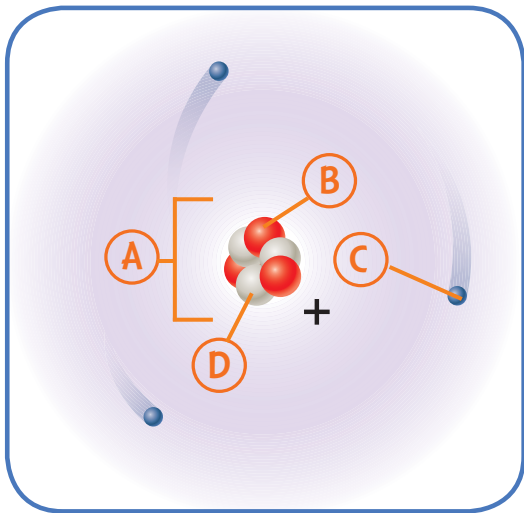


Sum It Up >>

1 Label the parts of this atom.



- A _____
- B _____
- C _____
- D _____

2 Sequence the following from smallest to largest.

___ A atom ___ B proton ___ C molecule ___ D nucleus

3 Fill in the blanks.

An atom is the smallest particle of an **A** _____ that has its properties. Our current **B** _____ is the result of the ideas of many scientists over many years. Scientists currently theorize that atoms contain a dense core that is called the **C** _____. It contains positively charged particles called **D** _____, and **E** _____, which have no charge. Particles called **F** _____ move around the center of the atom. The identity of an element is determined by the number of **G** _____ in one atom of the element. When two or more atoms are joined together, **H** _____ form.



Name _____

Vocabulary Review

1 For each jumbled term, unscramble the letters to form a term from this lesson. Use the clues to help you.

1. tasmoo

____o

The smallest particles of an element

2. ueotnrrn

____n

The particle in an atom that has no charge

3. retelocn

____c

Moves around the outside of an atom

4. omdocpun

____p

Formed from at least two types of chemically combined atoms

5. onropt

____t

The positively charged part of the nucleus

6. mitoca rohety

____y

Changed through history as scientists learned more about atoms

7. cnluseu

____e

The dense, central part of an atom

8. nemtele

____e

Contains only one kind of atom

Riddle Put the circled letters into the riddle in the order they are circled.

What did the chemistry teacher get for her birthday?

the element of _____



Apply Concepts

2 Draw and label a diagram of a nitrogen atom. It should have 7 protons, 7 neutrons, and 7 electrons.

3 Use the terms *atom* and *element* to explain what makes silver and gold different.

4 Complete the table.

| Compound | Atoms | Fraction of each type of atom |
|-------------------|----------------------------------|------------------------------------------------|
| methane | 5 total: 1 carbon, 4 hydrogen | |
| propane | 11 total: _____ | $\frac{3}{11}$ carbon, $\frac{8}{11}$ hydrogen |
| hydrogen peroxide | 4 total: 2 hydrogen, 2 oxygen | |
| carbon dioxide | 3 total: _____ | $\frac{1}{3}$ carbon, $\frac{2}{3}$ oxygen |

Take It Home!

Check the ingredient lists on labels of several household products. Find the names of two different compounds. Use reference books or the Internet to find out what elements are in the compounds.