



CSI: SCIENCE

Curriculum Support Information



Terminology (make flashcards and practice them for 15 minutes each night):

- Position:** The location of an object
- Motion:** The change of position of an object
- Speed:** How far something moves over a certain amount of time
- Velocity:** The speed and direction of an object
- Acceleration:** Any change in the speed or the direction of an object in motion
- Force:** A push or pull
- Inertia:** The property of matter that keeps an object from changing speed or direction unless a force acts on it
- Gravity:** A force that pulls everything toward Earth
- Gravitation:** A force that acts between all objects and causes them to pull on each other
- Weight:** The gravitational force that pulls on an object
- Friction:** A force that slows down or stops motion between objects that are touching
- Work:** The use of force to move an object from one place to another
- Simple machine:** A machine that has only a few or no moving parts
- Lever:** A bar that pivots, or turns, on a point that does not move
- Fulcrum:** The fixed point of a lever
- Wheel-and-Axle:** A simple machine that has a wheel and an axle that turn together
- Pulley:** A wheel with a line around it
- Inclined plane:** A slanted surface, such as a ramp
- Screw:** A post with an inclined plane wrapped around it
- Wedge:** Two inclined planes put back-to-back

Simple Machines and Force & Motion

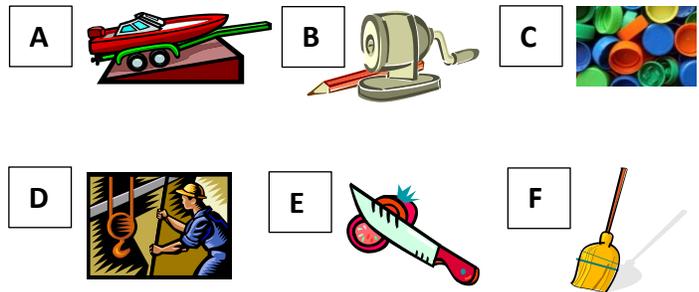
Students will: **Fourth Grade 3 of 5**

- Identify simple machines and explain their uses
- Observe how different forces affect speed and motion
- Explain what happens to the speed or direction of an object when a greater force than the first one is applied to it
- Explain the effect that gravitational force has on the motion of an object

Further Investigations
 Remember to check out Ms. Peterson's website at <http://APaigePage.weebly.com>. Here, you will find the Investigations for this unit.

Classroom Cases:

- Match the letter of each picture to the name of the simple machine it is an example of in the chart below.



Simple machine	Picture	Examples
Lever		
Pulley		
Wedge		
Inclined Plane		
Screw		
Wheel- and-axle		