

## Grade 6 Science – Curriculum Overview

	<b>Unit 1 (40 Days)</b>	<b>Unit 2 (40 Days)</b>	<b>Unit 3 (40 Days)</b>	<b>Unit 4 (40 Days)</b>
<b>Unit Titles</b>	<b>What is the MATTER in Flint?</b>	<b>Eur-Zika!</b>	<b>Maryland Pride</b>	<b>Ready, Set, Launch!</b>
<b>Essential Question(s)</b>	How can we use atomic and molecular interactions to explain the properties of matter we see in systems?	How can we map out the structures of a cellular or multicellular system to determine the relationship within the system and how that system functions?	How can we use what we know about the processes that affect ecosystems in order to take action to preserve the health of the Chesapeake Bay and Maryland’s other natural resources?	How can humans apply their knowledge of the flow of matter and energy through an ecosystem to developing a colony on another planet? How can we model the interactions and movements of objects in our solar system?
<b>Big Ideas</b>	<ul style="list-style-type: none"> <li>• Atoms form molecules that vary in size and are the building blocks of matter.</li> <li>• Solids may be formed from molecules or they can be extended structures with repeating subunits such as crystals.</li> <li>• When substances interact, the properties of the reactants are different from the products.</li> <li>• The total amount of matter stays the same during a chemical reaction.</li> <li>• Water goes through a predictable cycle.</li> </ul>	<ul style="list-style-type: none"> <li>• Living things are made of either one or many cells.</li> <li>• There are individual parts within a cell that work together to allow the cell to function.</li> <li>• Patterns of interaction occur within an ecosystem as well as across ecosystems.</li> <li>• Human impacts on the environment have both positive and negative consequences.</li> <li>• Humans have the ability to come up with solutions to help minimize our impact on the environment.</li> </ul>	<ul style="list-style-type: none"> <li>• Weathering and erosion change the surface of Earth.</li> <li>• The Chesapeake Bay is comprised of abiotic and biotic factors and the number and types of these factors have changed over time.</li> <li>• Biotic factors are dependent on their environmental interactions with both other biotic and abiotic factors.</li> <li>• Biodiversity is important in an ecosystem and the health of an ecosystem depends on its diversity.</li> <li>• The health of Chesapeake Bay, other ecosystems, and the ability to maintain ecosystem services are all determined by humans.</li> </ul>	<ul style="list-style-type: none"> <li>• Photosynthesis is an essential process for life on Earth.</li> <li>• Planetary motion and moon phases can be explained using models of the Earth-Sun-Moon system.</li> <li>• Gravity is an inward pulling force which causes motions and interactions in the solar system.</li> <li>• The Earth and our solar system is part of the Milky Way Galaxy.</li> <li>• The solar system and celestial objects can be analyzed using a scale model.</li> </ul>