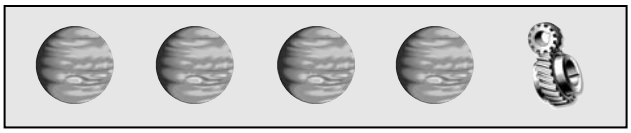
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Date: _____ Grade: _____

SECTION QUIZ 4-3



Remember:
Score an average of 85% or higher on all three quizzes, and you may be exempt from the chapter test!



Congratulations! You have completed this section!
Answer the following questions to test your understanding of the material. When you are finished, hand in your quiz to your teacher. Each answer is worth 2.12 points.

Match the planets:

1. _____ Neptune
2. _____ Pluto
3. _____ Uranus
4. _____ Saturn
5. _____ Neptune and Uranus
6. _____ Uranus and Venus
7. _____ Pluto and Neptune

(a) has thousands of rings—the most of any planet
(b) spins sideways and backwards, has 21 moons that also spin backwards and sideways
(c) discovered through math calculations, has highest winds
(d) both have retrograde rotations
(e) smallest, most recently discovered planet; sometimes called a "double" planet due to size of its moon
(f) called "twin" planets due to similar diameters and densities
(g) orbits cross paths

Fill in the blank: Choose the correct word from the WORD BANK.

WORD BANK

color	magnitude	empirical	truth	method
axis	red	temperature	Sirius	correctly
Polaris	black	hottest	orbit	frequently

8. The scientific _____ uses data, scientific laws and process skills.
9. Ethical science involves a search for _____ regardless of personal beliefs.
10. Scientists look for _____ data, which is information they can see, feel, hear, or touch.
11. In the light spectrum, _____ produces the longest wavelengths.
12. The key to the scientific method is to use the process skills _____.
13. Pluto is the coldest of all the planets and has the most tilted _____.
14. _____ reveals the _____ of a star.
15. Distance, size and temperature affect a star's _____.
16. _____ is the brightest star and over twice the size of our Sun.

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SECTION QUIZ 4-3

Multiple Choice: Choose the correct answer.

17. Which does the Big Bang Theory **NOT** assume? _____
_____

(a) The universe as we now see it got this way by chance over a long period of time.
(b) The universe first resulted from an explosion of a "cosmic egg."
(c) The universe resulted from purposeful, intelligent planning.
(d) The universe began as a concentrated mass of matter.

18. The Law of Conservation of Angular Momentum refutes (the): _____
_____.

(a) Law of Gravity
(b) Big Bang Theory
(c) Theory of Intelligent Design
(d) all of these

19. The Theory of Evolution assumes: _____
_____.

(a) the universe began in a complex way and got more simple over millions of years
(b) the universe began by chance with simple life forms becoming more complex over time
(c) the universe is a product of intelligent design
(d) both a and b

20. The Theory of Intelligent Design assumes: _____
_____.

(a) the universe is too complex to have happened by chance
(b) the universe began in a simple way and became more complex over time
(c) the universe came about from an explosion of concentrated matter
(d) the universe began in a complex way and became simplified

21. Isaac Newton, the greatest scientist of all time, believed the universe came into being by:
_____.

(a) a cosmic explosion (b) evolutionary development (c) intelligent design

22. The First Law of Thermodynamics states: _____
_____.

(a) the universe began as a "cosmic egg" millions of years ago
(b) things left to themselves deteriorate or progress from complex to simpler forms
(c) matter/energy cannot be created or destroyed, but can only change form
(d) complex, intricate, harmonious things do not happen by chance

23. The Second Law of Thermodynamics (Law of Entropy) states: _____
_____.

(a) the universe began as a "cosmic egg" millions of years ago
(b) things left to themselves deteriorate or progress from complex to simpler forms
(c) matter/energy cannot be created or destroyed, but can only change form
(d) complex, intricate, harmonious things do not happen by chance

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SECTION QUIZ 4-3

24. A group of stars that seems to form a picture is called a: _____.
    (a) supernova
    (b) constellation
    (c) galaxy
    (d) milky way

25. Star distance is measured by a special unit called: _____.
    (a) kilometers
    (b) AU's
    (c) light-years
    (d) miles

26. Absolute zero means no heat is present and: _____.
    (a) water freezes
    (b) solids freeze
    (c) all molecules stop vibrating
    (d) all gases become frozen vapors

True or False: Write the correct answer.

