

Middletown Township Public Schools

Elementary Science Guidelines for Parents

2009-2010

1. Programs Used:

The core text for science in Grades 1-5 use is the Macmillan-McGraw Hill Science program © 2005 (referred to below as MMH). It is supplemented with two science kits from *Science and Technology for Children* (STC) or *Full Option Science System* (FOSS). In our full-day kindergarten, two science kits from Insights are used.

NOTE: Below, Physical Science is referred to as PS, Earth Science ES, and Life Science LS.

“The elementary science program must provide opportunities for students to develop understandings and the skills necessary to function productively as problem-solvers in a scientific and technological world.

Elementary school students learn science best when –

- *They are involved in first-hand explorations and investigation and inquiry/process skills are nurtured.*
- *Instruction builds directly on the student’s conceptual framework.*
- *Content is organized on the basis of broad conceptual themes common to all science disciplines.*
- *Mathematics and communication skills are an integral part of science instruction.”*

National Science Teachers Association

2. Units and Science Kits used in each grade level:

Kindergarten: Topics such as the seasons (ES), colors (PS), and Earth Day (LS) are touched on in kindergarten.

2nd Marking Period

Insights Kit – *The Senses* (PS)

3rd Marking Period

Insights Kit – *Balls and Ramps* (PS)

Grade 1:

1st or 2nd Marking Period

MMH Unit F – *On the Move* (PS)

Chapter 11 - “Force and Motion”
“Magnets and Sound”

MMH Unit E – *Matter, Matter Everywhere* (PS)

Chapter 9 - “Describe and Measure Matter”
Chapter 10 - “Changes in Matter”

3rd Marking Period

FOSS Kit - *Air and Weather* (ES)

Investigation 1: “Exploring Air”
Investigation 2: “Observing Weather”
Investigation 3: “Wind Exploration”
Investigation 4: “Looking For Change”

4th Marking Period

STC Kit - *Organisms* (LS)

Grade 2:

1st Marking Period

MMH Unit D – *Sun and Its Family* (ES)

2nd Marking Period

STC Kit - *Changes* (PS)

3rd Marking Period

FOSS Kit - *Sound* (PS)

Investigation 1: “Dropping In”
Investigation 2: “Good Vibrations”
Investigation 3: “How Sound Travels”

4th Marking Period

MMH Unit A – *Plants and Animals* (LS)

Chapter 1 *only* - “Plants”

Grade 3:

1st Marking Period

MMH Unit D – *Cycles on Earth and in Space* (ES)

Chapter 7 – “Earth’s Weather”
Chapter 8 – “Earth in Space”

2nd Marking Period

FOSS Kit – *Earth Materials* (ES)

Investigation 2: “Scratch Test”
Investigation 3: “Calcite Quest”
Investigation 4: “Take it for Granite”

Grade 3 (continued):

3rd Marking Period

STC Kit – *Chemical Tests* (PS)

4th Marking Period

MMH Unit A – *Looking at Plants and Animals* (LS)

Chapter 1 - “Plants”

Chapter 2 - “Animals”

Grade 4:

1st Marking Period

MMH Unit A – *The World of Living Things* (LS)

Chapter 2 – “Plants”

2nd Marking Period

MMH Unit B – *Animals as Living Things* (LS)

Chapter 3 – “Describing Animals”

Chapter 4 - “Life Processes”

3rd Marking Period

STC Kit – *Electric Circuits* (PS)

4th Marking Period

STC Kit – *Motion and Design* (PS)

Grade 5:

1st Marking Period

MMH Unit A – *Characteristics of Living Things* (LS)

Chapter 4 - “Animal Diversity”

2nd Marking Period

MMH Unit D – *Astronomy, Weather, and Climate* (ES)

Chapter 9 – “Astronomy”

Chapter 10 – “Weather”

3rd Marking Period

FOSS Kit - *Mixtures and Solutions* (PS)

Investigation 1: “Separating Mixtures”
Investigation 2: “Reaching Saturation”
Investigation 3: “Concentration”
Investigation 4: “Fizz Quiz”

Lesson on oceans from the MMH series in preparation for the fourth marking period kit.

MMH Unit C – *Earth and It’s Resources* (ES)

Chapter 8 – “Air, Water, and Energy”

4th Marking Period

STC Kit - *Land and Water* (ES)

In order to measure student progress in the achievement of the New Jersey Core Curriculum Content Standards, as well as give the students practice with the types of questions asked on the NJ ASK science assessment in fourth grade, students will be assessed at the each marking period on either the book unit covered or the Science Kit used.