Honors Physics Mr. McMullen

Name _____ Date_____ Period _____

EXPERIMENT 3.1 Uniform Motion

4. Write an explanation for what the graph shows. Point out any changes in the slope of the line and describe what the slope represents.

5. Look at both graphs. Explain how the shape of the second graph correlates with the shape of the first graph.

6. In your experiment, which was the independent variable and which was the dependent variable?

Extension

1. Using the actual period for your recording timer, convert each interval to actual time in seconds. Each interval consists of five spaces (dots) from the initial dot, so the actual time for the interval will be five times the period of your recording timer. Calculate the average velocity in cm/s for each interval.

2. Using your velocity-time graph, answer the following.
   a. What does the area under the line on the graph represent?

   b. Make an estimate of the area under the curve. How does the area compare to the total displacement for the same number of intervals?

   c. What does the slope of the line represent?