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 STD - VI, SEC - A
 School No - 7912

WORKSHEET

Read the following information on the classification of matter

1. Fill in the blanks where necessary.

Elements:

- An element is a pure substance made of only one type of atom.
- An element has the same composition throughout, which is called Substances.
- An element cannot be separated into simpler materials by physical means.
- Over 100 existing elements are listed and classified on the periodic table.

Compounds:

- Compounds are pure substances made of more than one type of atoms and are water and sugar.
- A compound has the same composition throughout, which is called homogeneous ^{elements}.
- Compounds cannot be separated into simpler materials by physical means. Separating a compound requires a chemical reaction.

- The properties of a compound are usually different than the properties of the elements it contains.

2. Classify each of the following as elements (E), compounds (C) or Mixtures (M). Write the letter X if the example is not matter

E Diamond (C)

M Air

E Krypton (K)

C Water (H₂O)

C Ammonia (NH₃)

M Wood

C Dry Ice (CO₂)

E Iron (Fe)

X Electricity

C Sugar (C₆H₁₂O₆)

C Sulfuric Acid (H₂SO₄)

E Bismuth (Bi)

C Alcohol (CH₃OH)

C Salt (NaCl)

M Bronze

C Baking Soda (NaHCO₃)

M Popcorn

M Milk

M Gasoline

E Uranium (U)

M Pail of Garbage

X Energy

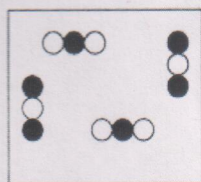
M Ink

E Titanium (Ti)

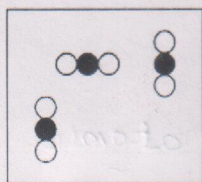
E Gold (Au)

M Concrete

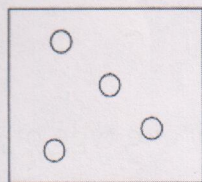
Match each diagram with its correct description. Diagram choices will be used only once.



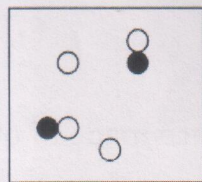
A



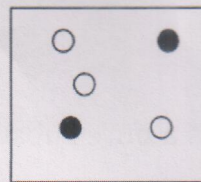
B



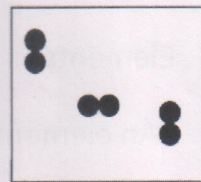
C



D



E



F

C 1. Pure element - only one type of atom present.

E 2. Mixture of two elements - two types of uncombined atoms present.

B 3. Pure compound - only one type of compound present.

A 4. Mixture of two compounds - two types of compounds present.

D 5. Mixture of a compound and an element.

F 6. Diatomic molecule - a pure substance of two of the same atom bonded together

Column A lists a substance. In Column B, list whether the substance is an element, a compound, a heterogeneous mixture, or a solution

(Remember a solution is a homogeneous mixture.) In Column C, list one physical properties of the substance.

Column A	Column B	Column C
1. Summer Sausage	Heterogeneous mix	Brown
2. Steam	Compound	Gas
3. Salt Water	Solution	liquid
4. Pencil lead (Pb)	Element	solid
5. Dirt	Heterogeneous	Solid
6. Silver (Ag)	Element	Solid
7. Toothpaste (Na_2HPO_4)	Compound	White
8. Italian Dressing	Heterogeneous	liquid
9. Lemonade	Solution	liquid.

EDUCATIONAL GROUP

Changing your Tomorrow