

Unit: 2. STARTING THE INVESTIGATION: HOW TO IDENTIFY ELEMENTS, COMPOUNDS, AND MIXTURES

## GLOSSARY AND CREDITS

Chemistry is an ancient science. In man's quest for ways to make life easier and more plentiful for himself, chemistry has played a major role. The products we have been able to synthesize are a result of the knowledge man has gained in chemistry.

On the other hand, our polluted streams, poisoned atmosphere, and trash-laden garbage dumps are also a result of our knowledge of chemistry. It is not the knowledge that is good or bad, but man's use of it.

In this section, you will study the history of chemistry, the classification of matter, and man's knowledge of the world about him.

## VOCABULARY

alchemy	An ancient study or art which attempted to combine science and philosophy to solve worldly problems.
alloy	A homogeneous mixture of elements with metals to form metallic solids.
atom	The simplest unit of an element that still retains the properties of that element.
chemical change	A change that causes the starting materials to completely lose their properties to form new and distinctly different substances.
colloid	A mixture in which the suspended particles are too small to be seen with the naked eye.
compound	Two or more elements joined together such that the elements have lost their individual identity in favor of a new set of properties.

element	A primary substance that cannot be divided into separate substances; one of about 112 different basic varieties of matter making up the universe.
hardness	Resistance of a material to being scratched.
heterogeneous	Composed of dissimilar parts which can be separated easily and which are unevenly distributed in the mixture.
homogeneous	Even distribution of parts throughout the whole mixture; not easily separated into individual components.
inorganic	Compounds which do not contain carbon and hydrogen.
metal	The group of elements that are good conductors of electricity and heat; solids except for mercury.
mixture	Two or more substances dispersed in one another but each retaining their own identity.
nonmetal	The group of elements that are poor conductors of electricity and heat; mostly liquids and gases.
organic	Any compound containing carbon and hydrogen.
phase change	A change from one state of matter to another.
physical change	A change in shape, size, or physical characteristics but remaining the same substance.
saturated solution	A solution in which no more solute will dissolve at a given temperature.
solute	The substance that is dissolved.
solution	A uniform mixture of molecules or ions of one substance in another.
solvent	The substance that does the dissolving.
supersaturated	A solution that holds more solute than it normally can under the conditions at a given temperature.

suspension	A temporary heterogeneous mixture that separates into individual components with time.
unsaturated	A solution in which more solute will dissolve at a given temperature.