27. _____ The Law of Gravity depends upon mass and distance.

28. _____ All terrestrial planets have rings.

29. _____ Retrograde planetary movement has to do with spinning sideways.

30. _____ If all the planets in our solar system came from a single explosion of a homogeneous mixture, all the planets should have the same composition.

31. _____ Light travels at 300,000 miles per second.

32. _____ Saturn is called the most beautiful planet because of its rings.

Complete the Life Principles.

33. *"Aim for the Moon. If you miss, you'll land among the _____."*

34. *"The more you learn about things that seem _____, the less strange they seem."*

35. *"One event, decision or thing usually _____ another."*

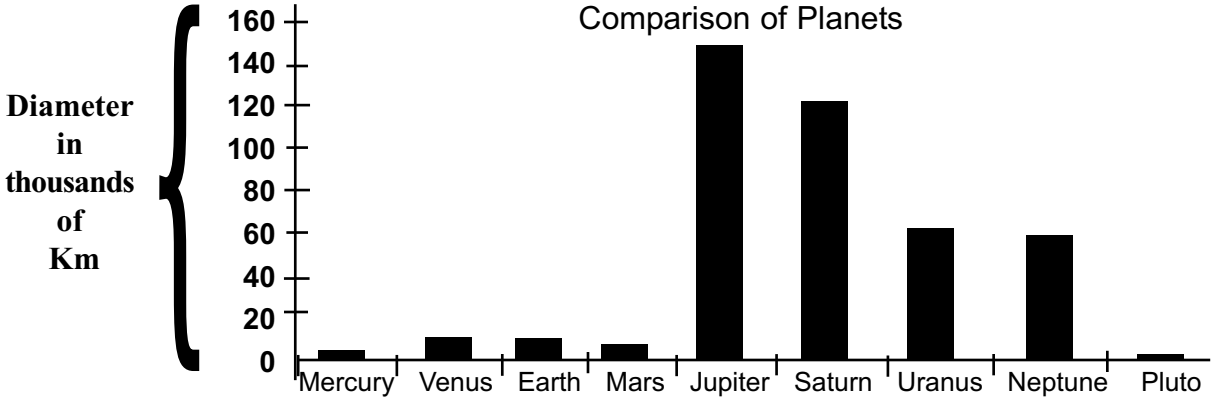
36. *"Do not overlook the _____ things in life. They may lead to something important!"*

37. *"Truth will always be truth, regardless of lack of understanding, _____ or ignorance."*

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SECTION QUIZ 4-3

Use the following bar graph to answer questions #38-41.



38. Which planet has the smallest diameter? _____

39. Which planet has the second smallest diameter? _____

40. Which planet has the largest diameter? _____

41. Which two sets of planets are closest in diameter?
_____, _____, and
_____, _____

Use the following table to answer questions #42-44.

Earth/Uranus Comparisons		
	Earth	**Uranus**
Diameter	**12,756 km**	**51,118 km**
Period of Rotation	**23 hours, 56 minutes**	**17 hours, 14 minutes**
Period of Revolution	**365.26 days**	**84.04 years**
Average Orbital Speed	**29.79 km/s**	**6.81 km/s**

42. Which diameter is 12,756 km? _____

43. Which planet has the larger diameter? _____

44. How long is the period of rotation for Uranus? _____

Use the following table to answer questions #45-47.

Uranus/Neptune Comparisons		
	Uranus	**Neptune**
Diameter	**51,118 km**	**49,528 km**
Density	**1.03 g/cm^3**	**1.66 g/cm^3**
Mass (E = 1.0)	**14.54**	**17.23**

45. What is the diameter of Neptune? _____

46. Which planet has the larger diameter? _____

47. Which planet is denser? _____

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