

Section 3 – Tides, the Sun, and the Moon

1. What are *tides*?

2. What two forces influence tides?

THE LURE OF THE MOON

Write the letter of the correct answer in the space provided.

_____ 3. The tides are influenced by

- a. gravity.
- b. seasons.
- c. weather.
- d. climate.

_____ 4. The moon's pull is strongest at the place on Earth that is

- a. opposite the moon.
- b. directly facing the moon.
- c. opposite the sun.
- d. directly facing the sun

_____ 5. The pull of the moon on the ocean causes water to bulge and create

- a. waves.
- b. the rotation of Earth.
- c. high tides.
- d. gravity.

_____ 6. The two factors that determine when tides occur are the rotation of Earth and the

- a. rotation of the moon.
- b. revolution of the moon.
- c. rotation of the sun.
- d. location of the sun.

_____ 7. How long does it take for a spot on Earth that is facing the moon to rotate so that it is facing the moon again?

- a. 24 h and 5 m
- b. 12 h and 5 m
- c. 12 h and 50 m
- d. 24 h and 50 m

TIDAL VARIATIONS

- 8. The difference in levels of ocean water at high tide and low tide is called a(n) _____.
- 9. Tides that occur when the sun, moon, and Earth are aligned are _____ tides.
- 10. Tides with the smallest daily tidal range are _____ tides.

TIDES AND TOPOGRAPHY

- 11. In your own words, what is a *tidal bore*?

- 12. What place on Earth has the greatest tidal range?

- 13. At what letters would we see Spring tides? ____ Neap tides? ____
Highest high tides? ____ Lowest high tides? ____

