Name _____ Date _____ Class _____

School to Home **LESSON 2**

Speed and Velocity

Directions: *Use your textbook to answer each question or respond to each statement.*

1. **Speed is a measure of the distance an object travels in a unit of time.**

   What is the difference between constant speed and instantaneous speed?

2. **Average speed is the total distance traveled divided by the total time taken to travel that distance.**

   Find the average speed of a marble that takes 6 seconds to roll 30 m across a gymnasium floor.

3. **Distance-time graphs show the way the distance an object travels changes over time.**

   A distance-time graph shows the motion of two bicycle riders. Each rider's motion is represented on the graph by a diagonal line sloping upward from left to right. The graph shows that they traveled the same distance. However, the line representing the motion of Rider #1 slopes upward more steeply than the line representing the motion of Rider #2. What can you conclude about the speed of the two riders? Which rider arrived at his or her destination first?

4. **Speed does not describe motion completely.**

   What is velocity, and how does it differ from speed?