

Science Solar System Study Guide

1. How did sailors see stars to find their way when traveling on the ocean? (The stars did not move.)
2. What is a telescope? (It brings objects closer to make them appear larger.)
3. Constellations or patterns of stars do what? (They stay in the same pattern as they appear to move in the sky. Hint: It is not the stars that are moving.)
4. What is the similarity of stars and planets? (They are the same shape.)
5. What is the difference between stars and planets? (Stars are larger planets.)
6. Why can a planet be seen in different locations, but the pattern of stars in a constellation stay the same? (The stars making constellations are at fixed points.)
7. What makes our sun a medium star? (Color yellow, size, brightness, temperature)
8. A color of a star tells you what? (its temperature)
9. What is true about the objects in the sky? (Our Moon orbits the Earth.)
10. What is the length of time for Earth to make a revolution around the Sun? (1 year/365 days)
11. The sun rises and sets in the sky in what direction? (East to West)
12. From the full moon, what is the correct order of the phases of the moon? (Full, 3rd quarter, new, 1st quarter)
13. What is the approximate completion of the phases of the Moon? (1 month/29.5 days)
14. Why are summer days in the Northern Hemisphere hotter than the winter? (Northern Hemisphere tilted toward sun)
15. What makes the Sun appear to rise & set every day? (Earth's rotation)
16. Draw out the 8 phases of the moon starting with the New Moon.
17. What is the length of a rotation for Earth? (1 day/24 hours)
18. How often do you see a Full moon in a month/29.5 days? (1 time)
19. Describe/draw the movement the Moon makes throughout the month.
20. The Earth's tilt of its axis creates what? (Seasons)
21. Describe our solar system? (Its planets revolve around the sun.)
22. What describes Earth? (It is an inner planet. The moon revolves around Earth. The Earth revolves around the sun.)
23. What is the season that occurs after the Northern Hemisphere has been tilted away from the sun? (Spring)
24. What is true about the planets? (Earth is an inner planet.)
25. What is true about the outer planets? (They are made mostly of gas.)
26. Describe how seasons would be different if the Earth's axis was not tilted? (Same temperature & season yearly)
27. Write the planets in order from the Sun. (Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune)