

GLOSSARY AND CREDITS

Chemistry is a very old science. Every substance we see, smell, or touch is a chemical. The application of chemistry to change man's environment was known very early. Brass and iron were used for sculptures and construction. Copper and zinc (which when melted together make brass) do not occur in nature as pure substances, nor does iron. It follows, then, that man must have been able to refine natural ores, smelt them, and purify the resulting mixtures.

Chemistry is an experimental science. We are surrounded by chemistry every day. Our bodies, all plant and animal life, changes in our physical world, the fuels we burn, the energy from the sun, and the plastics and containers we use involve chemistry.

Our study of chemistry will be designed to help us understand the material world around us, develop an appreciation of the beauty of the world around us, and wisely use and develop the resources of this planet and universe. This course should be a "fun" adventure and challenge. Be prepared to work and enjoy our study together.

VOCABULARY

accuracy	The correctness of measurement when compared to the actual value.
deductive reasoning	A prediction made or conclusion drawn from insight gained from an established principle.
direct relationship	When two variables change in the same direction, one remaining larger than the other by the same factor.
hypothesis	An initial proposed explanation for the phenomenon.
inductive reasoning	Drawing a conclusion from many observations concerning a possible common cause and forming a general rule.
interpolate	To insert between neighboring points or estimate by taking an average of known values.

inverse relationship	When one variable becomes larger by a given factor and the other variable becomes smaller by the same factor.
law	A relationship that is accepted as true and no longer needs to be tested and verified.
length	The measure of the distance from one point to another.
mass	The measure of the quantity of matter in an object.
objective	Real reasoning based on data or facts.
precision	How spread out the results of an experiment are or, how repeatable measurements are; often dependent on the certainty with which an estimation can be made.
presupposition	Initial idea which is believed to be true and is used as a basis (starting point) from which further reasoning and conclusions are made.
qualitative	Generalized descriptions based on senses.
quantitative	Description based on numbers, mathematics or measurements.
SI system	The metric system of units.
subjective	Ideas resulting from the personal feelings, emotions, bias of a person.
theory	A generalized model used to explain observations, to answer questions, and to predict answers to related evidence and problems.
volume	Space occupied by quantity of matter.