

M O D E R N E A R T H S C I E N C E

Section 22.3

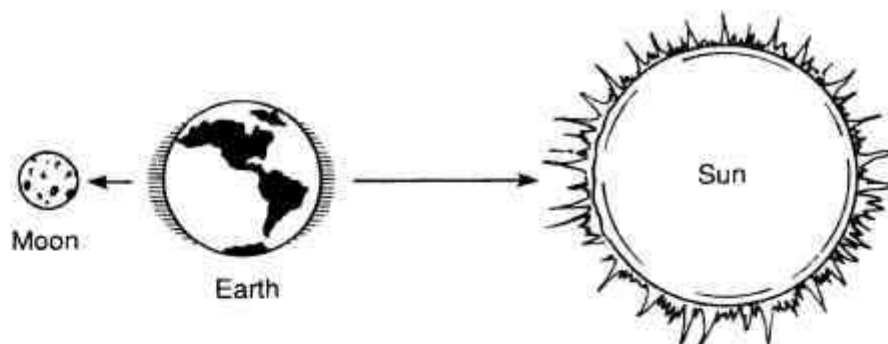
Tides

Read each statement below. If the statement is true, write *T* in the space provided. If the statement is false, write *F* in the space provided.

- _____ 1. The position of the sun has the greatest influence on the tides.
- _____ 2. High tides occur at the same time each day.
- _____ 3. According to Newton's Law of Universal Gravitation, the gravitational pull of the moon on the earth and its waters causes the rise and fall of the tides.
- _____ 4. Tidal range is the difference in time between two successive high tides.
- _____ 5. Tidal patterns are greatly influenced by the size, shape, and location of the ocean basin in which they occur.
- _____ 6. There are always two tidal bulges somewhere on the earth's surface.

Read each question and answer it in the space provided.

7. What is the term for a tidal current that flows toward the coast? _____



8. What type of tide is produced when the earth, sun, and moon are aligned as in this diagram? _____
9. What is the term for the surge of water that is sometimes seen when tidal currents move up rivers through a long bay? _____
10. What is the term for the tidal bulge that occurs during the first and third quarters of the moon? _____