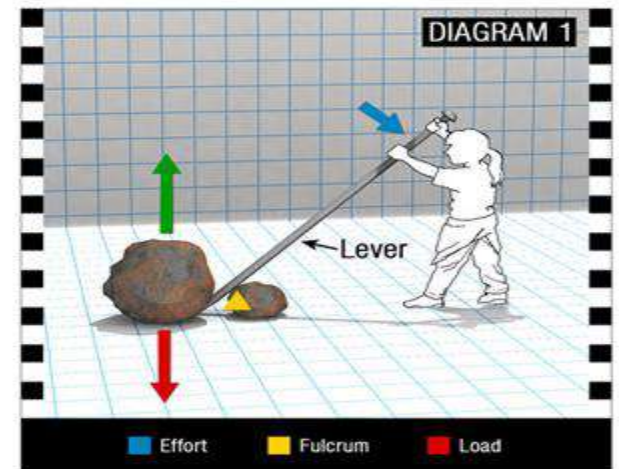


What is a Force?

Objectives

- **Describe** forces, and explain how forces act on objects.
- **Determine** the net force when more than one force is acting on an object.
- **Compare** balanced and unbalanced forces.
- **Describe** ways that unbalanced forces cause changes in motion.



I. Forces Acting on Objects

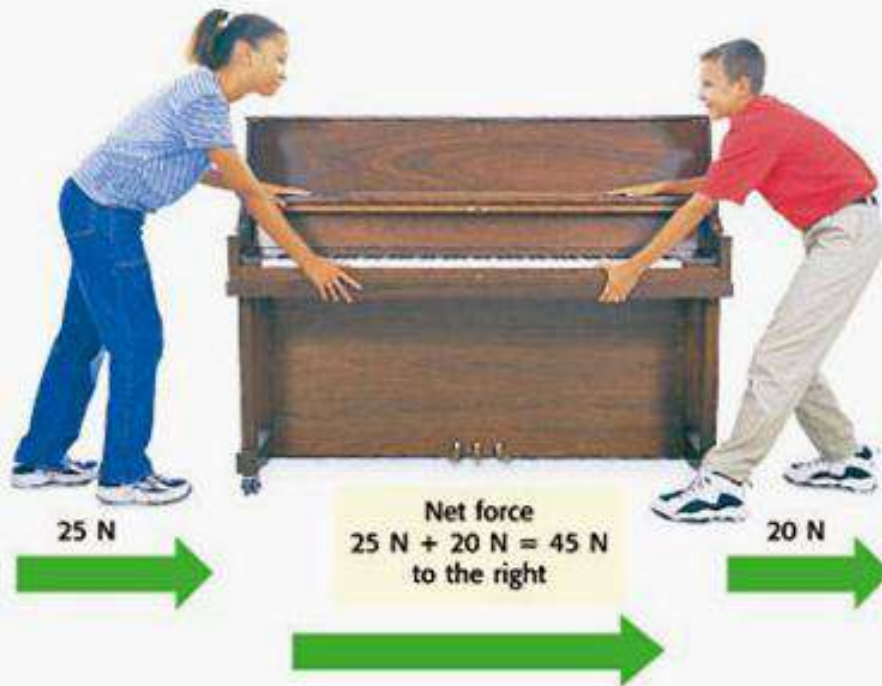
A. Being Pushed Around All forces act on objects. For any push to occur, something has to receive the push.

B. Unseen Sources and Receivers of Forces It is not always easy to tell what is exerting a force or what is receiving a force. You cannot see what exerts the force that pulls magnets to refrigerators. And you cannot see that the air around you is held near Earth's surface by a force called gravity.



