**AP Physics 1-D Kinematic Motion Video**  Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. <http://ia700204.us.archive.org/14/items/AP_Physics_B_Lesson_01/Container.html>

**Study Guide**

**Part I – Velocity**

1. The study of simple motion is called\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The change of position is known as\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and is denoted with a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. The time it takes to move from position to another is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. The average velocity equation is:
5. So if it takes you 20 minutes to travel 7 km. What is your average velocity\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. If you make a plot of displacement versus time \_\_\_\_\_\_\_\_\_\_\_\_\_of the curve gives you instantaneous velocity at that moment.
7. Your speedometer tells you\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. Speedometer gives:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Part II – Acceleration**

1. When you speed up or slow down, your velocity changes in that that is called\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. a) Average Acceleration is define as: a)

b) Average Acceleration Equation

1. Graphically acceleration is the slope of a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_curve.
2. When the change in velocity is a straight line the acceleration is\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Three Equations for Constant Acceleration:

1)

2)

3)