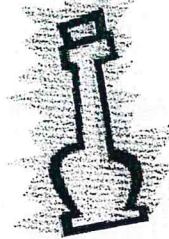


PURE SUBSTANCES AND MIXTURES UNIT TEST

/33



CLASS:

NAME:

A) True and False (7 points)

1. T 0.7% of the earth's water is fresh water.
2. F Canadians use, on average, 200 litres of water per day.
3. F 7.4% of the earth's water is ice.
4. T Flourine is added to water by municipalities to prevent tooth decay.
5. T An unsaturated solution can dissolve more solutes without its temperature being raised.
6. T Apples have a lower pH than tomatoes and are considered more acidic.
7. T When an acid is mixed with a base, the base is neutralized.

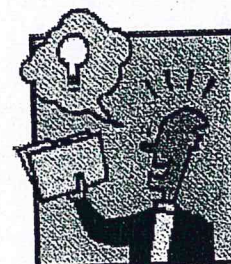
B) Short Answer Questions

1. What can you do at home to help conserve water? (2 points)
2. If a solution is saturated, what can you do to allow it to dissolve more solutes? (2 pts)
3. Looking at the following items, state which is the **solvent**, **solute**, and **solution**. (3pts)

Pop solute Carbon Dioxide (gas)
solvent water
solution type gas-liquid

Maple Tree Syrup solution type Solid-liquid
solvent water (liquid)
solute sugar (solid)

Vinegar solution type liquid-liquid
solvent water (liquid)
solute acetic acid



C) 1) Name seven elements of the *periodic table*. (3 points)

- 2) (a) What does "pH" stand for? (1 point)

potential hydrogen

- (b) What does the pH table describe? (1 point)

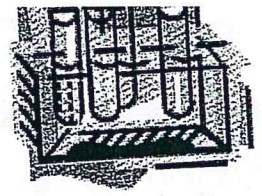
how acidic or basic a substance is

- (c) What does the pH scale vary from and to? (1 point)

0-14



(d) Looking at the following pH scale (see next page), list **three items** that are considered **basic** and **three items** that are considered **acidic**. (2 points)



(e) Milk of magnesia is **how much more** acidic than ammonia solution? (1 point)

10x

(f) Toothpaste is **how much more** acidic than ammonia solution? (1 point)

100x

(g) Please name ³ ~~four~~ acids. (2 points)

Define six of the following seven: (6 points – 1 each)

Solubility the maximum amount of a particular solute that can be dissolved by a particular solvent at a given temperature.

Solute a substance that is dissolved in a solvent to form a solution.

Solution a homogeneous mixture of two or more substances; in a solution, only one substance is visible / A solution is made of one solvent & one or more solutes

Solvent a substance that dissolves a solute to form a solution

Dissolve when one substance (the solute) mixes with another (the solvent) to form a solution

Residue in filtration, the part of a mixture that remains in or on the filter

Saturated a solution that contains the maximum amount of solute that the solvent can dissolve at a given temperature.

Bonus Question: What is the address of the school's website? (1 point)

Name 4 elements' symbols.

