

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

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

	Nuclear symbol	Name	Atomic #	Mass #	# Protons	# Neutrons	# Electrons
1	$^{39}_{19}\text{K}$	Potassium	19	39	19	20	19
2	$^{51}_{23}\text{V}$	Vanadium	23	51	23	28	23
3	$^{56}_{26}\text{Fe}$	Iron	26	56	26	30	26
4	$^{11}_5\text{B}$	Boron	5	11	5	6	5

Questions #5-6: Complete the table. All atoms are neutral.

	Nuclear Symbol	Hyphen Notation	# Protons	# Neutrons	# Electrons
5	$^{40}_{20}\text{Ca}$	Calcium-40	20	20	20
6	$^{84}_{36}\text{Kr}$	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	$^{81}_{35}\text{Br}$	35	46	35
8	Cobalt-60	$^{60}_{27}\text{Co}$	27	33	27
9	Barium-137	$^{137}_{56}\text{Ba}$	56	81	56

Questions #10- 15: Complete the table. All atoms (ions) have a charge.

	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^{+1}	Silver	47	46
14	Cl^{-}	Chlorine	17	18
15	O^{2-}	oxygen	8	10

If $\#p^+ \neq \#e^-$

add $e^- = \ominus$ sign

remove $e^- = \oplus$ sign