

Name \_\_\_\_\_

## Explaining Why Tides Change Daily Answer Key

### Short Answer Questions (Sample Answers)

1. Tides change daily because the Moon's gravity pulls on Earth's oceans, and both the Earth's rotation and the Moon's movement cause the water levels to rise and fall at different times.
2. As Earth rotates, different coastlines pass into and out of the tidal bulges, which creates alternating high and low tides.
3. The Moon's orbit makes the timing of tides shift slightly each day, so tides don't happen at the exact same time every 24 hours.
4. When the Sun, Earth, and Moon line up during new or full moons, their gravity works together to create spring tides with the greatest difference between high and low tides.
5. Neap tides are weaker because the Sun and Moon form a right angle with Earth, and their gravitational forces partly cancel each other out.