Maureen M. Drees

Physics Lesson Plans

January 8-12, 2018

Note: Wednesday will be a 1:25 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. Revisit science data sheet
  2. Assign new physics numbers
  3. See book covers
  4. Notes—Definition of Forces, Inertia, Newton’s Laws, model resolving forces into vectors, finding the vector sum of forces (relate to work in Chapter 3 on 2-Dimensional Motion), equilibrium

Tuesday—

* + 1. Board Problems—Resolving Vectors, Finding Vector Resultant, confirm to go on
    2. PB 1-3 pg 128 + SR 1-5 pg 129 + CR 1-4, 13-15 pg 145-6

Wednesday—shortened periods

* + - 1. Check PB 1-3 pg 128 + SR 1-5 pg 129 + CR 1-4, 13-15 pgs 145-6
      2. Notes—Newton’s Second and Thirds, Action-Reaction Pairs, model and guided practice net F=ma (put equation on back of book)
      3. PC 1-5 pg 132 + SR 1-5 pg 134

Thursday—

* + - * 1. Check PC 1-5 pg 132 + SR 1-5 pg 134
        2. Board Problems—must confirm to go on
        3. Net Force WS

Friday—

Check Net Force WS

Notes—Static Friction, Kinetic Friction, Coefficient of Friction, model and guided practice

Put Coefficient of Friction formula on back of book

PD 1-3 pg 139