

Quarter 2 – Astronomy

Study Guide

General Space

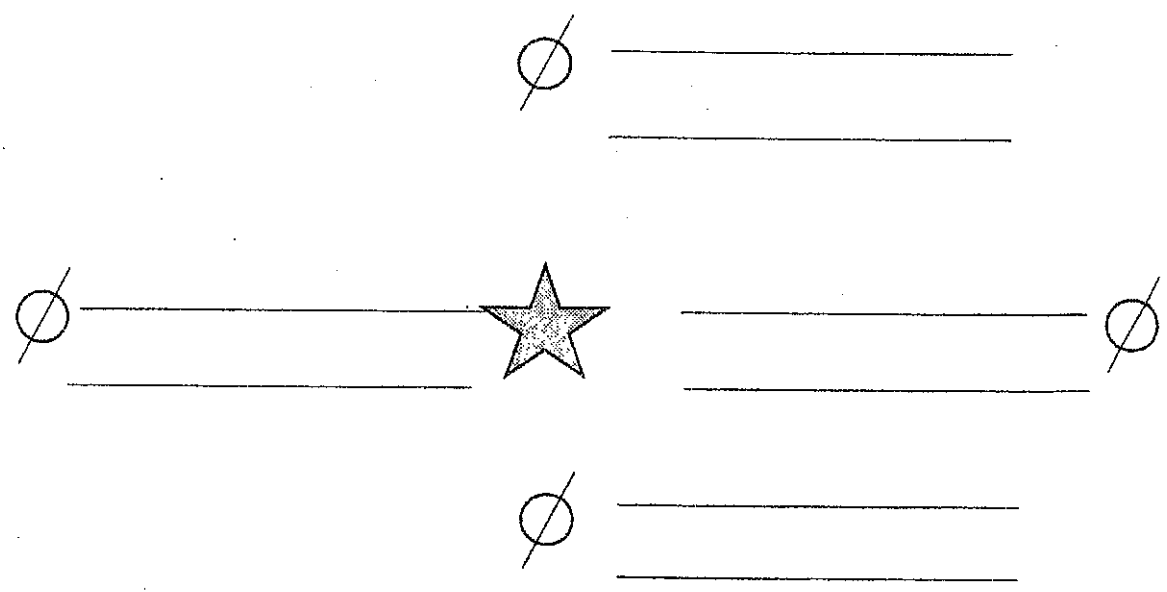
1. What scientist is known for their idea that the Sun was at the center of the solar system?

2. What does heliocentric mean? _____
3. How many degrees is the Earth's axis tilted? _____
4. What object has more gravity, a dog or an elephant? _____
 - a. Why? _____
5. Place the following in the correct order based on size: Sun, solar system, Earth, universe, galaxy
Smallest _____ Largest

6. Define rotation: _____
7. Define revolution: _____
8. What is the Sun? _____
9. How many stars are in our solar system? _____
10. How long does it take for the Earth to rotate on its axis? _____
11. How long does it take for the Earth to revolve around the Sun? _____

Seasons

12. What are the four seasons? _____
13. Label the following diagram for the seasons in BOTH hemispheres:



14. In what season will the northern hemisphere have the highest temperatures?

15. In what season will the southern hemisphere have the highest temperatures?

16. In what season will the northern hemisphere have the lowest temperatures?

17. In what season will the southern hemisphere have the lowest temperatures?

18. What seasons will the earth experience even heating?

19. During an equinox, the Earth gets _____ amounts of light on the hemispheres.

20. During a solstice, the Earth gets _____ amounts of light on the hemispheres.

21. In the summer, the sun's rays are (more/less) direct making the temperatures rise.

22. In the winter, the sun's rays are (more/less) direct making the temperatures drop.

23. In the spring and fall, the sun's rays are (more/less) direct at the equator.

Tides

24. What creates the tides on Earth? _____

25. There are _____ tides in a day.

26. Neap tides occur during which two moon phases? _____

27. Spring tides occur during which two moon phases? _____

28. What angle do the Moon, Sun, and Earth form during a Spring tide? _____

29. What angle do the Moon, Sun, and Earth form during a Neap tide? _____

Stars

30. What is a constellation? _____

31. The North Star is also called: _____

32. What is the term used for constellations that can be seen all year?

33. Why does it look like the constellations are moving? _____

34. Draw and label the following constellations: Ursa Major, Ursa Minor, Cygnus, Hercules, and Cassiopeia

Moon Phases and Eclipses

35. Why are there phases of the moon?

36. The Sun is always shining on how much of the moon? _____

37. Describe a solar eclipse: (Draw a picture too)

38. Describe a lunar eclipse: (Draw a picture too)

39. How many days does it take the moon to travel around (revolve) the Earth?

40. Draw the moon phase you would see and label it:

