

Pg. 143 #1-5

1. An element is a pure substance that cannot be broken down into simpler substance by chemical means (i.e., chemical reactions). An example of an element is gold (or any element from the periodic table).

A compound is a pure substance made up of two or more elements that are combined chemically. Examples of compounds are water, table sugar, and carbon dioxide.

2. A pure substance is an element or a compound. A mixture is a combination of pure substances, but the substances do not change chemically when combined.

3. A solution is composed of one substance, the solute, dissolved in another substance, the solvent. A suspension is composed of one substance that is suspended in or surrounded by another substance. A solution is a homogeneous mixture; a suspension is typically classified as a heterogeneous mixture.

4. (a) Pop is a mixture.

(b) Carbon dioxide is a pure substance.

(c) Sand is a mixture.

(d) Graphite is a pure substance.