**Acceleration Notes-** *Complete using Power Point & attach in your notebook*

The \_\_\_\_\_\_\_\_\_\_\_\_\_ acceleration of an object is defined to be the ratio of its change in velocity

to the \_\_\_\_\_\_\_\_\_\_\_\_\_ taken to change the velocity.

Acceleration formula: aav =

Δv =

Δt =

The “sign” of the acceleration indicates whether the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is increasing or decreasing.

A \_\_\_\_\_\_\_\_\_\_\_\_ sign indicates that the velocity is increasing. It will also be an increase in

speed if the object is \_\_\_\_\_\_\_\_\_\_\_ in the positive direction. It is a \_\_\_\_\_\_\_\_\_\_\_\_ in speed otherwise.

A negative sign indicates that the velocity is \_\_\_\_\_\_\_\_\_\_\_\_. It will also be a decrease in speed if

*the object is traveling in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ direction. It is an increase in speed otherwise.*

What can we say about changes in speed and/or velocity if the acceleration is either increasing or decreasing?

An object’s acceleration tells us how the object’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is changing.

In order to know what this change in velocity is doing to the object’s speed, we must know the

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the object is traveling.

As a rule, if the object’s velocity and acceleration are in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ direction (have

the same sign), we can say that the object’s speed is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

If the velocity and acceleration are in opposite directions (have \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ signs), we know that the object’s speed is decreasing.

**\*\*\*Complete 5 acceleration problems in your notebook**

**& turn in *both* worksheets\*\*\***