PETERS TOWNSHIP SCHOOL DISTRICT

CORE BODY OF KNOWLEDGE

SCIENCE GRADE 1

For each of the sections that follow, students may be required to analyze, recall, explain, interpret, apply, or evaluate the particular concepts being taught.

COURSE DESCRIPTION:

The curriculum is broken into six units. They comprise of the following: matter, animals and their homes, motion and energy/STEM, weather and sky, plants, and magnets.

STUDY SKILLS:

- Maintain and organize a folder for each science unit.
- Students will identify and apply knowledge of content by use of vocabulary, sorting, journal writing, videos, songs, smartboard/apple TV, graphic organizers, and hands-on activities.

1. MATTER

- Comprehend that all things are made of matter
- Describe the properties of matter
- Identify the properties of solids
- Compare the properties of different solids
- Describe the properties of liquids and gases
- Compare properties of different kinds of liquids and gases
- Observe and describe how solids can change
- Prepare mixtures of different solids and liquids
- Explain why some mixtures can be separated and others cannot
- Describe how heat changes solids, liquids and gases
- Explain the processes of freezing, melting and evaporation

2. ANIMALS AND THEIR HOMES

- Observe and describe different kinds of animals
- Explain how animals are alike and different
- Identify what animals need to survive
- Explain how different animals meet their needs
- Relate the shape of an animal's teeth to what it eats
- Classify animals according to what they eat

- Describe the life cycles of different kinds of animals
- Explain what animals can do at different ages

3. MOTION AND ENERGY/ STEM

- Describe the position of an object in relation to other objects
- Observe an object's motion and speed by recording its change in position
- Identify pushes, pulls, gravity, and friction as forces
- Explain how different forces change the motion of objects
- Discover how simple machines make it easier to move objects
- Explain the functions of pulleys, levers, and ramps
- Explain why magnets attract some objects and not others
- Identify the two poles on a magnet

4. WEATHER AND SKY

- Identify different weather conditions
- Investigate ways to measure different weather conditions
- Explain how clouds form and why water falls back to Earth
- Identify different kinds of clouds
- Describe how weather changes as seasons change
- Identify and describe weather conditions for the four seasons
- Explain how fall and winter affect plants and animals

5. PLANTS

- Compare and classify living and nonliving things
- Explain what plants need to live and grow
- Identify plant parts such as, leaves, stems, and roots
- Describe what different parts do for the plant
- Classify and compare different plants
- Identify some edible plant parts
- Explain flowers and fruits are important to plants
- Describe and compare different seeds
- Describe the life cycle of a plant
- Explain how plants can grow from seeds and other plant parts
- Describe how plants survive in different places

MATERIALS:

• Science A Closer Look – Teacher's Editions: Life Science, Physical Science, Earth Science

- Science A Closer Look CD Rom
- Science A Closer Look Consumable Workbook Reading Essentials
- Science A Closer Look Lab Activity Book one per teacher
- Scholastic News

Revised September 2014