

Name \_\_\_\_\_ Date \_\_\_\_\_ # \_\_\_\_\_

## Force and Motion

Have you ever kicked a ball or pushed a swing? When you do, you are using a force to make something move. Force and motion are part of our everyday lives!

### What Is Force?

A force is a push or a pull. When you push your friend on a swing, you are using a force. When you pull open a door, you are using a force. Forces can make things start moving, stop moving, or change direction.

### What Is Motion?

Motion means movement. When something is moving, it is in motion. A rolling ball, a flying bird, and a running dog are all in motion. Things move in different ways—they can go fast or slow, straight or in a curve.

### How Are Force and Motion Connected?

Force is needed to start something moving or to make it stop. If you kick a soccer ball, it rolls because of your force. If you catch the ball, it stops because your hands use force. The size of the force can change how fast something moves. A big push makes a ball go faster and farther than a small push.

### Friction

Friction is a force that happens when two things rub together. It can slow things down or stop them. That's why a ball rolls farther on smooth ground than on rough grass.

### Comprehension Questions

1. What is a force?
  - a) Something you can eat
  - b) A push or a pull
  - c) A kind of animal
2. What does motion mean?
3. Give one example of using a force in real life.
4. How does friction affect motion?
5. What happens if you give a ball a big push instead of a small push?