



Force & Motion

Name _____



Speed, Velocity & Acceleration

Purpose: To practice calculating speed.
To distinguish between speed and velocity.
To observe the causes of acceleration.

Background Information: *Speed* is defined as distance traveled per unit time. It can be calculated by using the formula: **$S=D/T$** .

Velocity is speed and direction.

Acceleration is any change in velocity; or any change in speed or direction.

Question: What types of things affect the speed, velocity, and acceleration of an object?

Prediction (use a complete sentence):

Materials:

Stopwatch	Marbles of different sizes	Meter stick
Wooden blocks	Ramp for the marble	

Procedure:

1. Using the materials provided, calculate the speed of a moving marble under at least **five** different conditions. (different heights of ramp, different sizes of marbles, different starting places for marbles...)
2. Remember to repeat your trials at least five times.
3. Record all of your data in a data table.

Data:

