Name_____ Date____/____/_____ Period_____

Atomic Structure

An atom is made up of protons, neutrons and electrons. The atomic number of an atom is equal to the number of protons located in the nucleus. The mass number of an atom represents the total number of protons and neutrons in the nucleus of that atom. In a neutral atom the number of electrons equals the number of protons. An atom that has too many electrons (anion) will have a negative charge and an atom with too few (cation) will have a positive charge.

Example:

$^{15}_{7}N^{3+}$

15 is the mass number 7 is atomic number 3+ is the charge

number protons is 7
number of neutrons is 8 (15-7)
number of electrons is 4 [(7-3)(3 less electrons)]

Complete the following table

	Isotopic notation	Atomic Number	Mass number	# of Protons	# of Neutrons	# of Electrons	Charge
1		1	1				0
2	$^{2}_{1}H$						
3			39			18	1+
4				12	12		2+
5		8	16			10	
6		26			30		0
7			14	6		6	
8			35			18	1-
9		47	108				1+
10	$^{12}_{6}$___						0
11	$^{202}_{80}Hg$						
12		27	60			25	
13	___-----F—				10	10	
14			127	53			1-
15			207		125		2+

Which questions above are isotopes of each other?_____

LIVEWORKSHEETS