

## Newton's 1<sup>st</sup> Law – Guided Notes

A force is a \_\_\_\_\_ . Forces are measured in \_\_\_\_\_ .

### Two types of forces:

1. \_\_\_\_\_

2. \_\_\_\_\_

### Examples of long range forces:

1. \_\_\_\_\_

2. \_\_\_\_\_

### Examples of Forces:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Demo

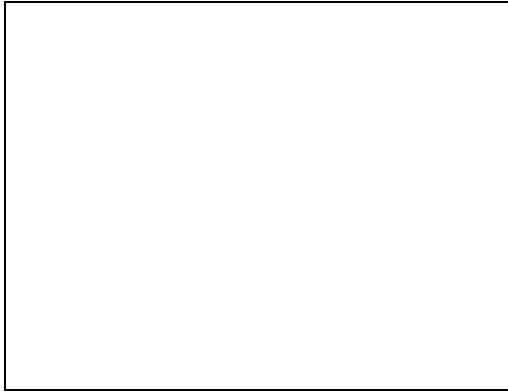
What happened when the index card was flicked?

### Balanced Forces

A shopping cart stops after being pushed once because the forces become unbalanced. This happens because of the force of \_\_\_\_\_ .

### Newton's 1<sup>st</sup> Law says:

**FBD of Coin on the Index Card:**



**FBD of Coin Without the Index Card:**



A net force is \_\_\_\_\_.

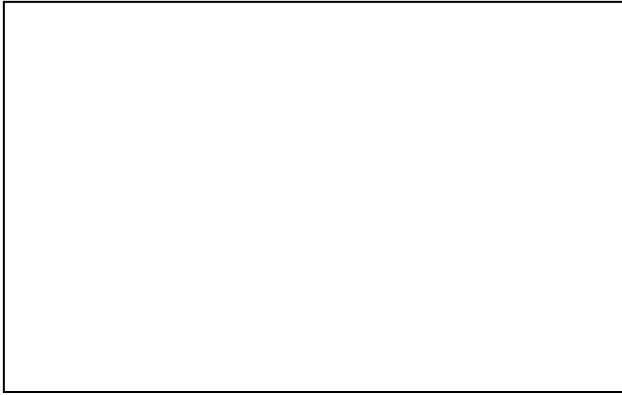
Net force is otherwise known as \_\_\_\_\_ or \_\_\_\_\_.

**Tug of War Diagram:**



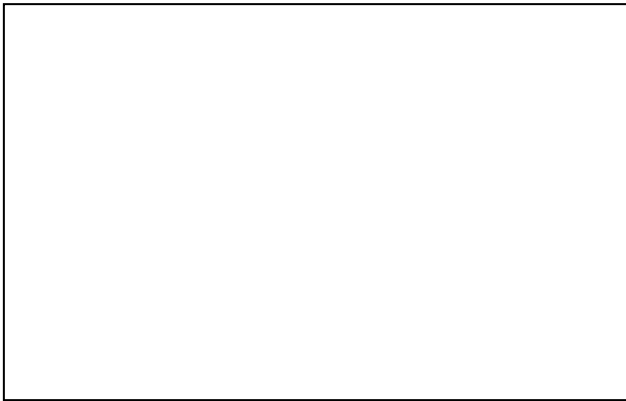
The net force in this situation will be \_\_\_\_\_ N to the \_\_\_\_\_ (right/left).

**Forces Box Diagram:**



The net force in this situation will be \_\_\_\_\_ N to the \_\_\_\_\_ (up/down/right/left).

**FBD of Table:**



**FBD of a Brick/Ball on a Slope:**



