SECTION QUIZ 4-2

Date: _____ Grade: _____



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 2.1 points.

Matching:

1. _____ Fossils
2. _____ Laws of Heredity
3. _____ Law of Biogenesis
4. _____ Law of Entropy
5. _____ Theory of Evolution
6. _____ Natural selection
7. _____ Empirical data
8. _____ First Law of Motion/Law of Inertia

(a) simple life resulted from a cosmic accident or chance, developed into complex forms over millions of years
(b) all systems move from complexity and order to simpler, disordered forms
(c) evidence of once-living things
(d) organisms keep favorable qualities and discard unfavorable or harmful characteristics
(e) all objects resist change in motion
(f) living things can only come from other living things
(g) living things only produce offspring of their own kind
(h) observable information used to test scientific theories or hypotheses

True or False: Write the correct answer.

9. _____ Single, "simple" cells are really very complex.
10. _____ The Theory of Evolution is supported by scientific laws and the fossil record.
11. _____ The "plan and purpose" concept of the origin of life supports the Theory of Evolution.
12. _____ The Theory of Evolution was proven 140 years after *On the Origin of Species* was published.
13. _____ Darwin formulated the Theory of Evolution without knowledge of the Laws of Heredity.
14. _____ Jupiter is classified as a star because of its Giant Red Spot.

©Copyright 2005, Paradigm Accelerated Curriculum

SECTION QUIZ 4-2

Multiple Choice: Choose the correct answer.

15. What gives Mars its seasons? _____
    (a) its moons
    (b) its diameter
    (c) its distance from the Sun
    (d) its tilt of its axis

16. What causes Mars to appear red? _____
    (a) seasonal color changes
    (b) volcanic action
    (c) carbon dioxide in the dust
    (d) iron oxide in the rocks

17. The Viking probe unsuccessfully searched for _____ molecules on Mars, which would have indicated life forms.
    (a) iron oxide
    (b) organic
    (c) inorganic
    (d) carbon dioxide

18. What holds the planets together and their atmospheres in place? _____
    (a) magnetic force
    (b) gravity
    (c) temperature
    (d) the Sun

19. Upon which of these does the pull of gravity depend? _____
    (a) acceleration and rotation
    (b) velocity and friction
    (c) mass and distance
    (d) relative motion and mass

20. What is an example of moving at a constant velocity? _____
    _____
    (a) a car coming to a stop sign, stopping, and starting again
    (b) a train traveling at 60 mph
    (c) a person warming up, jogging, and then cooling down
    (d) a squirrel jumping from one tree limb to another

21. On Earth, what effect do air resistance and gravity have on moving objects? _____
    _____
    (a) none
    (b) speeds them up
    (c) slows them down
    (d) keeps them constant

22. Why do heavenly bodies in outer space keep moving but do not collide? _____
    _____
    (a) air resistance and friction
    (b) the orbits are elliptical
    (c) there is no air and the gravitational attraction is balanced
    (d) gases in the atmosphere are so light that they float

©Copyright 2005, Paradigm Accelerated Curriculum

23. How can you change the velocity of an object? _____
    (a) apply force
    (b) determine its mass
    (c) determine the gravitational attraction
    (d) calculate its inertia

Match the scientists:

24. _____ Isaac Newton
25. _____ Galileo Galilei
26. _____ Nicholaus Copernicus
27. _____ Charles Darwin

(a) British naturalist in 1800s, popularized the Theory of Evolution and natural selection, wrote *On the Origin of Species*
(b) Father of Modern Science, discovered first four moons of Jupiter and Saturn's rings in 1610
(c) Father of Modern Astronomy; claimed the Sun, not Earth, to be center of the universe
(d) Greatest scientist in history, formulated Laws of Gravity and Motion

Match the planets:

28. _____ Mars
29. _____ Pluto
30. _____ Saturn
31. _____ Jupiter
32. _____ Mercury, Earth, Mars, Venus
33. _____ Jupiter, Saturn, Uranus, Neptune

(a) most rings, most moons, considered most beautiful planet
(b) terrestrial planets, closest to the Sun, have similar composition
(c) the red planet, smaller than Earth, has seasons
(d) gaseous giants, have similar composition
(e) furthest planet from Sun, unlike other planets in composition
(f) largest planet, has striped appearance

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

		WORD BANK		
inertia	velocity		gravity	friction
time	terrestrial	motion	gaseous	elliptical
empirical	circular	Jupiter	Saturn	Earth

34. Relative _____ explains why we do not feel like we are moving when we actually are.
35. _____ planets are composed mainly of rock and dirt.
36. All planets in our solar system have _____ orbits.
37. _____ is the most dense planet.
38. The least dense planet is _____.
39. Rougher surfaces result in greater _____.

©Copyright 2005, Paradigm Accelerated Curriculum

SECTION QUIZ 4-2

Complete the Life Principles.

40. *"Seeing, hearing, feeling are miracles, and each part and tag of me is a _____."*
41. *"Being _____ isn't enough—you can be sincerely wrong."*
42. *"If I have seen farther than others, it is by standing on the shoulders of _____."*
43. *"Every cubic inch of space is a _____."*
44. *"Outward beauty can be _____."*

Use the following table to answer questions #45-48.

Earth/Jupiter Comparisons		
	Earth	**Jupiter**
Diameter	**12,756 km**	**142,796 km**
Period of Rotation	**23 hours, 56 minutes**	**9 hours, 55 minutes**
Period of Revolution	**365.26 days**	**11.86 years**
Average Orbital Speed	**29.79 km/s**	**13.06 km/s**

45. What is the diameter of Jupiter? _____
46. Which has a faster period of rotation? _____
47. Which has a faster orbital speed? _____
48. Which has the longer period of revolution? _____

©Copyright 2005, Paradigm Accelerated Curriculum