Maureen M. Drees

Physical Science Lesson Plans

April 16-20, 2018

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. Discuss and hand in tri-folds
  2. Classify statements about conduction, convection, and radiation
  3. Have students discuss why a pan of chicken noodle soup has more thermal energy than a bowl of the same soup, write explanation
  4. Classify statements about temperature and thermal energy (heat), then record

Tuesday—

* + 1. Pour boiling water into Styrofoam cup and into glass beaker, have students tell which container feels hotter and why
    2. Introduce idea of specific heat
    3. Board Problems—Specific Heat
    4. Specific Heat WS

Wednesday—shortened periods

* + - 1. Check Specific Heat WS
      2. Specific Heat Board Problems
      3. Draw Changes of State for Water graph in notes
      4. Draw numbers to ask questions about Changes of State for Water graph

Thursday—

* + - * 1. Draw numbers to solve out algebra for KE and Specific Heat formulas
        2. Read 10.3 Matter and Heat pages 260-262 and take book notes

Friday—

Check 10.3 book notes

Preview Chapter 10 Test—Heat—for Wednesday

Specific Heat and Temperature Conversions board problems

Popcorn Read pages 270-271

Draw numbers to practice vocabulary