

Elements, Compounds & Mixtures Worksheet

Part 1: Read the following information on elements, compounds and mixtures. Fill in the blanks where necessary.

Elements

- A pure substance containing only one kind of _____.
- An element is always uniform all the way through (homogeneous).
- An element _____ be separated into simpler materials through chemical reactions.
- Over 100 existing elements are listed and classified on the _____.

Compounds

- A pure substance containing two or more kinds of _____.
- The atoms are _____ combined in some ratio. When atoms that are different they come together in some groups of atoms called molecules.
- A compound is always homogeneous (uniform).
- A compound _____ be separated 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.

Mixtures

- Two or more _____ of _____, NOT chemically combined.
- No reaction between substances.
- Mixtures can be uniform (called _____) and are known as solutions.
- Mixtures can also be non-uniform (called _____).
- Mixtures can be separated into their components by physical or physical means.
- The properties of a mixture are similar to the properties of its components.

Part 2: Carefully read the following statements of a compound (C) or mixture (M). Write the letter C if it is made of one.

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|-----------------|----------------------------|---------------------|-----------------|
| ___ Diamond (C) | ___ Sugar (C, H, O) | ___ Milk | ___ Iron (M) |
| ___ Air | ___ Sodium Chloride (NaCl) | ___ Chlorine | ___ Electricity |
| ___ Copper (M) | ___ Bromine (M) | ___ Titanium (C) | ___ Paper |
| ___ Water (M) | ___ Aluminum Sulfide | ___ Pot of Chlorine | ___ A dog |