Eclipses and Tides Notes Key!

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

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_

**Movement of the Earth, Moon and Sun!**

Rotation- \_the act of rotation or spinning around an axis or center

Revolution - \_\_the circular movement of an object around a center\_\_\_

Orbit- \_\_\_the curved path of a revolving object\_\_\_\_

**Solar Eclipse!**

* The \_\_moon\_\_\_ comes between the \_\_Sun\_\_\_\_\_ and the \_Earth\_\_\_.
* The \_Moon\_\_\_ casts a shadow on the \_\_\_Earth\_\_\_.
* A Solar Eclipse can happen during a \_\_\_new\_\_\_\_ \_\_\_\_moon\_\_\_\_\_.



**Lunar Eclipse!**

* The \_\_\_Earth\_\_ comes between the \_\_\_Sun\_\_\_ and the \_\_moon\_\_.
* The \_\_Earth\_\_\_ casts a shadow on the \_\_\_Moon\_\_\_\_\_.
* A Lunar Eclipse can happen during a \_\_\_\_Full Moon\_\_\_\_\_\_\_\_



We don’t have eclipses every month because the moon’s \_orbit\_\_ has a \_\_tilt\_\_\_ to it causing the moon to pass above or below the Earth. **Tides Information**

* Tides are the \_\_\_rise\_\_\_ and \_\_\_fall\_\_\_\_ of water at a coastline.
* High tide - \_\_\_\_water comes in\_\_\_\_\_\_
* Low tide - \_\_\_\_water goes out\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Occurs in all bodies of water but is most noticeable with the \_\_\_ocean\_\_\_

**Causes of Tides**

* Tides are caused by the interaction of the \_\_\_Earth\_\_\_, \_\_Moon\_\_\_, and \_\_Sun\_\_.
* Gravity “pulls” on the water causing a \_\_tidal bulge\_\_\_.
* There are two types of tides: \_\_high\_\_\_\_\_ and \_\_\_\_\_low\_\_\_\_.

**High Tides**

* Occurs on two sides of the Earth:
	+ The side of the Earth that is \_closest\_ to the moon.
	+ The side of the Earth that is \_\_\_farthest\_\_ away from the moon.

**Low Tides**

* Occurs on two sides of the Earth:
	+ The sides of the Earth that are between the \_\_\_high tides\_\_\_\_.

**Spring Tides**

* The moon, sun, and Earth are in a \_\_\_\_straight line\_.
* High tides are \_\_\_higher\_ than normal and low tides are \_\_lower\_\_ than normal
* Spring tides happen during \_\_new\_ moons or \_\_full\_\_ Moons.

Sun

Sun

**Neap Tides**

* The moon, sun, and Earth are at a \_\_\_90 degree angle\_\_\_\_.
* High tides are \_\_\_lower\_\_\_ than normal and low tides are \_\_higher\_\_ than normal
* Neap Tides occur during \_\_\_\_quarter moons\_\_\_\_\_\_.

Sun