



# MOHAWK

## Local School District

*Preparing today's students for tomorrow's challenges*

### Mohawk Local Schools 7<sup>th</sup> Grade - SCIENCE

### Quarter 2 Curriculum Guide

#### Guiding Principles of the Scientific Inquiry/Learning Cycle:

Evaluate...Engage...Explore...Explain...Extend...Evaluate

- Identify ask valid and testable questions
- Research books, other resources to gather known information
- Plan and Investigate
- Use appropriate mathematics, technology tools to gather, interpret data.
- Organize, evaluate, interpret observations, measurements, other data
- Use evidence, scientific knowledge to develop explanations
- Communicate results with graphs charts, tables

#### Critical Areas of Focus Being Addressed:

- Cycles and Patterns of Earth and the Moon
- Conservation of Matter and Energy
- Science Inquiry and Applications

Content Statements Addressed and Whether they are Knowledge, Reasoning, Performance Skill, or Product:  
 (DOK1) (DOK2) (DOK3) (DOK4)

Underpinning Targets Corresponding with Standards and Whether they are Knowledge, Reasoning, Performance Skill, or Product: "I can.....", "Students Will Be Able To....."

The relative patterns of motions and positions of the Earth, moon and sun cause solar and lunar eclipses, tides and phases of the moon.  
 (DOK 2)

- The students can explain that the Earth and its solar system are a part the Milky Way Galaxy, which are a part of the universe. **R**
- The students can construct a model that represents the

	<p>position of the moon, Earth and sun during the moon phases. <b>K</b></p> <ul style="list-style-type: none"> <li>• The students can recognize the different phases of the moon. <b>K</b></li> <li>• The students can explain what causes the phases of the moon. <b>R</b></li> <li>• The students can identify the positions of the Earth, moon and sun during the moon phase and what the moon looks like from Earth from those locations. <b>K</b></li> <li>• The students can construct a model of the sun, earth and moon to illustrate high and low tides. <b>R</b></li> <li>• The students can use a model to analyze when and what causes high and low tides. <b>R</b></li> <li>• The students can identify and explain the causes for lunar and solar eclipses. <b>R</b></li> <li>• The students can explain why certain places around the world will experience a lunar and or solar eclipse. <b>R</b></li> </ul>
<p>In any particular biome, the number, growth, and survival of organisms and populations depend on biotic and abiotic factors. (DOK 3)</p>	<ul style="list-style-type: none"> <li>• The students can classify biomes based on topography, soil types, precipitation, solar radiation and temperature. <b>R</b></li> <li>• The students can explain how abiotic resources enable specific types of biotic organisms to live in a particular biome. <b>R</b></li> <li>• The students can investigate a photo and use observations to classify them as a particular biome. Students must also be able to defend their choices with evidence. <b>PS</b></li> <li>• The students can explain how natural disasters affect an ecosystem in the short term and the long term. <b>PS</b></li> </ul>