

SECTION 14-3

REVIEW AND REINFORCE

Particles of Matter

◆ Understanding Main Ideas

The following statements refer to Dalton's ideas on atomic theory. If the statement correctly describes Dalton's ideas, write true. If the statement does not describe Dalton's ideas correctly, change the underlined word or words to make the statement correct. Write the characteristic of atoms from Dalton's theory that supports your answer.

a different

1. The element oxygen and the element hydrogen are made from the same kind of atom.

Characteristic:

In any element, all the atoms are exactly alike.

Compound

2. The hydrogen and oxygen atoms chemically bond to form the mixture called water.

Characteristic:

Atoms of 2 or more elements can combine to form compounds

True

3. The hydrogen atoms in the water molecule are identical to all other hydrogen atoms.

Characteristic:

In any element, all the atoms are exactly alike

could not

4. Dalton believed that atoms could be divided into smaller pieces.

Characteristic:

Atoms can't be broken into small pieces

True

5. The mass of a hydrogen atom is different from the mass of an oxygen atom.

Characteristic:

Atoms of each element have a unique mass

◆ Building Vocabulary

Use the following terms to label the parts of the illustration.

- atom
- molecule
- chemical bond

