Maureen M. Drees

General 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. Matte**r 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. Go over Chapter 12 Test—The Periodic Table
  2. Journal, See semester grades to this point
  3. Clean out folders, save periodic table
  4. Use penny analogy to introduce ionic bonds
  5. Use periodic table to work out how many valence electrons each group has, how many electrons it wants to give up or take, and what its charge is
  6. Work out ionic compounds

Tuesday—

* + 1. Review groups on periodic table and how many electrons they want to give up or take, what their charges are
    2. Read, discuss, and take book notes 13.1 Electrons and Chemical Bonding pages 364-367

Wednesday—shortened periods

* + - 1. Practice ionic compounds (Be and F, Ga and Cl, B and P)
      2. Read together 13.2 Ionic Bonds pages 368-371 and take book notes
      3. Work out ionic diagrams for Ionic Compounds (Na and Cl, K and Br, Mg and Cl, Al and F)

Thursday—

* + - * 1. Work out diagrams for Ionic Compounds (Cs and I, B and Cl, Ca and Br)
        2. Go Fish for Chapter 13 Vocabulary
        3. Chapter 13 Vocabulary WS

Friday—

Check Chapter 13 Vocabulary WS

Preview Chapter 13 Test—Chemical Bonding—for Tuesday

Draw numbers to practice vocabulary

Construct chart in notes with group number, number of valence electrons, charge

Practice telling group number, number of valence electrons, charge