Maureen M. Drees

General Science Lesson Plans

December 11-15, 2017

Note: Wednesday is a 2:25 dismissal.

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. Demo—make a parachute out of a garbage bag and straw struts, drop a box from the gym balcony without a parachute and then with the parachute, have students explain, tie into reading on gravity and air resistance (Velveeta box, opened large garbage bag taped on works well)
  2. Read pages 154-156 and take book notes

Tuesday—

* + 1. Walk students through Penny Projectile Motion lab
    2. Students conduct lab
    3. Students finish lab write up, hand in
    4. Demo—Egg on a Truck, use to introduce Newton’s First Law of Motion
    5. Begin to read together 6.2 Newton’s First Law of Motion pages 158-160 and take book notes

Wednesday—shortened schedule

* + - 1. Finish reading 6.2 and taking book notes, if needed
      2. Review Newton’s First Law
      3. Brainstorm examples of objects that want to stay at rest and objects in motion that want to stay in motion (unless acted upon by an outside force)
      4. Students pick one example of objects that want to stay at rest and one example of objects that want to stay in motion to write a sentence about and illustrate

Thursday—

* + - * 1. Share out examples of objects at rest and in motion, hand in
        2. Let students know that we will put chapter 6 on hiatus until after Christmas break
        3. Hand out folder of old tests, preview semester test
        4. Let students know that they will need to hand in folder of old tests when they take the semester test
        5. Students complete Chapter 1 of Semester Test Review (use book, not old test)

Friday—

Check Chapter 1 of Semester Test Review

Go Fishing for Chapter 1 Vocabulary Words

Pull Numbers to Practice Chapter 1 Vocabulary Words

Popcorn Read

Students complete Chapter 2 and 3 of Semester Test Review (use book, not old tests)