Maureen M. Drees

General Science Lesson Plans

January 8-12, 2018

Note: Wednesday is a 1:25 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. Assign new science numbers
  2. See book covers
  3. Review Newton’s Three Laws
  4. Practice filling in the blank with statements about Newton’s Three Laws
  5. Share with class the definition of momentum, challenge the class to figure out how a small student and a large student could have the same momentum
  6. Begin to read 6.3 Momentum pages 166-169 and take book notes

Tuesday—

* + 1. Finish reading and taking book notes over pages 166-169
    2. Discussion notes—objects with same masses and different velocities, who has the largest momentum; objects with same velocities and different masses, who has the largest momentum (act out with students)
    3. Preview Chapter 6 Test for Friday

Wednesday—shortened periods

* + - 1. T-Chart, examples and non-examples of projectile motion
      2. Go Fish for Chapter 6 Vocabulary
      3. Practice together examples of projectile motion, statements about Newton’s Laws, largest momentum
      4. Chapter 6 Vocabulary WS

Thursday—

* + - * 1. Check Chapter 6 Vocabulary WS
        2. Draw numbers to practice vocabulary
        3. Examine Newton’s Cradle—relate to Newton’s Laws
        4. Groups of two or three—Coin in a Cup—relate to Newton’s Laws
        5. Popcorn Read

Friday—

Chapter 6 Test—Forces and Motion

ABC Chart—Science Words from Chapters 1-6