


Name: _____

Chemistry I Pretest

1. If speed is equal to distance divided by time, and time is equal to distance divided by speed, what is distance equivalent to?
2. What speed is required to travel sixty miles in three hours?

3. Estimate the length of following line to the right in feet, inches, meters, and centimeters.
feet: _____ inches: _____
meters: - _____ centimeters; _____
4. On the planet Rigel-4 a relationship often used by students is: rads is equal to figs times quarks. When this relationship is solved for figs one would get:
5. How should a young child be dressed to play outside, if it is 35 degrees Celcius?
6. The formula for water is: _____.
7. 10 is to 5 as 100 is to ____ .
8. $\frac{10}{5} = 2$ and $\frac{100}{5} = 20$ therefore $\frac{10000.0}{5} =$ _____
9. Express the speed of light, 300000000 m/sec in exponential (scientific) notation.

10. Multiplying a number by 100 simply moves the decimal two places to the _____, while dividing by 1000 simply moves the decimal _____ places to the _____ .
11. How much money is required to purchase six packs of gum @ twenty-five cents/pack? (Assume 6% sales tax.)
12. If a dollar is worth 0.02 bars of "pressed latinum", how many dollars will you get in exchange for 200 bars?

13. What type of products are sold in liters? _____

14. What is the fraction(al) equivalent commonly used for each of the following:

(a) 0.3333333334 _____

(d) 0.25 = _____, (b) 0.666666667 =

_____?

(e) 0.75 = _____ (c) 0.80 =

15. The value of a fraction is greater than one, when.

a. numerator > denominator;

b. numerator < denominator

c. denominator > numerator

d. abscissa > ordinate

16. $\frac{1/2}{1/4} =$

a. $\frac{1/2}{4/1}$

b. $\frac{0.5}{0.25}$

c. $\frac{0.25}{0.5}$

d. both a and b

e. both a and c

17. Assume that there are 30 students in this room and that five of these students earn A's after the first marking period. What percentage of students would that represent?

18. Xavier is two years more than twice as old as Yoko. The sum of their ages is 86. How old are they?

19. If $(x+4)/y = z$, what does x equal? (Hint: solve for one variable in terms of the others.)

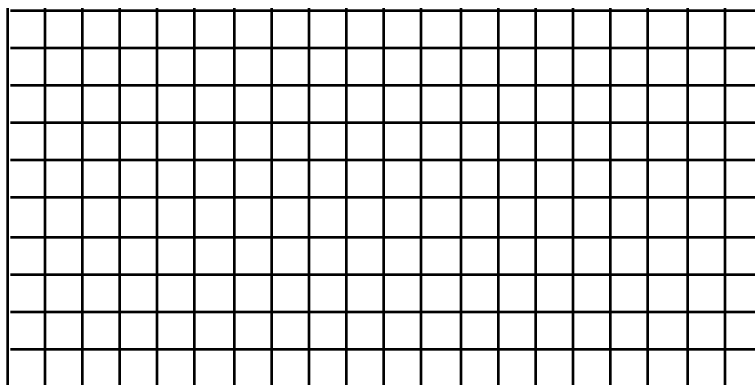
20. An element is _____

21. How many square eggs per doz, $(\frac{\text{eggs}^2}{\text{doz}})$, are in one dozen, that is, 12 eggs?

22. The formula for sulfuric acid is H_2SO_4 . How many atoms of oxygen would be in $4\text{H}_2\text{SO}_4$?

23. Which is better: (1) eating food which has been treated with insecticides to kill pests; (2) eating food that has not been treated with insecticides; or (3) eating food that was developed as pest resistant
24. A certain food item was found to contain radioactive potassium-40. Should it be removed from the market? Why?

25. Use the grid below to construct a graph of distance vs time (for three hours) to represent a car traveling at a speed of 60 m.p.h.



26. Use the grid below to construct a graph of speed vs time (for three hours) to represent a car traveling at a constant speed of 60 m.p.h.

