

**Atomic Number, Mass Number, Isotopes, and Stuff****1 Complete the following questions. Assume all atoms are neutral.**

element: \_\_\_\_\_

# protons: \_\_\_\_\_

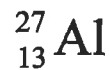
# neutrons: \_\_\_\_\_



element: \_\_\_\_\_

atomic #: \_\_\_\_\_

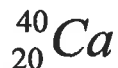
mass #: \_\_\_\_\_



element: \_\_\_\_\_

# protons: \_\_\_\_\_

# electrons: \_\_\_\_\_

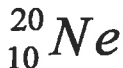


element: \_\_\_\_\_

# protons: \_\_\_\_\_

# neutrons: \_\_\_\_\_

# electrons: \_\_\_\_\_



element: \_\_\_\_\_

atomic #: \_\_\_\_\_

# electrons: \_\_\_\_\_

atomic mass: \_\_\_\_\_



element: \_\_\_\_\_

# protons: \_\_\_\_\_

# electrons: \_\_\_\_\_

# neutrons: \_\_\_\_\_



element: \_\_\_\_\_

atomic #: \_\_\_\_\_

mass #: \_\_\_\_\_

# electrons: \_\_\_\_\_



element: \_\_\_\_\_

atomic #: \_\_\_\_\_

# electrons: \_\_\_\_\_

# neutrons: \_\_\_\_\_



element: \_\_\_\_\_

# protons: \_\_\_\_\_

# electrons: \_\_\_\_\_

# neutrons: \_\_\_\_\_

**2. Write the symbol for the isotope...**

a. with 8 protons and 8 neutrons

c. with atomic # 11 and mass # of 23

b. with 28 protons and 30 neutrons

d. with 92 protons and mass # 238

How many neutrons are in this isotope? \_\_\_\_\_

1. Here are three isotopes of an element:  ${}^6_{12}\text{C}$        ${}^6_{13}\text{C}$        ${}^6_{14}\text{C}$

- The element is: \_\_\_\_\_
- The number 6 refers to the \_\_\_\_\_
- The numbers 12, 13, and 14 refer to the \_\_\_\_\_
- How many protons and neutrons are in the first isotope? \_\_\_\_\_
- How many protons and neutrons are in the second isotope? \_\_\_\_\_
- How many protons and neutrons are in the third isotope? \_\_\_\_\_

2. Complete the following chart:

Isotope name	atomic #	mass #	# of protons	# of neutrons	# of electrons
Uranium-235					
Chlorine-35					
Calcium-48					
Strontium-90					
Bismuth-209					
Boron-11					
			22	22	
				30	26
	15	32			
			34	45	
		208		127	
				146	94