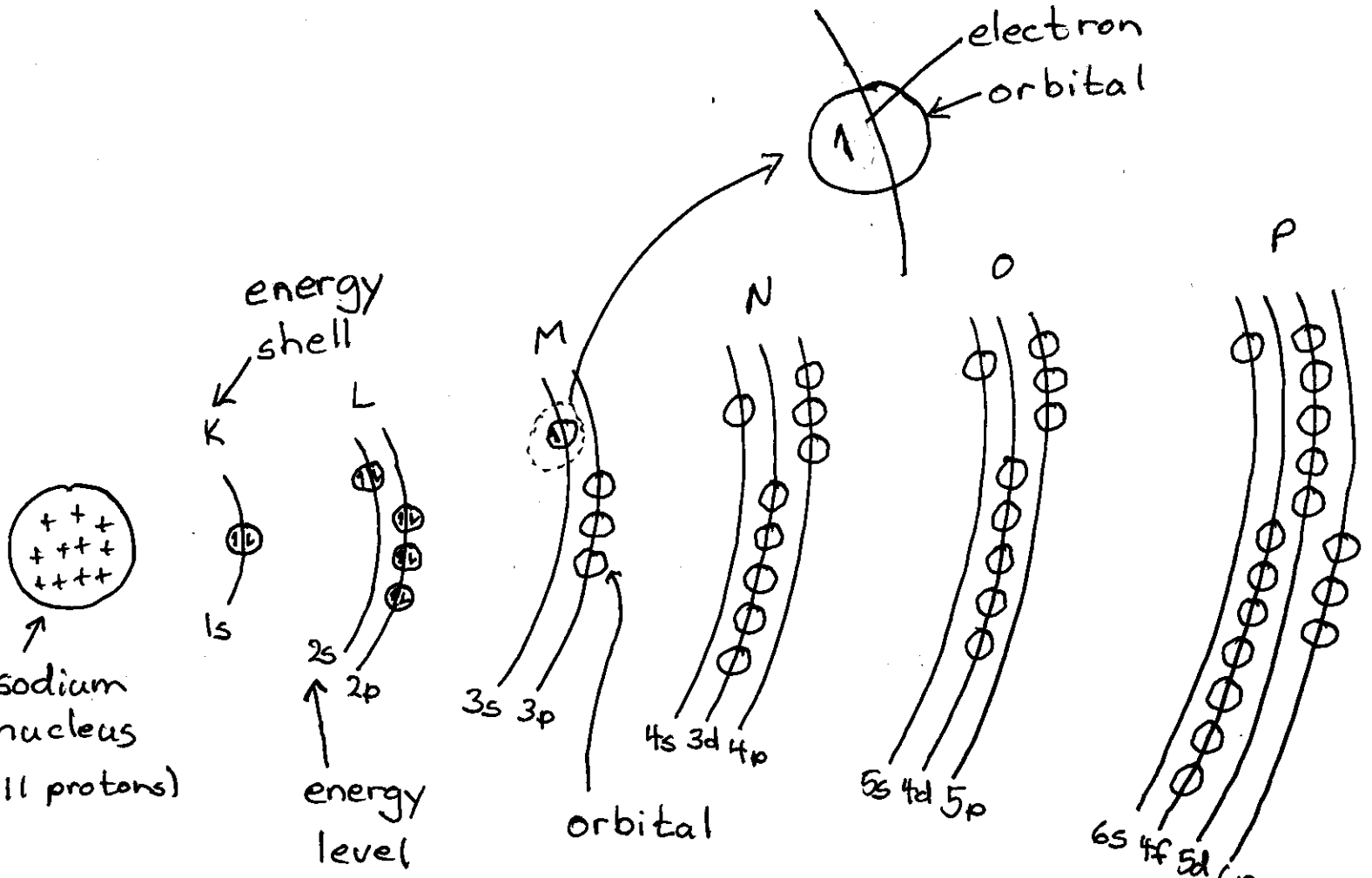
Atomic Structure

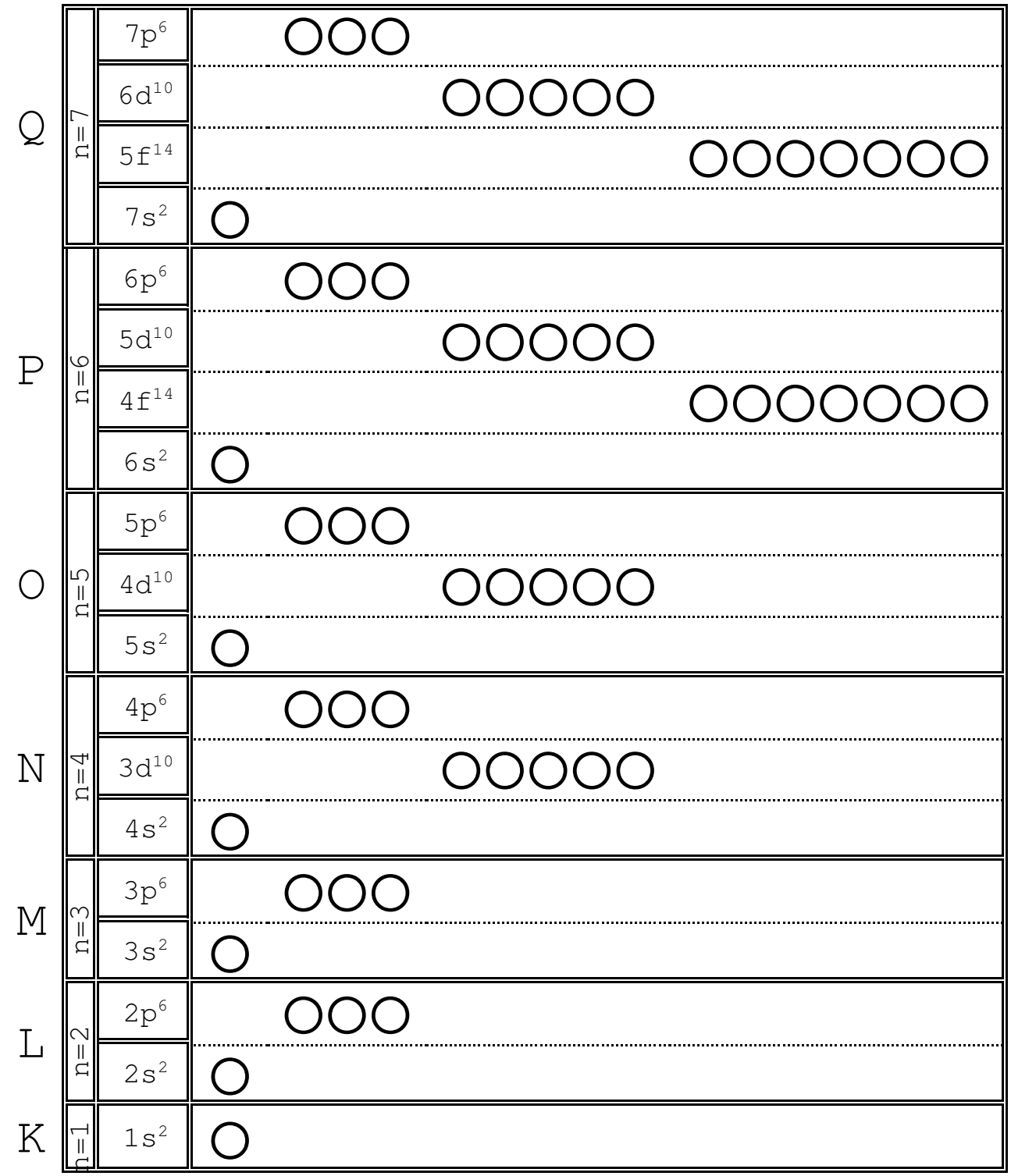


2p = energy level

6 = # of electrons in that level

Electron Configuration: $_{11}Na$ $1s^2\ 2s^2\ 2p^6\ 3s^1$

Energy Level Diagram

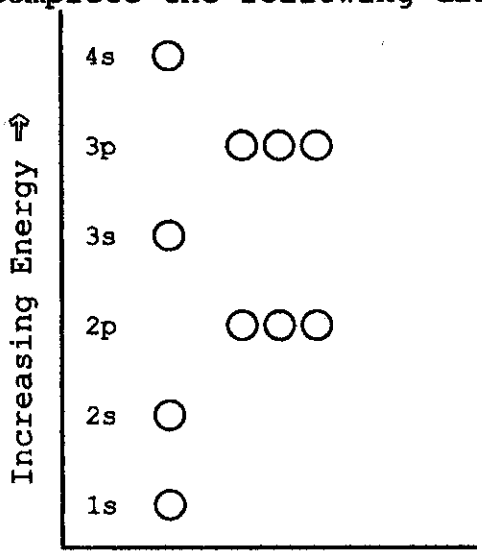


