

SECTION 1

Reinforcement

Atoms

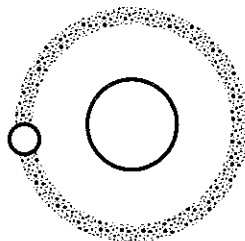
Each element is made of just one kind of atom. The number of protons in the atoms of an element is unique to that element. The number of protons in an atom is called the **atomic number**. The mass of an atom depends on the number of its protons and neutrons. The **mass number** is the sum of the protons and neutrons in the nucleus. The mass of an electron is so small that it is usually omitted in mass determinations.

Directions: Use the definitions of atomic number and mass number to help you fill in the blanks in the table below.

Element	Symbol	Number of protons	Number of neutrons	Number of electrons	Atomic number	Mass number
1. Oxygen	O	8		8		16
2. Silicon	Si	14	14			28
3. Aluminum	Al		14	13	13	
4. Iron	Fe				26	56
5. Calcium	Ca	20		20		
6. Sodium	Na				11	23
7. Copper	Cu	29	35	29		
8. Magnesium	Mg				12	24
9. Gold	Au	79				197
10. Silver	Ag		61	47		

Directions: Add electrons to complete the atomic models of helium and sodium.

11. Helium
Atomic number 2
Mass number 4



12. Sodium
Atomic number 11
Mass number 23

