**Notes: Force**

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

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per. :\_\_\_\_\_\_\_\_\_\_**

* **Force** is represented by an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which points in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the force.

 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ force

 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ force

* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the arrow tells you the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the force. The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the arrow, the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the force.

 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ force

 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ force

* Force is measured in units called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The abbreviation is \_\_\_\_\_\_\_\_\_.
* To find the **net force** acting on an object, you \_\_\_\_\_\_\_\_\_\_\_\_\_ together the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of all of the individual forces.

|  |  |
| --- | --- |
| **20 N****10 N** | \_\_\_\_\_\_\_\_\_\_\_\_ **+** \_\_\_\_\_\_\_\_\_\_\_\_ **=** \_\_\_\_\_\_\_\_\_\_\_\_ |
| **8 N****16 N** | \_\_\_\_\_\_\_\_\_\_\_\_ **+** \_\_\_\_\_\_\_\_\_\_\_\_ **=** \_\_\_\_\_\_\_\_\_\_\_\_ |
| **10 N****10 N** | \_\_\_\_\_\_\_\_\_\_\_\_ **+** \_\_\_\_\_\_\_\_\_\_\_\_ **=** \_\_\_\_\_\_\_\_\_\_\_\_ |

* When the net force is **zero**, it is called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ force. These forces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ an object’s motion.
* When the net force is **nonzero**, it is called an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ force. These forces \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ an object’s motion. If the forces are acting in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ directions, the net force is in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ direction as the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ arrow.

**10 N**

**20 N**

 Net force = \_\_\_\_\_\_\_\_\_\_\_\_ , which means the box will

 move to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Example drawings**

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| **Balanced forces pushing** | **Balanced forces pulling** |
| **Unbalanced forces pushing in the same direction** | **Unbalanced forces pulling in opposite directions** |