



# MOHAWK

## Local School District

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

### Mohawk Local Schools Grade 4<sup>th</sup> SCIENCE

### Quarter 4 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:

- Earth's Surface
- Electricity, Heat, and Matter
- Earth's Living History
- Scientific Inquiry and Application

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 total amount of matter is conserved when it undergoes a change (DOK2)

The students can explain that matter remains constant when it undergoes a change (based on experimental experiences).

	<p>(DOK2) The students can explain that when an object is broken into smaller pieces, the total amount of matter remains constant.</p> <p>(DOK2) The students can explain that when a solid is dissolved in a liquid, the total amount of matter remains constant. (DOK2)</p> <p>The students can explain that when matter changes state (solid, liquid, gas), the total amount of matter remains constant. (DOK2)</p> <p>The students can explain that the sum of all of the parts in an object equals the mass of the object.(DOK2)</p>
<p>Energy can be transformed from one form to another or can be transferred from one location to another. (DOK2)</p>	<p>The students can observe situations, conduct demonstrations, and record data about energy transfer from hot objects to cold objects as heat, resulting in a temperature change.(DOK3)</p> <p>The students can make predictions about the heat conductivity of different materials.(DOK2)</p> <p>The students can demonstrate and explain that electric circuits require a complete loop of conducting materials through which electrical energy can be transferred. (DOK2)</p> <p>The students can demonstrate and explain how electrical energy in circuits can be transformed to other forms of energy, including light, heat, sound and motion. (DOK3)</p> <p>The students can demonstrate and explain that when a wire conducts electricity, the wire has magnetic properties and can push and/or pull magnets.(DOK3)</p>

