Maureen M. Drees

Physical Science Lesson Plans

November 6-10, 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 rest of 4.3 book notes
  2. Whole Class Flashcards
  3. Written Scavenger Hunt for Elements, Symbols on periodic table

Tuesday—

* + 1. Check Written Scavenger Hunt
    2. Students classify statements as being true for metals, nonmetals, metalloids individually by number, then record as statements with whole class
    3. Add matter subdivided into pure substances (elements and compounds) and mixtures (homogeneous and heterogeneous) classifications to discussion notes
    4. Read and discuss together pg 91 Common Techniques for Separating Mixtures

Wednesday—shortened schedule

* + - 1. Discuss how solutions fit into matter subdivisions, record in discussion notes
      2. Measure the mass of dry Kool-Aid powder, measure the volume of water, calculate the concentration—do this twice, once for a concentrated solution and once for a dilute solution—use vocabulary—solute, solvent, solution
      3. Record in notes
      4. Draw numbers to practice vocabulary

Thursday—

* + - * 1. Examine photo of snow globe (suspension) and eat Jell-O and Cool Whip (colloids), discuss how their properties differ from a solution (Kool Aid)
        2. Classify statements about suspensions, colloids, and solutions in notes using numbers
        3. Confirm as a class, record
        4. Practice fill-in-the-blanks
        5. Chapter 4 Vocabulary WS

Friday—

Check Chapter 4 Vocabulary WS

Go Fish

Preview Chapter 4 Test—Elements, Compounds, Mixtures—for Wednesday

Popcorn Read

Prepare for test together