Maureen M. Drees

Physics Lesson Plans

September 18-22, 2017

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

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. Chapter 1 Test—The Science of Physics—must finish vocabulary and cloze, star problems that students want to come back to next day

Tuesday—

* + 1. Finish Chapter 1 Test—The Science of Physics
    2. Read or work on other homework quietly

Wednesday—shortened schedule

* + - 1. Go over Chapter 1 Test—The Science of Physics
      2. Semester grades to this point
      3. Clean out folder
      4. Notes—Frame of Reference, Displacement, Average Velocity

Thursday—

* + - * 1. Board Problems
        2. Discuss how a motorcycle helmet protects head, relate to how Egg Drop Apparatus will need to protect egg
        3. Use rubric to walk through specifications for Egg Drop, papers will be handed into me via Google Doc
        4. Use puzzle pieces to divide into groups for Egg Drop
        5. Groups plan how they will spread out force, cushion the egg, and slow down its descent; plan who will bring what materials, will part of Monday and Tuesday, will drop on Wednesday, paper is due on Wednesday

Friday—may adjust periods (will most likely miss last week or this week due to Homecoming)