

# Science: Grade 8

UNIT/Weeks	Timeline/Topics	Essential Questions
6	<p><b><u>Astronomy</u></b></p> <ul style="list-style-type: none"> <li>• The Universe and its Stars</li> <li>• Earth and the Solar System</li> <li>• Earth's History</li> </ul>	<ul style="list-style-type: none"> <li>• What is the role of gravity in the motions within galaxies and the solar system?</li> <li>• What are the scale properties of objects in the solar system?</li> </ul>
6	<p><b><u>Earth Systems</u></b></p> <ul style="list-style-type: none"> <li>• Geologic Time Scale</li> <li>• Geoscience Processes</li> <li>• Tectonic Processes</li> </ul>	<ul style="list-style-type: none"> <li>• If no one was there, how do we know the Earth's history?</li> <li>• What provides the forces that drive Earth's systems?</li> </ul>
6	<p><b><u>Stability and Change On Earth</u></b></p> <ul style="list-style-type: none"> <li>• Natural Resources</li> <li>• Natural Hazards</li> <li>• Human Impact</li> </ul>	<ul style="list-style-type: none"> <li>• How do we monitor the health of the environment (our life support system)?</li> <li>• Is it possible to predict and protect ourselves from natural hazards?</li> </ul>
6	<p><b><u>Relationships Among Forms of Energy</u></b></p> <ul style="list-style-type: none"> <li>• Kinetic Energy</li> <li>• Potential Energy</li> <li>• Energy Transfer</li> </ul>	<ul style="list-style-type: none"> <li>• How can physics explain sports?</li> </ul>
6	<p><b><u>Thermal Energy</u></b></p> <ul style="list-style-type: none"> <li>• Temperature</li> <li>• Total Energy of a System</li> </ul>	<ul style="list-style-type: none"> <li>• How can a standard thermometer be used to tell you how particles are behaving?</li> </ul>
6	<p><b><u>Electromagnetic Spectrum</u></b></p> <ul style="list-style-type: none"> <li>• Simple Waves</li> <li>• Light and Sound Waves</li> <li>• Wave-Related Technologies</li> </ul>	<ul style="list-style-type: none"> <li>• How do cell phones work?</li> </ul>