# **Matter**

Content Area: Science
Course(s): Science 4
Time Period: Undefined
Length: Undefined
Status: Published

## **Unit Overview**

## **Essential Questions**

How can matter be described and measured?

What are properties of matter?

How is matter measured?

What are phases of matter?

What are mixtures?

How does matter change?

#### Content

The properties of matter are characteristics, such as: color, size, shape, texture, odor and taste.

You can measure the mass and volume of matter.

The three phases of matter are: solids, liquids, and gases.

A mixture is a combination of two or more substances.

The size, shape and state of matter can change.

## **Skills**

Compare objects based on their physical properties and know that magnets attract and repel objects.

Demonstrate an understanding of how matter is measured.

Understand that heating and cooling affects the motion of particles.

Explain how to separate mixtures.

Demonstrate an understanding of how matter changes into materials with different characteristics.

#### **Assessments**

Apply understanding of the phases of matter to everyday scenarios such as the change that occurs when chocolate melts.

Study Guide

Chapter Review

Chapter Test

**Benchmark Practice** 

Performance-Based Assessment, Program Guide pg 70: Height and Potential Energy, Cooking up Science and/or Write a Poem

STEM Activity Book

# **Lessons/Learning Scenarios**

Chapter 7: Lesson 1, Lesson 2, Lesson 3, Lesson 4, Lesson 5

Inquiry, pg 304-305: What properties can be used to classify matter?

Vocabulary

Study Guide

Chapter Review

## **Standards**

SCI.3-4.5.1.4.B.3	Formulate explanations from evidence.
SCI.3-4.5.1.4.C.1	Monitor and reflect on one's own knowledge regarding how ideas change over time.
SCI.3-4.5.1.4.C.3	Present evidence to interpret and/or predict cause-and-effect outcomes of investigations.
SCI.3-4.5.2.4	All students will understand that physical science principles, including fundamental ideas about matter, energy, and motion, are powerful conceptual tools for making sense of phenomena in physical, living, and Earth systems science.
SCI.3-4.5.2.4.A	All objects and substances in the natural world are composed of matter. Matter has two fundamental properties: matter takes up space, and matter has inertia.

#### Resources