

Directions: Complete the following chart and answer the questions below.

Remember:

Element Name – Mass # (Carbon-12)

Atomic # = #Protons = #Electrons

Atomic Mass = #Protons + #Neutrons (rearrange it to find #protons, or #neutrons)

Element Name	Atomic Number	# of Protons	# of Neutrons	# of Electrons	Mass Number
Carbon-	6	6	6	6	12
Oxygen	8	8	8	8	16
Hydrogen-	1	1	0	1	1
Carbon	6	6	8	6	14
Hydrogen-	1	1	2	1	1
Nitrogen-	7	7	7	7	14
			1		2
Uranium	92	92	146	92	238
Cesium-	82	82	82	82	
	11	11	12	11	
	47	47		47	108
Tungsten-			110		
			45		80
	24	24		24	52
			89		152
Silver-					107
	76	76	114	76	

- 1) How are the atomic number and the number of protons related to each other?

They're the same #s

- 2) How do the number of protons, number of neutrons, and the mass number relate to each other?

mass - protons = neutrons

- 3) What is the one thing that determines the identity of an atom (that is, whether it is an oxygen atom or a carbon atom, etc.)?

of protons