

Physical & Chemical Changes

Vocabulary Word	Definition
physical properties	color, shape, hardness, or density
physical change	physical properties are changed, but substance remains the same
solids	definite shape & definite volume, do not take the shape of their container
liquids	definite volume, but no definite shape, take the shape of their container
gases	no definite shape, no definite volume, always fill their container
plasma	not found on earth, such high energy, dangerous to living things, found in stars and sun
melting	solid to liquid
freezing	liquid to solid
vaporization	liquid to gas
evaporation	when vaporization takes place at the surface of a liquid
condensation	gas to liquid
sublimation	solid to gas



Vocabulary Word	Definition
chemical properties	describe how a substance changes into other new substances (ie - flammability)
chemical change	process by which the substance changes into a new substance
chemical reaction	another name for chemical change

Atoms & Molecules

Vocabulary Word	Definition
matter	what everything is made of
atom	smallest piece of matter
nucleus	center of an atom, positively charged
protons	positively charged particles found in the nucleus
neutrons	electrically neutral particles found in the nucleus, no charge
electrons	negatively charged particles in the atom
atomic number	number of protons in the nucleus, never changes
mass number	sum of protons and neutrons in the nucleus
isotopes	atoms that have same number of protons, but different numbers of neutrons
atomic mass	average of the masses of all the atoms in the sample



Vocabulary Word	Definition
electron cloud	space where the electrons are found
molecule	two or more atoms chemically combined

Elements & Compounds

Vocabulary Word	Definition
pure substance	contains only one kind of molecule
element	purse substance made up of only one kind of atom, simplest type of pure substance, cannot be changed into simpler substances
chemical symbols	abbreviation for the elements, shown on the periodic table, first letter is always capitalized, second letter is never capitalized
compounds	made up of molecules that contain more than one kind of atom, two or more elements chemically combined
chemical formulas	combinations of chemical symbols
subscripts	smaller numbers to the lower right of the symbols, shows how many atoms of each element
chemical reaction	substances are changed into a new substance through rearrangement or new combination of their atoms
chemical equation	description of a chemical reaction using symbols and formulas
coefficient	shows how many molecules
mixture	two or more pure substances that are mixed together, but not chemically combined



Vocabulary Word	Definition
heterogenous	no two parts of the mixture are identical, you can separate the parts
homogenous	parts are identical, cannot be separated
solution	substances are dissolved in one another
solute	is dissolved
solvent	does the dissolving
acids	taste sour, change litmus paper from blue to red
bases	taste bitter, feel slippery/soaper, don't change the color of litmus paper
pH scale	measures how acidic or basic something is