

## SCIENCE

### New York State – Learning Standards

Students will be tested on the following standards for science:

#### **Physical Setting**

- The Earth and celestial phenomena can be described by principles of relative motion and perspective.
- Many of the phenomena that we observe on Earth involved interactions among components of air, water, and land.
- Matter is made up of particles whose properties determine the observable characteristics of matter and its relativity.
- Energy exists in many forms, and when these forms change, energy is converted.
- Energy and matter interact through forces that result in changes in motion.

#### **The Living Environment**

- Living things are both similar to and different from each other and from nonliving things.
- Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring.
- Individual organisms and species change over time.
- The continuity of life is sustained through reproduction and development.
- Plants and animals depend on each other and their physical environment.
- Human decisions and activities have had a profound impact on the physical and living environment.

### Life Science

#### September – November 2016

Unit: C: Classifying Living Things

Objectives / concepts:

- Investigate life cycles and the growth and development of plants and animals.
- Observe, explain, and give examples of how plants and animals depend on each other, and how their characteristics help them survive in differing environments (adaptation and interdependence).

**Themes / Systems:** Classification of living things; characteristics of different animal and plant groups; basic needs of living things; adaptations that help living things meet their needs.

**Textbook:** Discovery Works: Chapters 1 & 2

## Physical Science

November 2016 – January 2017

Units B & D: Properties of Matter & Magnetism and Electricity

**Objectives / concepts:**

1. Investigate and classify materials based on their physical properties, including physical changes, such as how water can change from liquid to gas or solid (change of state).
2. Observe, investigate, and describe light, heat, electrical, sound, chemical, and mechanical energy; how they are transferred; and what happens when objects interact with them.

**Theme:** Describing Matter; Investigating States of Matter; Discussing Electrical energy; Observing Electricity at Work

**Textbook:** Discovery Works: Unit B, Chapters I, 2 & 3; D: Chap. 1, 2 & 3

## **Earth Science**

**February 2017 – April 2017**

### **Unit A** Earth's Land

#### **Objective / Concept:**

- Examine, describe, investigate and measure the effects of erosion and other natural events on Earth materials, such as on land, water, and air.
- Evaluate the powerful forces that shape the land.
- Analyze the effects of trash on our natural resources.

**Theme:** Constancy and Change

**Textbook:** Discovery Works: Unit A, Chap. 1, 2 & 3

**May – June 2017**

### **Unit E:** Weather and Climate

Objective: (a) Understand the natural cycles of Earth's land, water and air, such as the water cycle, which includes evaporation and condensation.

(b) Observe and record daily, monthly, seasonal changes in the environment, such as those caused by weather.

(c) Investigate weather patterns and learn how to predict the weather.

(d) Discuss dangerous weather conditions and safety precautions.

Theme: The Air around us; Observing the Weather; Weather Patterns; Season and Climate

Textbook: Discovery Works: Unit E, Chapters 1, 2, 3 & 4: Other resource Habits and Habitats