Maureen M. Drees

Physical Science Lesson Plans

October 16-20, 2017

Note: Wednesday afternoon is a 2:25 dismissal for teacher work time.

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. Use water, pepper, and dishwashing detergent to illustrate surface tension
  2. Act out with students
  3. Journal, share
  4. Read pages 60-67 Four States of Matter and take book notes

Tuesday—

* + 1. Check book notes
    2. Use overhead projector and apparatus to illustrate Boyle’s Law
    3. Notes—Boyle’s Law
    4. WS—Boyle’s Law Problems

Wednesday—shortened schedule

* + - 1. Check Boyle’s Law WS
      2. Board Problems
      3. Examine Gas Law graphs on page 66—Decide which fits Boyle’s Law and which fits Charles’s Law
      4. Notes—Charles’s Law
      5. WS—Charles’s Law Problems

Thursday—

* + - * 1. Check Charles’s Law WS
        2. Board Problems—Boyle’s Law and Charles’s Law, draw numbers for students to solve
        3. Read pages 68-73 Changes of State and take book notes

Friday—

Check book notes

Put heating curve in notes

Pose situation on page 73 to students, journal, share