

23. What type of Galaxy is our Milky Way? Where are we located?	23. Spiral galaxy Near the tip of the Orion Arm <i>25,000 LY away from the center (light years)</i>
24. What is gravity? Where in the universe does gravity have an effect?	24. The force that pulls all objects toward one another. Everywhere
25. What two forces work together to keep a planet or space object in orbit?	25. Gravity and inertia
26. How does mass affect the gravitational pull between two objects	26. Larger objects have more mass and therefore more gravitational pull. (The Sun is massive, and has great pull on the planets)
27. How does distance affect gravitational pull between two objects?	27. When the distance between two objects is smaller (they are closer) the gravity increases.
28. Why does the moon shine at night? What is the source of the moon's light?	28. The sunlight reflects off of the surface of the moon (that is the light that we see). The sun is the source of light
29. The sun always shines on what part of the moon?	29. Half of the moon is always lit by the sun. It changes shape because our point of view changes as the moon orbits around Earth
30. How long is one lunar cycle? – the time it takes the moon to go through all 8 phases	30. About 29.5 days
31. How long does it take the moon to rotate on its own axis?	31. About 29.5 days. This is why we always only see one side of the moon!
32. How long does it take the moon to go from one new moon to the next new moon	32. 30 days (29.5 days exactly)
33. It is the 1 st quarter moon. In how many weeks will it be the 3 rd quarter moon?	33. two weeks
34. During what phase of the moon can a solar eclipse take place?	34. New moon The moon comes between the Earth and Sun. (EMS)
35. During what phase of the moon can a lunar eclipse take place?	35. Full moon. The Earth comes in between the moon and Sun. (SEM)
36. What part of the sun can be seen during a total solar eclipse?	36. The sun's outer atmosphere (The Corona)
37. During an eclipse, the darkest part of the shadow is called the	37. Umbra
38. during an eclipse the lighter part of the shadow is called the	38. Penumbra
30. The first day of spring (daylight = darkness)	30. Spring or Vernal Equinox
31. The first day of summer (longest daylight hours)	31. Summer Solstice
32. The first day of autumn (daylight = darkness)	32. Autumnal Equinox
33. The first day of winter (shortest daylight hours)	33. Winter Solstice
34. Does the equator get four distinct seasons?	34. No, these areas get direct sunlight all year long
35. Why is it warmer in summer than in the winter in Georgia?	35. Because Earth's tilt makes Georgia receive more direct sunlight in summer.
36. During which seasons does neither hemisphere point towards the sun?	36. Spring and Fall

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1. List the correct order of the inner planets starting with the planet closest to the sun.	1. Mercury, Venus, Earth, Mars also known as "terrestrial planets"
2. List the correct order of the outer planets, starting with the planet closest to the sun.	2. Jupiter, Saturn, Uranus, Neptune also known as "gas giants"
3. The movement of a body in space around another body is called	4. revolution (revolution takes 1 year)
5. The path the revolving object takes is known as the	5. Orbit
6. The movement of a space object turning on its own axis is known as	6. rotation (rotation takes 1 day)
7. Which two planets do <u>not</u> have a moon	7..Mercury and Venus
8. How are Jupiter, Saturn, Uranus and Neptune similar	8. They are all huge fluid planets made of liquids and gases (very cold too!)
9. Why is the surface of Venus so hot?	9. Carbon dioxide in the atmosphere traps heat.
10. The giant red spot on Jupiter is actually	10. A huge storm, larger than Earth
11. Large pieces of space rock with irregular shapes are known as	11. Asteroids (most are found in the asteroid belt)
12. Most asteroids are found in the asteroid belt between the orbits of what two planets?	12. Mars and Jupiter
13. What are comets made of?	13. Ice, dust and small particles nucleus coma tail
14. Pieces of rock or dust that are smaller than asteroids in space	14. Meteoroids
15. When a meteoroid enters Earth's atmosphere it begins to burn, this streak of light is known as a	15. Meteor
16. If a meteor does not burn up all the way in the atmosphere, it is called a _____ when it hits the ground	16. Meteorite
17. The theory that the Earth is the center of the universe (old theory)	17. Geocentric Model or theory
18. List two scientists who supported the Geocentric theory	18. Aristotle, and Ptolemy
19. The current theory that the Sun is the center of our Solar System	19. Heliocentric Model or theory
20. List three scientists that helped prove the heliocentric theory.	20. Copernicus, Brahe, Galileo, Kepler
21. What does the Big Bang Theory explain? What evidence supports the Big Bang Theory?	21. How the universe was formed 10-15 billion years ago. Evidence that Galaxies are moving away from each other (also background radiation)
22. What is a galaxy? Name three types of Galaxies	22. A large group of stars held together by gravity. Spiral, elliptical, irregular 