Maureen M. Drees

General Science Lesson Plans

November 13-17 2017

Note: Tuesday afternoon I’ll be at the DLT meeting. Ann Zaiger is my substitute. 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. Go over Chapter 4 Test, Journal
  2. Semester grades to this point
  3. Clean out folders
  4. Will need calculators on Tuesday and Wednesday
  5. Matter in Motion—The Domino Derby Lab, preview with students, start to conduct

Tuesday—

* + 1. Finish The Domino Derby Lab, write up, hand in
    2. Measure distance across the room
    3. Have student volunteers cover the distance in different ways, each time have student use stopwatch feature on their cell phones to measure the time
    4. Model how to figure speed
    5. Students use calculators to determine speed

Wednesday—shortened schedule

* + - 1. Have one more student move across the room and then have the class calculate his/her speed and velocity
      2. Begin to read and take book notes together Measuring Motion 5.1 pages 118-123

Thursday—

1. Finish book notes, if needed
2. Demonstrate acceleration with Matchbox cars
3. Model how to calculate acceleration
4. Have a student move across the room in two different ways, calculate speed for each trip, then calculate acceleration
5. Repeat with student moving slower the second time

Friday—

* + - * 1. Contrast forces that you can see—pushing on a wooden car—with forces that you cannot see—static electricity caused by rubbing a balloon on a volunteer student’s hair
        2. Read and take book notes together What Is a Force? Pages 124-127