

# Vocabulary

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

**alchemists** ..... a group of people who searched for a way to turn ordinary metals into gold

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

**atomic mass unit (amu)** ..... a unit of mass equal to the mass of a proton or a neutron;  $\frac{1}{12}$  of the mass of a carbon atom

**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

**atomic mass** ..... the mass of protons and neutrons found in the nucleus of an atom

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

**electron** ..... the negatively charged particle of an atom; the electron moves around the center of the atom (nucleus)

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

# Vocabulary

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|---------------------------|--|
| <b>energy level</b> ..... | most likely location where the electron can be found around the center of the atom; any of the possible energies an electron may have in an atom |
| <b>group</b> .....        | elements arranged in a vertical column on the periodic table representing similarities in properties   |
| <b>mass</b> .....         | the amount of matter in a substance  |
| <b>matter</b> .....       | anything that has both mass and volume   |
| <b>metal</b> .....        | a substance that has a specific luster, is usually a good conductor of heat and electricity, and can be pounded or drawn into various shapes     |
| <b>neutron</b> .....      | the neutral particle found in the nucleus of an atom; a neutron has no charge  |
| <b>nonmetal</b> .....     | an element that does not have the properties of a metal  |
| <b>nucleus</b> .....      | the center region of an atom around which the electron(s) move   |
| <b>period</b> .....       | arrangement of elements into horizontal rows on the periodic table   |

# Vocabulary

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| <b>periodic table</b> .....    | a table showing the arrangement of the chemical elements according to their atomic numbers and chemical properties |
| <b>proton</b> .....            | the positively charged particle in the nucleus of an atom  |
| <b>rare</b> .....              | not common or usual; hard to find  |
| <b>substance</b> .....         | any material or matter   |
| <b>theory</b> .....            | an explanation that has been tested by repeated observations   |
| <b>valence electrons</b> ..... | the electrons in an atom's outermost energy level that are involved in the forming of bonds                        |