KEY

Handout 1

Atomic Structure

Fill in the empty spaces with the appropriate number or symbol.

Atomic number = number of PROTONS **= element**

# of Protons = # of ELECTRONS b/c elements are neutral

Mass number = number of PROTONS + NEUTRONS

Neutron number= Mass number – proton #

Element	Symbol	Atomic #	Mass #	# of Protons	# of Neutrons	# of Electrons
Helium	He	2	4	2	2	2
Magnesium	Mg	12	24	12	12	12
Zinc	Zn	30	65	30	35	30
Bromine	Br	35	80	35	45	35
Aluminum	Al	13	27	13	14	13
SODIUM	Na	11	23	11	12	11
CALCIUM	Ca	20	40	20	20	20
SILVER	Ag	47	108	47	61	47
Potassium	K	19	39	19	20	19
SELLENIUM	Se	34	79	34	45	34
BROMINE	Br	35	80	35	45	35
Gallium	Ga	31	70	31	39	31
NITROGEN	N	7	14	7	7	7
Barium	Ba	56	138	56	82	56
Nickel	Ni	28	58	28	30	28
BORON	B	~~11~~ 5	11	~~11~~ 5	~~6~~ 6	~~11~~ 5
Selenium	Se	~~78~~ 34	78	34	44	34

Period_____Date_____

ATOMIC STRUCTURE WORKSHEET

	element	Z	A	# protons	# neutrons	# electrons	symbol
1.	oxygen	8	16	8	8	8	$^{16}_{8}O$
2.	lithium	3	7	3	4	3	$^{7}_{3}Li$
3.	calcium	20	40	20	20	20	$^{40}_{20}Ca$
4.	sulfur	16	32	16	16	16	$^{32}_{16}S$
5.	argon	18	40	18	22	18	$^{40}_{18}Ar$
6.	carbon	6	12	6	6	6	$^{12}_{6}C$
7.	potassium	19	39	19	20	19	$^{39}_{19}K$
8.	helium	2	4	2	2	2	$^{4}_{2}He$
9.	aluminum	13	27	13	14	13	$^{27}_{13}Al$
10.	hydrogen	1	1	1	0	1	$^{1}_{1}H$
11.	beryllium	4	9	4	5	4	$^{9}_{4}Be$
12.	fluorine	9	19	9	10	9	$^{19}_{9}F$
13.	nitrogen	7	14	7	7	7	$^{14}_{7}N$
14.	arsenic	33	75	33	42	33	$^{75}_{33}As$
15.	bismuth	83	209	83	126	83	$^{209}_{83}Bi$
16.	gold	79	197	79	118	79	$^{197}_{79}Au$
17.	ruthenium	44	101	44	57	44	$^{101}_{44}Ru$
18.	platinum	78	195	78	117	78	$^{195}_{78}Pt$
19.	germanium	32	73	32	41	32	$^{73}_{32}Ge$
20.	scandium	21	45	21	24	21	$^{45}_{21}Sc$