## Picture dictionary: chemistry



The scientific study of the composition, structure, and properties of matter and the changes that matter undergoes. Organic Chemistry The study of most carbon containing compounds. Inorganic Chemistry The study on non-organic substances, many of which have organic fragments bonded to metals (ergonomically). Physical Chemistry The study of the properties and changes of matter and their relation to energy.

Analytic Chemistry The identification of the components and composition of materials. Biochemistry The study of substances and processes occurring in living things.

Theoretical Chemistry The use of mathematics and computers to understand the principles behind observed chemical behavior and to design and predict the properties of new compounds. Matter Anything that has mass and takes up space. Atom The smallest unit of an element that maintains the chemical properties of the element.

Element A substance that cannot be separated or broke down into simpler substances chemical means; all atoms of an element have he same atomic number. Compound A substance made up of atoms of two or more different elements Joined by chemical bonds.

Physical Property A characteristic of a substance that does not involve chemical changes, such as density, color, or hardness. Chemical Property A property of matter that describes a substance's ability to participate in chemical reactions.

Intensive Property A property that does not depend on the amount of matter present, such as temperature, pressure or density. Extensive Property A property that depends on the extent or size of a system.

Physical Change A change of matter from one form to another without a change in chemical properties. Chemical Change A change that occurs when one or more substances change into entirely new absences with different properties. Chemical Reaction The process by which one or more substances change to produce one or more different substances.

Homogeneous Mixture Describes something that has a uniform structure or composition throughout.

Heterogeneous Mixture Composed of dissimilar components. Pure Substance A sample of matter, either a single element or a single compound, that has definite chemical properties. Groups A vertical column to elements in a periodic table; elements in a group snare chemical Periods In chemistry, an horizontal row of elements in the periodic table. Metal An element that is shiny and that conducts heat and electricity well.

Nonmetal An element that conducts heat and electricity poorly and that does not form positive ions in electrolytic solution. Metalloid An element that has properties of both metals and nonmetals; sometimes referred to as semiconductor.

Noble Gas One of the elements of Group 18 of the periodic table (helium, neon, argon, krypton, xenon, and radon); noble gases are not reactive.

Accuracy A description of how close a measurement is to the true value of the quantity measured. Precision The exactness of the measurement.