## Name

## Sun, Moon, & Earth Study Guide

<u>Directions:</u> Fold study guide in half. Ask the question on the left. Check by turning the page over to look at the answers on the back. (This guide can be used alone or with a partner.)

\*Please remember this is a guide and the test may ask questions that are not on this guide.\*

Questions	Answers
1. What is the difference between rotate and revolve?	1. Rotate is when a planet spins on its axis. Revolve is when the planet goes around the sun.
2. What is an axis?	2. The imaginary line that goes through the North and South Pole.
3. What are the phases of the Moon?	Waxing Gibbous Moon  Full Moon  Waxing Crescent Moon  New Moon  New Moon  Waning Gibbous Moon  Three Quarter Half Moon  Waning Gibbous Moon  Waning Gibbous Moon
3. What is an equinox?	3. When the hours of daylight and darkness are the same. In the Northern Hemisphere, the spring equinox is on March 21, and the fall equinox is September 21.
4. What is a solstice?	4. The longest and shortest days of the year. In the Northern Hemisphere, the <u>summer</u> solstice is on June 21, and the <u>winter</u> solstice is December 21.
5. What causes seasons?	5. Seasons are caused by the tilt of the Earth towards the sun.
6. How long does it take the Moon to orbit the Earth?	6. 29.5 days

7. How long does it take the Moon to go through its phases?	7. 28-30 days
8. Why do the Northern and Southern hemisphere have opposite seasons?	8. The Earth will always be tilted closer to the sun in one of the hemispheres than the other. When the Northern Hemisphere tilts towards the Sun, the Southern hemisphere tilts away from it and vice versa.
9. Why do we see different phases of the Moon?	9. Because the sun's light shines on different parts of the Moon as it orbits the Earth.
10. How many time zones are there on Earth?	10. 24 time zones – it's the same as the number of hours there are in a day
11. What happens during a New Moon?	11. The Moon is between the Earth and the Sun.
12. What happens during a Full Moon?	12. The Earth is between the Moon and the Sun.
13. What is a constellation?	13. A group of stars that form a picture
14. How much of the Moon can we see from Earth?	14. We can only see one side (the front side) from Earth.
15. What does "lunar" mean?	15. "Lunar" means "moon" in Latin.
16. What is the difference between a gibbous and a crescent moon?	16. A gibbous moon has more light than darkness and a crescent moon has more dark than lightness. (A crescent moon typically looks like a banana.)
17. Who landed on the moon in 1969?	17. Neil Armstrong & Buzz Aldrin
18. What are the 4 major time zones in the United States?	18. Eastern, Mountain, Central, Eastern
19. If Earth took longer to orbit the sun, how would the seasons be different?	19. The seasons would be longer.

<sup>\*\*</sup> Students will need to be able to draw and label the phases of the moon in order.

<sup>\*\*</sup> Students will need to understand U.S. time zones and be able to figure out that if it is a certain time in one zone, what time will it be in another?