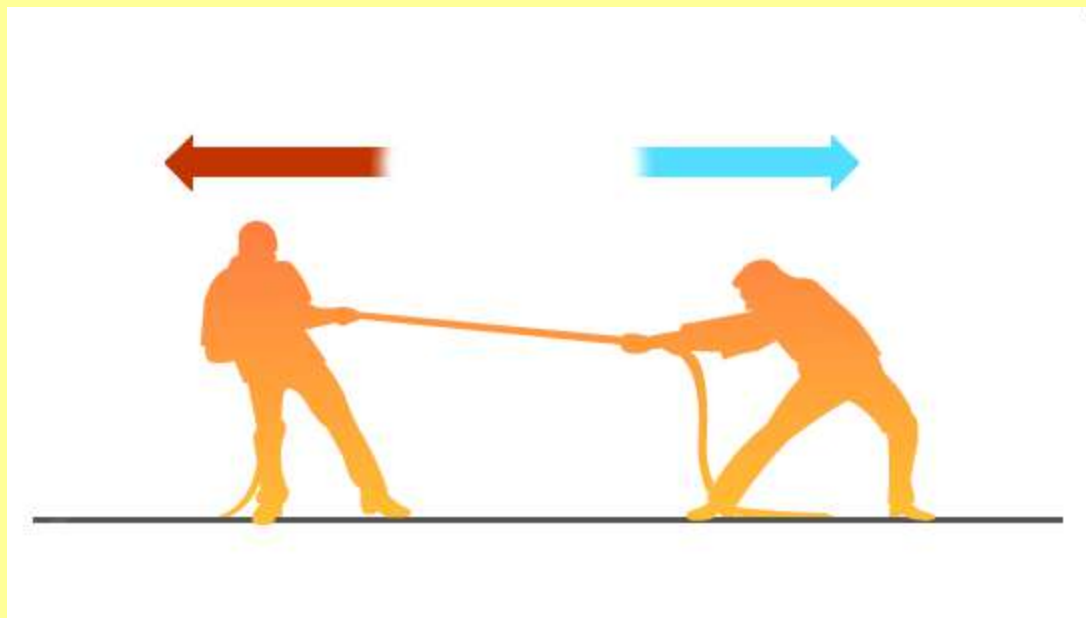
II. Determining Net Force

A. Forces in the Same Direction Two forces are added to determine the net force if the forces act in the same direction.



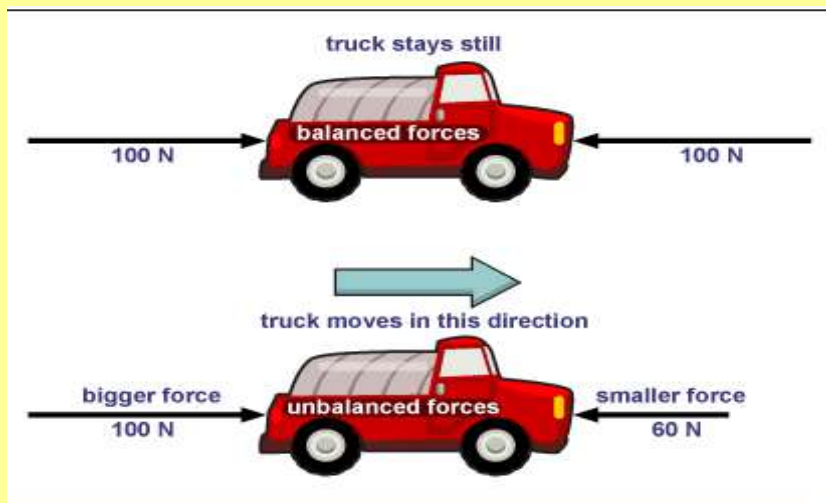
II. Determining Net Force

B. Forces in Different Directions If forces are in opposite directions, the net force is found by subtracting the smaller force from the larger one.



III. Balanced and Unbalanced Forces

A. Balanced Forces When the forces on an object produce a net force of 0 N, the forces are balanced.



B. Unbalanced Forces When the net force on an object is not 0 N, the forces on the object are unbalanced.

Science Journal Entry #3

- Draw 3 examples of balanced forces.
- Then, draw 3 more pictures showing what happens when the forces become unbalanced.

