The Need for Speed!

Name __________________________ Date __________________ Class ______ EN ______

Your task is to get a marble to roll at the assigned speeds. To do this you should use a track. Make sure you catch the marble at the end of the track!

Assigned speeds: **1.0 m/s and 0.5 m/s**

Questions:

1. What are two quantities that you will have to measure in order to determine the speed of the marble?

   ____________________________________________

2. What are two ways that you can get your marble to roll?

   ____________________________________________

3. How will you change the speed of the marble?

4. Will you be calculating average speed or instantaneous speed?

5. Describe the relative velocity of the marble
   a. At the beginning __________________________________________
   b. In the middle __________________________________________
   c. At the end __________________________________________

6. Overall, what happened to the velocity of the marble over the course of its trip?

7. How many seconds does it take for the marble to complete the track at
   
   **Show your work**

   a. **1.0 m/s** ______________ sec

   b. **0.5 m/s** ______________ sec