

Rubric Tides

Use pages 169-172 in your book.

Use a piece of blank paper to create a project which includes a clear explanation of the phenomenon of tides:

1. **Create a model** showing the differences in the moon's gravitational force on one side of Earth is stronger than the force on the Earth itself, and the force on the opposite side.
 - a. Label the locations of high and low tides.
 - b. Explain why there are two high tides and two low tides each day, using the model you created to support your explanation.
2. **Create a model** that can be used to explain
 - a. how the position of the moon and sun affect the tides
 - b. neap tides and spring tides.
3. **Construct an explanation** for why the moon has a greater gravitational influence over tides, but the sun has a stronger gravitational influence over Earth.
 - a. Create a gravity vs. distance graph similar to the one on page 169 to aid your explanation.