

Name: \_\_\_\_\_

## Forces

A force is simply a push or a pull. Friction is a force that \_\_\_\_\_ motion.  
Frictional forces depend upon the types of materials in contact and the \_\_\_\_\_  
of the objects. More contact means greater frictional force!

Various types of friction:

Static friction - force required to overcome a \_\_\_\_\_ object. Ex: pushing against  
a desk. If you don't push hard enough, the desk doesn't move. If you push hard enough, you  
have overcome \_\_\_\_\_ and now deal with sliding friction.

Sliding friction - occurs when two objects slide over each other. Give an example of sliding  
friction: \_\_\_\_\_

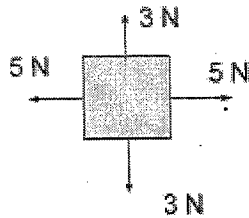
Rolling friction - Friction between a surface and a rolling object. Easier to overcome than sliding  
friction. Write your example here: \_\_\_\_\_

Fluid friction - Friction between an object and a fluid. Fluids can be either \_\_\_\_\_ or  
\_\_\_\_\_. Ex: A swimmer in water or a skydiver in free fall.

Net force: The \_\_\_\_\_ of all of the forces acting on an object.

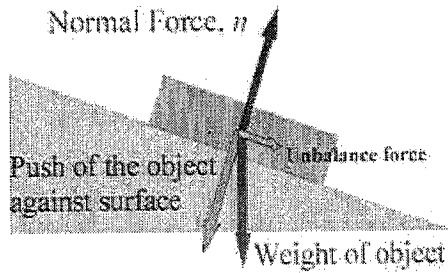


Net force: \_\_\_\_\_

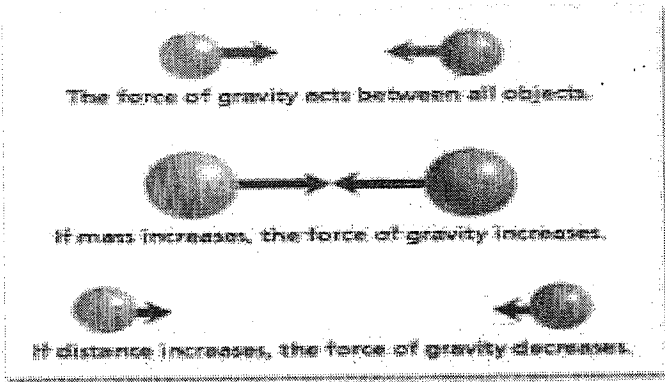


Net force: \_\_\_\_\_

Normal force: A force that always points perpendicular to the surface of contact with another object. Example: book sitting on a table.



Gravitational force: force of attraction due to mass of an object. Is impacted by the \_\_\_\_\_ and \_\_\_\_\_ of an object.



Centripetal force: a force that acts on an object moving in a \_\_\_\_\_ path and is directed toward the center around which the \_\_\_\_\_ is moving. What are some real world examples that relate to the images below?

