Name: _____

Date: _____ Grade: _____

SECTION QUIZ 6-3



Remember:
Score an 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 1.85 points.

Table 1

Volume

English System		**Metric System**
0.061024 cubic in.	=	Cubic centimeter
35.314667 cubic ft	=	Cubic meter (m^3)
Cubic inch	=	16.387064 cubic centimeters
Cubic foot;	=	0.028317 cubic meters;
7.480520 gal		28.31605 liters (*l*)
one ***gill***	=	23.656 milliliters (ml)
(4 gills = one pint)		

Work the following conversion problems. Refer to Table 1 and set up the problems in the space provided and use your calculator to perform the calculations. Write your answer on the blank.

1. Convert 25 cubic inches into cubic centimeters. _____

2. Convert 36 gallons into cubic feet. _____

3. Convert 12.5 gills into milliliters. _____

4. A tanker trailer on a gasoline truck holds approximately 5,000 gallons of gasoline. Calculate the volume of gasoline in the tank trailer in cubic feet, if the tank is one-half full. Round your answer to the nearest cubic foot. _____

©Copyright 2005, Paradigm Accelerated Curriculum

DUPLICATION BY WRITTEN PERMISSION ONLY.

5. The dimensions of a box used for shipping office supplies are 12 inches wide, 8 inches high, and 12 inches long. The volume of the box in cubic millimeters is _____ cubic millimeters.

Fill in the blank or choose the correct answer.

6. _____ (Weight, Length, Capacity) is another word for volume.

7. Unit conversions should be placed in such a manner as to _____ them out.

8. The formula for the volume of a rectangular prism is V = _____
(a) $l \times w$ (b) $l \times w \times h$ (c) $\frac{1}{2}bh$ (d) πr^2

9. m^3 means _____ meters.

10. The unit of temperature in the English System with 180 equal divisions between the freezing point (32°) and the boiling point (212°) is _____ (degrees Fahrenheit, degrees Celsius, degrees Kelvin).

11. The normal unit of temperature in the metric system with 100 equal divisions between the freezing point (0°) and boiling point (100°) of water is _____ (degrees Fahrenheit, degrees Celsius, degrees Kelvin).

12. The average citizen of the United States is most familiar with _____ units (Celsius, Fahrenheit, Kelvin).

13. Celsius measurements are a standard measurement for _____ in the scientific community all around the world.

14. The formula for converting Fahrenheit temperatures into degree Celsius is C = _____.
(a) $\frac{5}{9}(F - 32)$ (b) $\frac{9}{5}C + 32$ (c) neither of these

15. The boiling point of water is _____°F.

16. The formula for converting degrees Celsius into degrees Fahrenheit is F = _____.
(a) $\frac{5}{9}(F - 32)$ (b) $\frac{9}{5}C + 32$ (c) neither of these

17. Within the scientific community, scientists have an *absolute standard* of describing temperature called the _____ (Fahrenheit, Kelvin, Celsius) temperature scale.

18. Scientists consider _____°C as *absolute zero*, a point at which all motion within a molecule stops.

19. The formula for converting degree Celsius into degree Kelvin is K = _____.
(a) $273.16 + C$ (b) $K - 273.16$ (c) $\frac{5}{9}(K + 32)$

20. The x is usually isolated on the _____ side of the equals sign.

21. Five times a number decreased by 3.25 is the same as twice the number decreased by 1.3 is written mathematically as _____.

©Copyright 2005, Paradigm Accelerated Curriculum

DUPLICATION BY WRITTEN PERMISSION ONLY.

SECTION QUIZ 6-3

Table 2

Weight

one gill	=	4 ounces
one ounce (oz)	=	28.349523 grams (g)
one kilogram (kg)	=	2.204623 pounds
one pound	=	0.453592 kg or 453.59237 grams (g)
one ton	=	907.18474 kg 2,000 pounds

Work the following conversion problems. Refer to Table 2 and set up the problems in the space provided and use your calculator to perform the calculations. Write your answer on the blank.

22. One pound = _____ grams (g)

23. One ounce = _____ grams (g)

24. Five ounces = _____ gill

25. Two kilogram = _____ pounds

26. Convert 76 oz into gills. _____

27. 1.5 ton = _____ grams

28. 3 gills = _____ grams

©Copyright 2005, Paradigm Accelerated Curriculum

DUPLICATION BY WRITTEN PERMISSION ONLY.

29. 120.46 pounds = _____ kg

30. A milk tanker truck can haul approximately 23,000 kg of milk. The milk truck can haul _____ pounds of milk.

31. A soft drink can holds 12 fluid ounces of liquid. The nutritional facts list shows that one can contains 35 grams of carbohydrates. Calculate the amount of carbohydrates in a six-pack of soft drinks. Convert the answer into pounds.
grams: _____ pounds: _____

32. Convert 350°*F* into degrees Celsius. _____°*C*

33. The surface temperature of the Moon is estimated to be -243°*F* at the lowest point. Convert the surface temperature of the Moon at the lowest point into degrees Celsius. _____°*C*.

Work the following temperature conversion problems with the aid of your calculator. Show your work for setting up the conversions.

34. -30°*C* = _____ °*F*.

35. 350°*C* = _____°*F*

36. 35°*C* = _____°*K*

©Copyright 2005, Paradigm Accelerated Curriculum

DUPLICATION BY WRITTEN PERMISSION ONLY.

37. $70°K$ = _____ $°C$

Fill in the blanks.

38. *Times* means _____.

39. *Decrease* means _____.

40. *Increase* means _____.

41. *Same as* means _____.

Find the solution (solve for *x*) to the following problems. Show your work and write your answer on the blank. Be sure to use your calculator for the calculations.

42. $3x + 14 = 2x + 21$; x = _____

43. $13.5x - 3 = 4.5x + 6$; x = _____

44. Six times a number decreased by three is the same as three times the number increased by two. What is the number? x = _____

(a) 1.67 (b) 2.43 (c) 3.16 (d) none of these

45. Two times a number plus one is the same as the number, plus 5. What is the number?

x = _____

(a) 3 (b) 4 (c) 5 (d) 6

46. Seven times a number decreased by five, equals three times the number, minus 3. What is the number? x = _____

(a) .3 (b) .4 (c) .5 (d) .6

©Copyright 2005, Paradigm Accelerated Curriculum

DUPLICATION BY WRITTEN PERMISSION ONLY.

SECTION QUIZ 6-3

Match the following Life Principles.

47. _____ *"You can't do anything about the length of your life,*

48. _____ *"Commitment separates the doers*

49. _____ *"There is no part of life that does not contain its lessons.*

50. _____ *"The only way to solve the unknowns in our lives is to*

51. _____ *"Life consists of many absolutes.*

(a) *from the dreamers."*

(b) *Truth is one of them."*

(c) *If you are alive, there are lessons to be learned."*

(d) *but you can do something about its width and depth."*

(e) *put into the formula the absolutes we do know."*

©Copyright 2005, Paradigm Accelerated Curriculum

DUPLICATION BY WRITTEN PERMISSION ONLY.