

Quiz #2 Version 1: Universe Structure and Objects orbiting the Sun (Quizlets 3 and 4)

Part 1: Matching

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| 1. _____ Our Sun's Name, in English: | 7. _____ A "dirty snowball," made of rock and ice. |
| 2. _____ The most distant part of the Solar System, where comets spend most of their time. Beyond the Kuiper Belt. | 8. _____ Explosions on the Sun's surface. |
| 3. _____ The shape of every orbit: | 9. _____ This describes a constellation that we can see all year round |
| 4. _____ The process that produces the Sun's energy: | 10. _____ Our Moon's name, in English: |
| 5. _____ What stars (including The Sun) are made of: | 11. _____ A constellation that is <u>not</u> circumpolar |
| 6. _____ A collection of stars that form a dot-to-dot picture in the sky. | 12. _____ A constellation that is circumpolar (It's not actually an official constellation, but we think of it as one) |
| | 13. _____ An explosion on the Sun's surface |
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| A) Comet | H) Mostly hydrogen "gas" [actually hydrogen plasma] |
| B) Nuclear Fusion [Hydrogen atoms joining and becoming Helium] | I) Solar flares and Coronal Mass Ejections (CMEs) |
| C) Solar Flare or Coronal Mass Ejection | J) Ellipse (oval) |
| D) Orion | K) The Oort Cloud |
| E) The Big Dipper | L) Constellation |
| F) "The Moon" [and sometimes, Luna] | M) Circumpolar |
| G) "The Sun" [And sometimes "Sol"] | |

Multiple Choice:

14. The objects in our solar system that have the least circular, most elliptical orbits:
 a. planets b. comets c. asteroids d. meteors
15. An object orbiting the Sun speeds up when it is:
 a. Moving away from the Sun B. Moving toward the Sun
 c. Tilted on its axis D. A gas giant
16. An object orbiting the Sun speeds up when...
 a. The Sun's gravity is pulling the **hardest**
 b. The Sun's gravity is pulling the **least**
 c. The Sun's gravity is pulling in the **same** direction the object is moving
 d. The Sun's gravity is pulling in a direction **opposite** of the direction the object is moving
17. This is what causes a comet's tail to form:
 a. The sun melting the comet's ice and "blowing" it away into space
 b. The friction from air rushing past the comet
 c. Pieces of ice that stick to the comet as it travels
 d. Extra material left over from the Big Bang
18. The direction in which a comet's tail points:
 a. Opposite the Comet's direction of movement b. In the direction that the comet is moving
 c. Directly toward the Sun d. Directly away from the Sun
19. The Sun's actual color (the color you would see if you were in outer space)
 a. Blue b. Green c. White d. Yellow e. Red

20. Describe two ways in which stars can differ from one another.

21. The drawing on the right represents the Big Dipper. Use the Big Dipper to find and **circle** the North Star (Polaris).



22. The drawing on the right represents Orion. On the diagram, circle the red giant star, Betelgeuse.



Bonuses: If you lost points, you can have one point back for each correct Bonus. If this puts you over 100%, your score is capped at approximately 101%.

Bonus #1. During what month is the Earth closest to the Sun?

Bonus #2. How many miles across is the largest known comet?

Bonus #3. Describe two effects of solar flares or coronal mass ejections.

Bonus #4. Describe three things that increase and decrease during a solar cycle.