# Vocabulary

## Vocabulary

*Use the vocabulary words and definitions below as a reference for this unit.*

**atom** ..... the smallest unit of an element that is still that element; the basic building block of matter

**atomic number** ..... a number used to identify an element and represent its placement in the periodic table; identifies the number of protons in the nucleus of an atom

**chemical change** ..... change in which a new substance is produced

**chemical properties** ..... the qualities of matter that indicate whether it can change from one substance to another

**combustion** ..... the process of burning a substance

**compound** ..... a substance formed when two or more elements combine chemically

**density** ..... the mass per certain volume of a material

**element** ..... a substance that cannot be broken down into a simpler form by ordinary chemical means

# Vocabulary

**formula** ..... the way a chemist tells how two or more elements are combined to make a compound
*Example*: $H_2O$ is the formula for water

**gas** ..... the form of matter that has no definite shape or volume

**hydrogen (H)** ..... the lightest and most abundant of all elements; occurs as a gas when not in other substances

**liquid** ..... the form of matter that has a definite volume but does not have a definite shape

**mass** ..... the amount of matter in a substance

**matter** ..... anything that has both mass and volume

**mixtures** ..... two or more substances put together; no chemical reaction takes place and they are easily separated

**oxygen (O)** ..... an element found as a gas when not in other substances; it has an atomic number of eight and is involved in burning and rusting

**periodic table** ..... a table showing the arrangement of the chemical elements according to their atomic numbers and chemical properties

# Vocabulary

**physical change** ..... any change in the form or phase of matter; no new substances are formed

**physical properties** ..... the qualities of matter that can be observed without changing the matter (color, shape, size, density)

**solid** ..... the form of matter that has a definite shape and volume

**substance** ..... any material or matter

**symbols** ..... the letters used by scientists to represent the names of the elements

**volume** ..... the amount of space that matter takes up