

SCA Science 6 – Study Guide

Chapters 10 and 11

Name: _____

I. Fill in the Blank: Write the correct answer from the word bank

magnitude	nova	parallax
pulsar	supernova	variable stars

- _____ 1. a neutron star that spins rapidly on its axis
- _____ 2. the death explosion of a star
- _____ 3. an existing star that flares up and becomes brighter than normal
- _____ 4. stars that regularly or repeatedly change in magnitude
- _____ 5. a star's apparent movement in relationship to other stars
- _____ 6. the brightness of a star

aurora	chromosphere	corona	photosphere	solar flares
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- _____ 7. the surface of the sun
- _____ 8. created by solar storms exploding from the photosphere
- _____ 9. the outermost part of the sun
- _____ 10. energy emitted in the form of beautiful colors
- _____ 11. the atmosphere of the sun

II. Short answer:

12. _____ magnitude is how bright a star really is.
13. How bright a star looks to us is called _____ magnitude
14. The closet star to the Earth is the _____.
15. A cloud of interstellar gases and debris is a _____.
16. _____ is the closest planet to Earth. It is the brightest object in the morning and evening skies.
17. _____ is the planet closest to the sun. It is the smallest planet, about one-third the size of Earth.
18. Of all the planets, God made _____ unique in that it is the only planet able to sustain life.
19. One of the brightest objects in the night sky, _____ is visibly red.
20. _____ is known as the “ringed planet.”
21. The space probe *Voyager 2* revealed that _____ is a blue-green planet that rotates on its side.
22. _____ has the most violent weather in the solar system.
23. _____ is the largest planet in our solar system. All the other planets in the solar system could fit inside it!
24. The football shaped _____ of Jupiter is believed to be a huge hurricane that blows nonstop.
25. Saturn’s rings are made up of _____ that reflect the sun’s light.
26. Uranus’s color is produced by its atmosphere of _____
_____.

III. True – False: Write “T” for True or “F” for False.

- _____ 27. Refracting telescopes use mirrors to reflect light to make objects appear larger.
- _____ 28. Radio telescopes collect radio waves to detect objects in space that do not give off enough light to be seen by other telescopes.
- _____ 29. The scientific study of the stars is called astrology.
- _____ 30. An open star cluster is a constellation that revolves around the North Star.

IV. Complete the Statement: Circle the correct term

31. The complete turn of a planet on its axis is called a (revolution / rotation).
32. Dark spots on the photosphere of the sun are called (solar prominences / sunspots)
33. For a solar system object to be considered a planet it must orbit the sun, be large enough for its own gravity to keep it in the shape of a sphere, and not share its (orbit / atmosphere) with objects of similar size.
34. Junipter, Neptune, Saturn, and Uranus are the (inner planets / outer planets).
35. Earth, Mars, Mercury, and Venus are called the (inner planets / outer planets).
36. The inner planets are also known as (earth giants / terrestrial planets) because they are dense and composed of rocks.
37. A (lunar eclipse / solar eclipse) occurs when the moon passes between the earth and the sun.
38. A (lunar eclipse / solar eclipse) occurs when the moon passes through the shadow of the earth.