

Name: _____ Block: ___ Date: ___ **Atomic Structure Practice**

Questions # 1-4: Complete the table. All atoms are neutral. # Protons = # electrons

	Nuclear symbol	Name	Atomic #	Mass #	# Protons	# Neutrons	# Electrons
1	${}_{19}^{39}\text{K}$	Potassium	19	39	19	20	19
2	${}_{23}^{51}\text{V}$	Vanadium	23	51	23	28	23
3	${}_{26}^{56}\text{Fe}$	Iron	26	56	26	30	26
4	${}_{5}^{11}\text{B}$	Boron	5	11	5	6	5

Questions #5-6: Complete the table. All atoms are neutral. # p^+ = # e^-

	Nuclear Symbol	Hyphen Notation	# Protons	# Neutrons	# Electrons
5	${}_{20}^{40}\text{Ca}$	Calcium-40	20	20	20
6	${}_{36}^{84}\text{Kr}$	Krypton-84	36	48	36

Questions # 7-9: Complete the table. All atoms are neutral.

	Hyphen notation	Nuclear Symbol	# Protons	# Neutrons	# Electrons
7	Bromine-81	${}_{35}^{81}\text{Br}$	35	46	35
8	Cobalt-60	${}_{27}^{60}\text{Co}$	27	33	27
9	Barium-137	${}_{56}^{137}\text{Ba}$	56	81	56

Questions #10- 15: Complete the table. All atoms (ions) have a charge. $\#p^+ \neq \#e^-$

	Ion Symbol	Name of Element	# Protons	# Electrons
10	Cu^{3+}	Copper	29	26
11	K^+	Potassium	19	18
12	I^-	Iodine	53	54
13	Ag^+	Silver	47	46
14	Cl^-	Chlorine	17	18
15	O^{2-}	Oxygen	8	10