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General Science Lesson Plans

September 4-8, 2017

Note: Monday is Labor Day. Wednesday is 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—doesn’t meet

Tuesday—

* 1. Groups try out helicopter hypothesis and collect data, analyze data, draw conclusions, communicate results through lab sheet

Wednesday—shortened schedule

* + 1. Continue helicopter experiment
    2. Groups demonstrate their original helicopter and their improved one to class
    3. Groups share what they learned with rest of class
    4. Hand in lab sheets

Thursday—

* + - 1. Finish sharing of paper helicopters, if needed
      2. 3 Minute Journals—What Can You Do to Make a Paper Helicopter Fly the Best?
      3. Draw numbers to share out
      4. Review 6 Steps of Scientific Method, match up to Paper Helicopter Challenge
      5. Practice Vocabulary by Drawing Numbers

Friday—

* + - * 1. Go Fish for Vocabulary
        2. Use cream separator and toy tractor to introduce ideas of models
        3. Partner brainstorming-examples of models
        4. Compile class list of models
        5. Begin to read and complete book notes together 1.3—Scientific Models