Maureen M. Drees

Physical 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. Check Acceleration with Initial and Final Velocities WS
  2. Board Problems—Velocity, Acceleration, Acceleration with Initial and Final Velocities (draw numbers)
  3. Read 5.1 Measuring Motion pages 108-144 and take book notes

Tuesday—

* + 1. Check 5.1 Book Notes
    2. Discussion Notes—Forces, Determining Net Force, Comparing Balanced and Unbalanced Forces
    3. Forces WS

Wednesday—shortened schedule

* + - 1. Check Forces WS
      2. Forces Board Problems
      3. Students try Penny, Card, Class Challenge
      4. Read 5.2 What is a Force? Pages 115-118 and take book notes

Thursday—

* + - * 1. Check 5.2 Book Notes
        2. Prediction and then Experiment—Inclined Plane covered with different materials, discuss friction and its effects on motion
        3. 4-Quadrant Brainstorming—Friction Helps, Hurts, Ways to Reduce, Ways to Increase

Friday—

Review four kinds of friction—sliding, rolling, fluid, static

Classify statements about friction—record numbers, discuss, record statements

Go Fish

Read 5.3 Friction pages 119-124 and take book notes