u>SC.6.L.14.6</u></b></p> <p>Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites.</p> <p><b>Revisit:</b> <a href="#"><u>SC.6.N.3.4</u></a> <a href="#"><u>SC.6.N.1.1</u></a> <a href="#"><u>SC.6.N.2.3</u></a></p>

**Flagler County Grade 6/ Comprehensive Science 1**  
**2023-2024 Scope and Sequence based on HMH Florida Science**

Year at a glance: Please note that the map is based on a 180-day schedule.