8th Grade NGSS Integrated Course Sequence

Start the year off with a strong foundation. Begin with a unit on Design Thinking or Scientific Method.

Design Thinking

- MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
- MS-ETS1-2. Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

Scientific Method

- MS-ETS1-1. Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

DCI

Motion and Stability

7-8 weeks

Energy

2-3 weeks

Waves

2-3 weeks

Heredity

2-3 weeks

Biological Evolution

5-6 weeks

Earth's Place in the Universe

6-7 weeks

Performance Expectations

- MS-P5-1. Apply Newton's Third Law to design a solution to a problem involving the motion of two colliding objects.
- MS-P5-3. Construct and interpret graphical displays of data to describe the relationship of the mass of an object to the speed of an object.
- MS-P5-4. Construct and interpret graphical displays of data to describe the relationship of the mass of an object to the speed of an object.
- MS-P5-5. Construct and interpret graphical displays of data to describe the relationship of the mass of an object to the speed of an object.
- MS-P5-1. Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.
- MS-P5-2. Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
- MS-P5-3. Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
- MS-P5-4. Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
- MS-P5-5. Ask questions about data to determine the factors that affect the strength of electric and magnetic forces.
- MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
- MS-ETS1-2. Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

Mosa Mack Units

- Forces & Motion
- Electricity
- Potential and Kinetic Energy
- Waves
- Mutations
- Selection & Adaptation
- Evidence of Evolution
- Scale in the Solar System
- Sun-Earth System & Solar System Gravity

MOA MACK

SCIENCE