

Name _____

Sorting Tidal Influences



Tides on Earth are caused by **gravity pulling on the oceans**. The Moon is the main driver of daily tides, while the Sun also plays a role. Sometimes their pulls combine, and sometimes they work against each other. By sorting the causes, we can better understand how tides change.

Below is a list of tidal influences. Decide whether each one is mainly caused by the **Moon**, the **Sun**, or **Both**. Write your answers before each number.

Tidal Influences

1. Daily rise and fall of the oceans
2. Strong spring tides during new and full moons
3. Neap tides with the smallest difference between high and low water
4. Two high tides and two low tides each day
5. Slight additional pull that makes tides higher or lower depending on alignment
6. Strongest overall effect on ocean bulges
7. Gravitational pull working with the Moon during spring tides
8. Gravitational pull partly canceling the Moon's during neap tides

Reflection: Which do you think is more important for creating tides on Earth: the Moon or the Sun? Explain in 2-3 sentences.
