



MOHAWK

Local School District

Preparing today's students for tomorrow's challenges

Mohawk Local Schools 7th Grade - SCIENCE

Quarter 1 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
- 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 atmosphere has different properties at different elevations and contains a mixture of gases that cycle through the lithosphere, biosphere, hydrosphere, and atmosphere.
 (DOK 2)

- The students can determine the composition of Earth's air. **K**
- The students can create and interpret data on different graphs to determine differences in our atmosphere's composition and temperature based on altitude

	<p>differences. R</p> <ul style="list-style-type: none"> • The students can describe how specific layers of the atmosphere have different traits and purposes. K
<p>The hydrologic cycle illustrates the changing states of water as it moves through the lithosphere, biosphere, hydrosphere, and atmosphere. (DOK 3)</p>	<ul style="list-style-type: none"> • The students can explain the different parts of the hydrologic cycle. R • The students can describe how water can transfer from different states. K • The students can identify and explain how water is used and even wasted in our society. R • The students can explain and describe ways that pollutants can reach water sources. R • The students can compare similarities and differences in surface runoff in rural and urban area. PS • The students can describe the threat of algae blooms and the effect it has on our ecosystems and lives. PS
<p>Thermal energy transfers in the ocean and the atmosphere contribute to the formation of currents, which influence global climate. (DOK 2)</p>	<ul style="list-style-type: none"> • The students can create a model to show the movement of ocean water caused by surface currents. R • The students can explain that surface currents are created by the prevailing wind systems. R • The students can explain that ocean currents are affected by ocean water temperature, density and salinity. R • The students can describe reasons why certain places in the world experience different climate and weather patterns. R