$_{47}Ag^{1+} = 1s^2 2s^2 2p^6 3s^2 3p^6 4s^2 3d^{10} 4p^6 5s^2 4d^8$

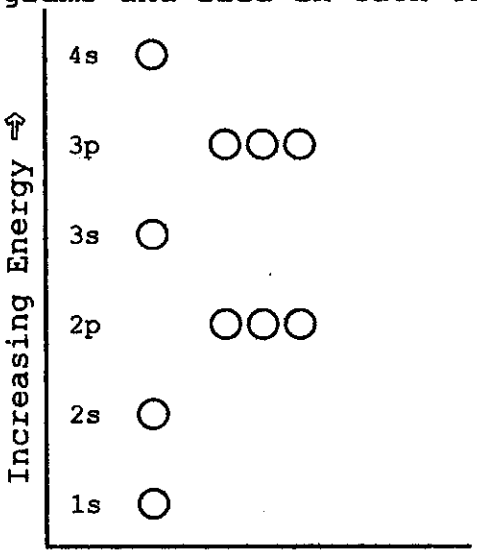
(1+ charge ∴ 46 e^{1-})

Name: _____

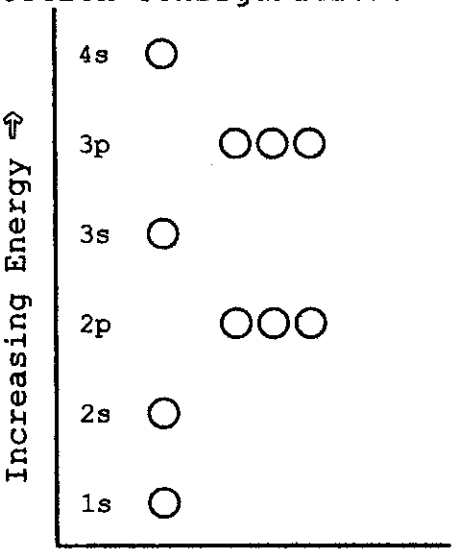
Complete the following diagrams and fill in each electron configuration.



