

Skills Worksheet

Directed Reading A**Section: The Atom****HOW SMALL IS AN ATOM?**

- _____ 1. Which of the following statements is true?
- A penny has about 20,000 atoms.
 - A penny has more atoms than Earth has people.
 - Aluminum is made up of large-sized atoms.
 - Aluminum atoms have a diameter of about 3 cm.

WHAT IS AN ATOM MADE OF?

Match the correct description with the correct term. Write the letter in the space provided.

- | | |
|---|----------------------------------|
| _____ 2. particle of the nucleus that has no electrical charge | a. electron |
| _____ 3. particle found in the nucleus that is positively charged | b. atomic mass unit (amu) |
| _____ 4. particle with an unequal number of protons and electrons | c. nucleus |
| _____ 5. negatively charged particle found outside the nucleus | d. proton |
| _____ 6. contains most of the mass of an atom | e. ion |
| _____ 7. SI unit used to express the masses of atomic particles | f. neutron |

HOW DO ATOMS OF DIFFERENT ELEMENTS DIFFER?

- 8.** The simplest atom is the _____ atom. It has one _____ and one _____.
- 9.** Neutrons in the atom's _____ keep two or more protons from moving apart.
- 10.** If you build an atom using two protons, two neutrons, and two electrons, you have built an atom of _____.
- 11.** An atom does not have to have equal numbers of _____ and _____.

