

Key Terms - Matter

Chemical and Physical Properties and Changes:

physical property - property of a compound that can change without involving a change in chemical composition; examples are the melting point and boiling point.

chemical property - any of a chemical's properties that become evident during a chemical reactions; examples are reactivity and flammability.

physical change - any change not involving a change in the substance's chemical identity. Includes a change from one state (solid or liquid or gas) to another without a change in chemical composition.

chemical change - any process determined by the atomic and molecular composition and structure of the substances involved

Classification of Matter:

element - a substance composed of atoms having an identical number of protons in each nucleus. Elements cannot be reduced to simpler substances by normal chemical means.

pure substance - a sample of matter, either an element or a compound, that consists of only one component with definite physical and chemical properties and a definite composition.

compound - a pure, macroscopically homogeneous substance consisting of atoms or ions of two or more different elements in definite proportions that cannot be separated by physical means. A compound usually has properties unlike those of its constituent elements.

mixture - a composition of two or more substances that are not chemically combined with each other and are capable of being separated.

solution - a homogeneous mixture of two or more substances, which may be solids, liquids, gases, or a combination of these.

heterogeneous - consisting of dissimilar parts. Heterogeneous mixtures have distinguishable phases.

homogeneous - uniform in structure or composition throughout. Homogeneous mixtures have atoms and molecules interspersed.

alloy - a homogeneous mixture or solid solution of two or more metals, the atoms of one replacing or occupying interstitial positions between the atoms of the other: *Brass is an alloy of zinc and copper.*

distillation - the evaporation and subsequent collection of a liquid by condensation as a means of purification.

density - the mass per unit volume of a substance. Commonly measured in grams per milliliter (g/mL) or grams per cubic centimeter (g/cm³).

Definitions from Answers.com.

Key Terms sheet from:

http://cms.gavirtualschool.org/Shared/Science/Chemistry/matter_shared/matter_shared2.html