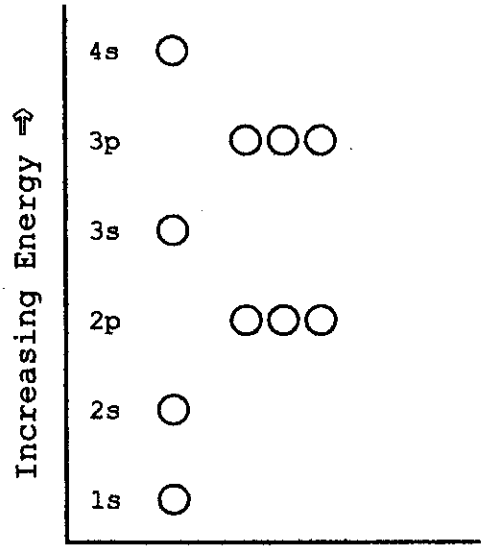
$_{10}Ne = 1s^2 2s^2 2p^6$



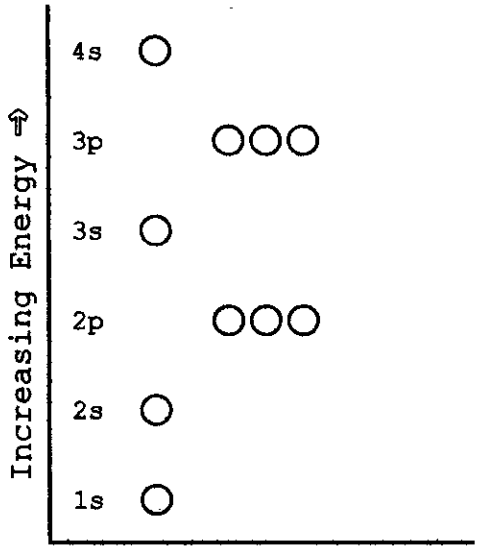
$_{5}B$



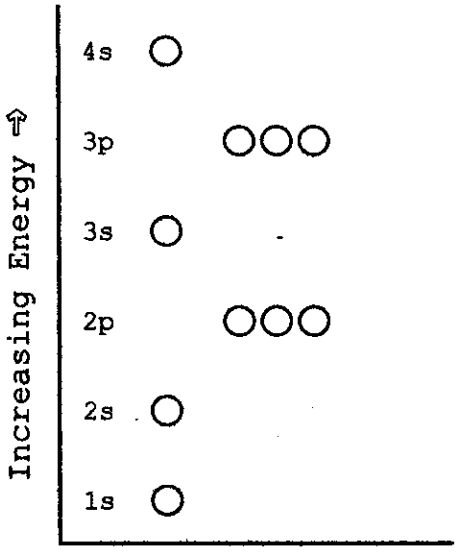
$_{11}Na$



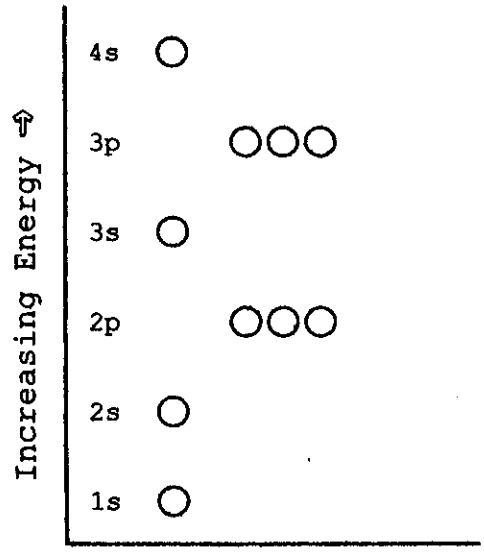
$_{18}Ar$



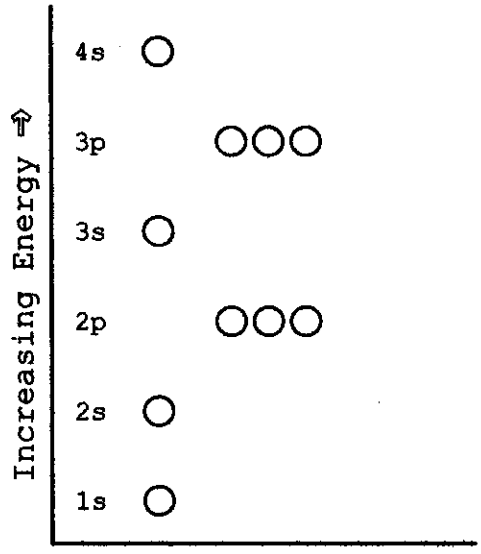
$_{6}C$



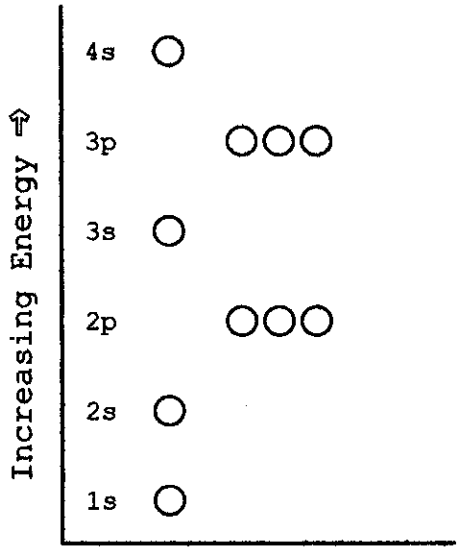
$_{3}Li$



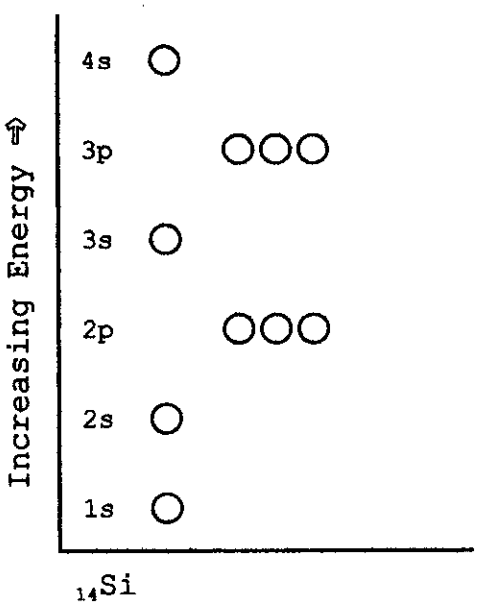
$_{13}Al$



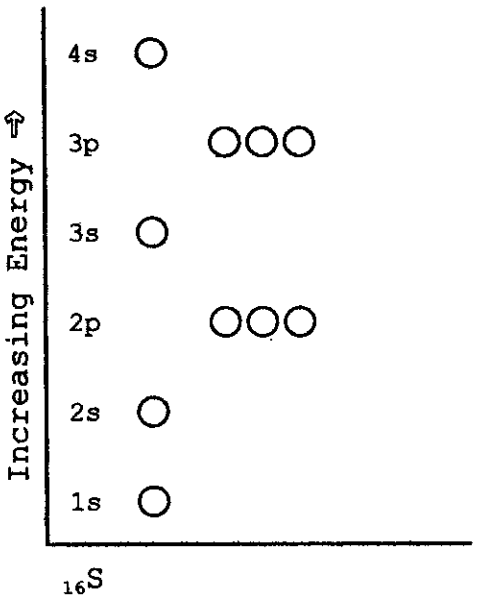
