

Science Ch. 1, lesson 2

Vocab.

- ***friction**- a force between two moving objects that slows them down
- ***balanced forces**- forces that cancel each other out when acting together on an object
- ***unbalanced forces**- forces that do not cancel each other out and that cause an object to change its motion
- ***force**- a push or pull

Forces

- *objects do not move by themselves
- *force must be applied to an object to change its motion
- *forces can be large or small
- *the force a train engine uses is a large force
- *the force your hand uses to lift a feather is small

Balanced and

Unbalanced Forces

- *forces can set objects in motion
- *heavy objects do not move
- *gravity tries to pull while a force pushes
- *balanced forces are sometimes equal in size and opposite in direction, but they do not have to be
- *when an object is standing still, all forces are balanced

*when an object is moving, all forces are also balanced

*balanced forces do not cause a change in motion

*forces that are not equal to each other are unbalanced forces

*if there is more than one force, all the forces determine the direction of the motion

Changing Motion

*to make an object remain still, place it on the floor

*to make an object move forward, pull from the front

*to make an object move faster going forward, pull or push with greater force

*to make an object move sideways, push or pull from one side

*to make an object move up, push up

*to make an object move down, push down