Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Friction Notes:

Weight: The force of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ acting on an object.

 Since F=MA and weight is a \_\_\_\_\_\_\_\_\_\_\_\_\_

 Fg=mg where g= the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ due to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 On earth g=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Friction and Air Resistance are forces that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ motion.



Friction:

 Origin of friction is \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ between solid \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

 Depends on \_\_\_\_\_\_\_\_\_ force (also called \_\_\_\_\_\_\_\_\_\_ force) and on properties of the surface.

 Depends on the \_\_\_\_\_\_\_\_\_\_\_\_ of the surfaces that are moving over each other and the \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ between the objects

* + \_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_\_ () is a dimensionless ratio that relates the \_\_\_\_\_\_\_\_\_\_ of the surfaces
	+ \_\_\_\_\_\_\_\_\_ force=support force. We will only be dealing with flat surfaces so Fn=weight=\_\_\_\_\_\_\_\_\_\_

Free Body Diagram

* A free body diagram outlines all of the \_\_\_\_\_\_\_\_\_ that act on an \_\_\_\_\_\_\_\_\_
	+ Fa=\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_
	+ Ff=\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_
	+ Fn=\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_
	+ Fg=\_\_\_\_\_\_\_\_



What does each force mean?

* Fa=\_\_\_\_\_\_\_\_\_ force. The \_\_\_\_\_\_\_\_\_ force that is being exerted on the object in order to make it \_\_\_\_\_\_\_\_\_\_.
* Ff=\_\_\_\_\_\_\_\_\_ force. The retarding force that \_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_ of the object.
* Fg=\_\_\_\_\_\_\_\_\_\_\_. Force of \_\_\_\_\_\_\_\_\_\_ on the object.
* Fn=\_\_\_\_\_\_\_\_\_\_ Force. The \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ force the \_\_\_\_\_\_\_\_\_\_\_\_ exerts on the moving object.

For friction problems, you will have to use the following equations:

1. Fn=m\*g
2. Ff=\*Fn
3. Fnet=Fa-Ff
4. Fnet=M\*A