$_{17}Cl$



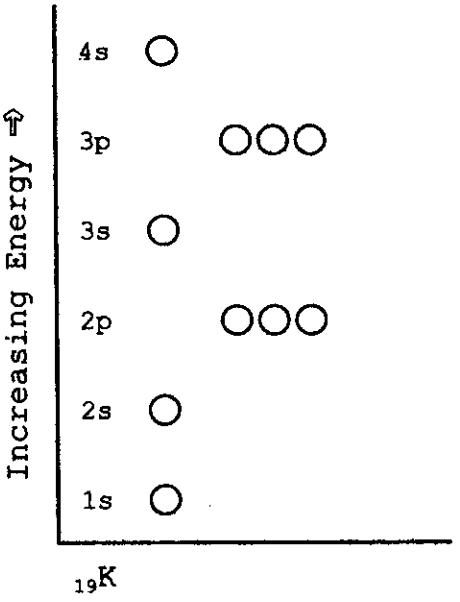
$_{7}N$



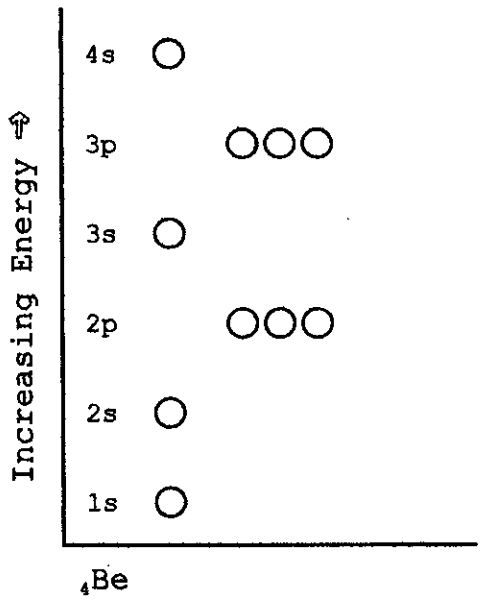
$_{14}Si$



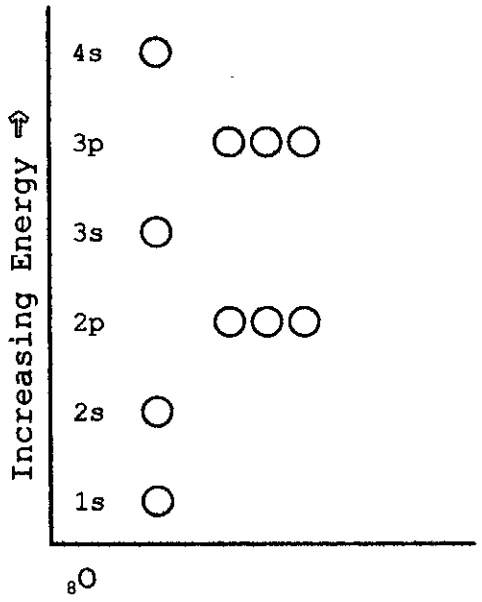
$_{16}S$



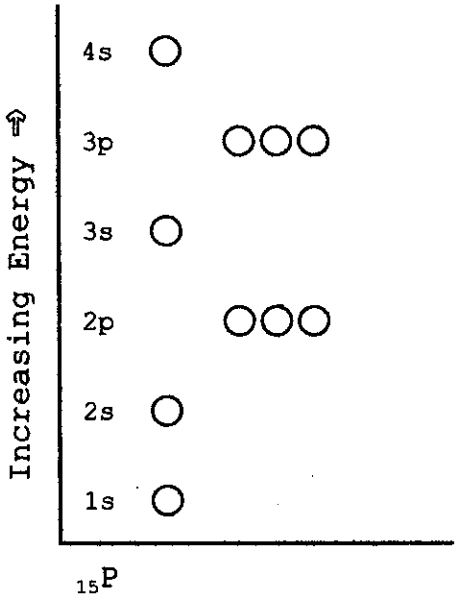
$_{19}K$



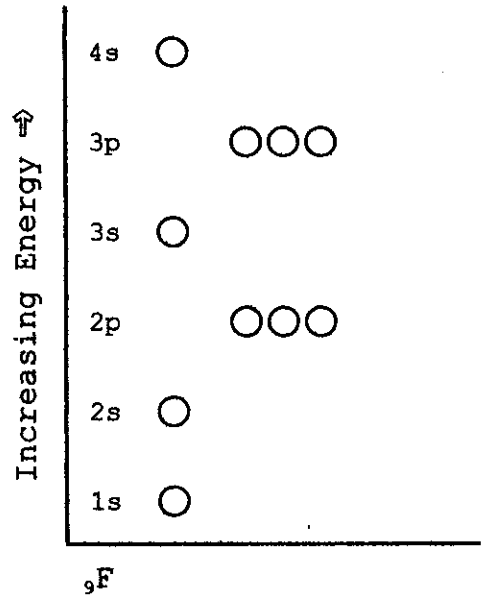
$_{4}Be$



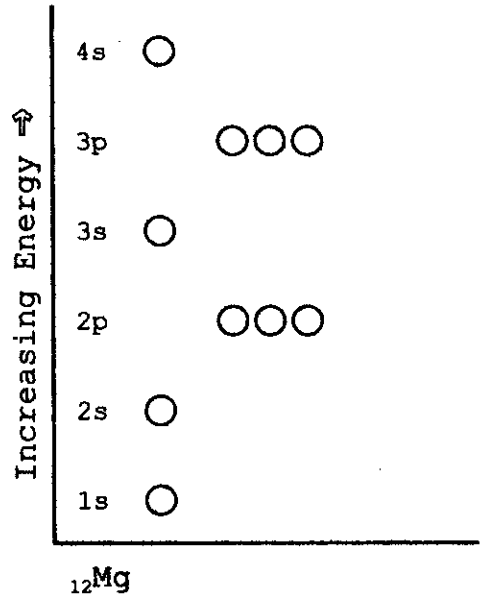
$_{8}O$



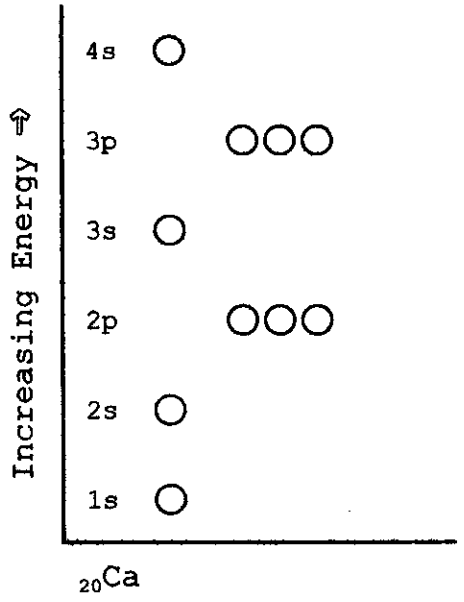
$_{15}P$



$_{9}F$



$_{12}Mg$



$_{20}Ca$

H																	He
Li	Be											B	C	N	O	F	Ne
Na	Mg											Al	Si	P	S	Cl	Ar
K	Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	Ga	Ge	As	Se	Br	Kr
Rb	Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	In	Sn	Sb	Te	I	Xe
Cs	Ba	Lu	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	Tl	Pb	Bi	Po	At	Rn
Fr	Ra	Lr	Rf	Db	Sg	Bh	Hs	Mt	Ds	Rg	Cn	Nh	Fl	Mc	Lv	Ts	Og

La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb
Ac	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No

Name:_____

SCH 3U Electron Configuration and Periodic Table Quiz

1. For each of the following, either show the end of the electron configuration or show the element that corresponds to the end of the electron configuration:

Element Symbol	Electron Configuration
$_{15}P$	
$_{75}Re$	
	$5d^1$
	$4d^9$
$_{101}Md$	
$_{71}Lu$	
	$6p^4$
	$5f^1$

2. Write the complete electron configuration for Roentgenium, $_{111}Rg$