Name: $\qquad$ Date: $\qquad$ Period: $\qquad$

## Speed and Acceleration Webquest

Go to: http://www.solonschools.org/SolonNet/FIS/Webquests/Process.aspx?ID=1602\&WQID=1388

Follow the directions, answer all questions.

Part 1:
\#1

Difference between instantaneous and average speed:

What are you reading when you look at a speedometer:
\#2

What is constant speed?

Solve the problem here (make sure to show all 4 steps)

Equation:
Plug in:

Variables:
Answer with units:
\#3

What is the equation for acceleration?

What are three different units that can be used for acceleration?

Solve the problem:

Part 2
\#1

What is the relationship between the slope of a position-time graph and velocity?

If the slope on a position-time graph increases, what happens to the velocity?
\#2

Explain to me in detail how you calculate the velocity of a moving object from two points on a positiontime graph.
\#3

From reading this page, tell me what the slope of a velocity-time graph tells you.

Also draw a rough sketch of a velocity-time graph for an object with a constant velocity and an object that is accelerating.

How do you know from a velocity-time graph whether an object is accelerating or decelerating?

Also, complete the last exercise on check your understanding at the bottom of this page. List all instances below that are TRUE.

