Maureen M. Drees

General Science Lesson Plans

November 27-December 1, 2017

Note: Wednesday is a 2:25 dismissal for professional development.

Essential concepts and skills emphasized in the week’s lessons will be highlighted.

Disciplinary Core Ideas

Life Science

1. From molecules to organisms: Structures and processes
2. Ecosystems: Interactions, energy, and dynamics
3. Heredity: Inheritance and variation of traits
4. Biological Evolution: Unity and diversity

Earth and Space Science

1. Earth’s place in the universe
2. Earth’s systems
3. Earth and human activity

Physical Science

1. Matter and its interactions
2. **Motion and stability: Forces and interactions**
3. Energy
4. Waves and their applications in technologies for information transfer

Science and Engineering Practices

1. **Asking questions and defining problems**
2. **Developing and using models**
3. **Planning and carrying out investigations**
4. **Analyzing and interpreting data**
5. Using mathematics and computational thinking
6. Constructing explanations and designing solutions
7. **Engaging in argument from evidence**
8. **Obtaining, evaluating, and communicating information**

Cross-Cutting Concepts

1. Patterns
2. **Cause and effect**
3. **Scale, proportion, and quantity**
4. Systems and system models
5. **Energy and matter**
6. **Structure and function**
7. Stability and change

Monday—

* 1. Finish reading and taking book notes together 5.3 Friction: A Force that Opposes Motion
  2. Prediction and then Experiment—How does changing friction affect the speed of a penny sliding downhill?

Tuesday—

* + 1. Go Fish
    2. Brainstorm ways to reduce friction, record
    3. Model writing descriptions of reducing friction, needs topic sentence and two details in sentences
    4. Students write three descriptions

Wednesday—shortened schedule

* + - 1. Edit and hand in Reducing Friction Descriptions
      2. Draw numbers to practice vocabulary
      3. Brainstorm ways to increase friction, record
      4. Model writing descriptions of increasing friction, needs topic sentence and two details in sentences
      5. Students write three descriptions

Thursday—

* + - * 1. Edit and hand in Increasing Friction Descriptions
        2. Use triple beam balance to measure mass and spring scales to measure weight
        3. Begin to read and take book notes together 5.4 Gravity: A Foce of Attraction pages 134-139

Friday—

Finish reading and taking book notes 5.4 Gravity: A Force of Attraction

Show picture of standing under Newton’s apple tree

Review differences between mass and weight, classify with numbers, discuss and record as whole class