LINCOLN PUBLIC SCHOOLS Science Learning Expectations: Grade 3

EARTH/PHYSICAL SCIENCE:

Rocks & their Properties Properties & Motion of Objects

Massachusetts Standard(s):

- Give a simple explanation of what a mineral is and some examples (e.g., quartz, mica). -Identify the physical properties of minerals (hardness, color, luster, cleavage, and streak) and explain how minerals can be tested for these different physical properties. -Differentiate between properties of objects (e.g., size, shape weight) and properties of materials (e.g., color, texture, hardness

Big Ideas:

□ Rocks are composed of one or more minerals, which are each, composed of a single substance.

Key Outcomes:

☐ Students will understand that Earth's materials can be broken down into individual components that have observable and measurable properties by classifying "unknown" minerals.

Essential Knowledge and Skills:

Students will know...

- How to use scientific inquiry* to access, explore and explain their understanding of core knowledge
- □ Rocks are continually changing and forming new rocks
- There are three types of rocks; metamorphic, sedimentary, and igneous
- The Earth is made up of layers of rocks: the crust, the mantle, and the core
- □ Volcanoes, landslides and earthquakes are naturally occurring events that quickly change the surface of the Earth
- □ Rocks change from heat and pressure the properties of rocks and minerals determine how they're used.
- ☐ Identify the three main types of rocks
- Describe the properties of rocks that reflect the way they were formed and the minerals in them illustrate and label the layers of the earth

*Scientific Inquiry Standards are embedded in each unit of study