Vasquez High School -- Physical Science -- Test #5 -- S' 2015 -- 100 points

Write TRUE if the statement is true OR write the word or words that substitute(s) for the underlined word or words that would make it true. Writing false only earns partial credit. Three points apiece.

_____ 1) A heterogeneous mixture made of a liquid and solid particles which settle out is caled a suspension.

_____ 2) Reactivity and flammability are examples of chemical changes.

_____ 3) Boyle's Law states the volume of a gas is directly related to its absolute temperature.

_____ 4) Magnesium is the element most commonly found in bananas.

_____ 5) The process of separating substances using evaporation is called Pascal's Principle.

_____ 6) The heat of fusion is the energy required to change a substance from solid to liquid at its melting point.

_____ 7) The ability of a metal to be drawn out into a fine wire is called ductility.

_____ 8) The most reactive of all the elements is oxygen.

_____ 9) The amount of force exerted per unit area is known as buoyancy.

_____ 10) Thermal expansion is an explanation of how the particles in gases behave.

_____ 11) If the pressure of a sample of gas decreases, and its temperature is kept constant, the volume of the gas increases.

_____ 12) Solids are the most energetic states of matter.

_____ 13) If the buoyant force on an object is greater than the gravitational force on the object, then the object will float.

_____ 14) Many explosives are so dangerous because of the energy stored up in the bonds of nitrogen.

_____ 15) Plasma is matter that has enough energy to overcome not just the attractive forces between its particles but also the attractive forces within its atoms.

Short Answer - Fill-in. Be clear. Be neat. Be complete. Three points apiece.

16) What is the Tyndall Effect? _____

_____.

17) What is the difference between a gas and a vapor? _____

_____.

18) The fact that the pressure a gas exerts decreases as its velocity increases is due to _____

_____.

19) The term that describes a liquid's resistance to flow is its _____.

20) When you squeeze an open toothpaste tube at the bottom and the toothpaste comes out of the top, it is an an example of _____.

21) The density of water is _____.

22) Some substances, like clay, are literally without crystalline form. We call them _____.

23) A substance where two or more elements are chemically bonded is called a _____.

24) Name the six physical changes AND the changes they indicate. Six points here.

_____ from _____ to _____

_____ from _____ to _____

_____ from _____ to _____

_____ from _____ to _____

_____ from _____ to _____

_____ from _____ to _____

25) Name five of the six ways you can tell if a chemical reaction has taken place: (five points)

_____ _____

_____ _____

_____

Multiple Choice. Write the letter that best answers each example. Two points each.

_____ 26) The least dense of these materials is:

a) gold b) carbon dioxide c) water d) iron

_____ 27) Matter cannot be created nor destroyed is a way of expressing

a) the law of definite composition b) Pascal's Principle
c) Archimedes' Principle d) the law of conservation of mass

_____ 28) Mixtures that have particles that never settle out, like paint or ink, are called

a) colloids b) sublime c) thermodynamic d) liquids

_____ 29) A concrete sidewalk has seams because of

a) thermal energy b) thermal expansion c) kinetic theory d) Archimedes' Rule

_____ 30) Which is a good example of a metalloid?

a) silicon b) chlorine c) neon d) sodium

_____ 31) Which is NOT an example of a mixture?

a) salt water b) air c) root beer float d) all three are mixtures

_____ 32) Which of the following is an example that a chemical change has taken place?

a) the rusting of an iron nail
b) the breaking of a glass window
c) the dissolving of sugar in water
d) the glowing of an incandescent light bulb

_____ 33) Salt is composed of what two elements?

a) salt and water
b) sugar and chlorine
c) sodium and oxygen
d) sodium and chlorine
e) none of these

34) Easy four points. Name any four physical properties NOT already named somewhere on this test.

_____ _____

_____ _____

35) <u>EXTRA CREDIT</u>. Draw and label a phase change diagram for water as shown in class. You have to label all five parts for the five points.