

Name KEY Date _____

PERIODIC TRENDS #3

n=1
n=2
n=3
n=4

+1 I UKWR	+2 II	+3 III s^2p^1	+4 IV	-3 V s^2p^3	-2 VI	-1 VII	0 VIII DGLZ
W	JVN	BFT	IPH	AEQ	CMS	QXY	Z
R	N	F	H	E	C	X	D
U	V	B	I	O	S	Q	G
K	J	T	P	A	M	Y	L
U	N	T	H	E		Q	G

Use the code letters A to Z and the clues below to fill in the periodic table above.

- The following elements belong in the same families
~~BFT---DGLZ JNV CMS QXY AEQ IPH UKWR~~
- The charge on an ion of H is +4 and -4
- A neutral atom of C contains 8 electrons
- G is a noble gas
- U is an alkali metal
- E has 5 electrons in its outermost shell → The electrons of Z end with s^2p^3 ADDED w/ other part
- N is an alkaline earth metal
- T has 3 electrons in the fourth energy level
- Q is a halogen
- F has the smallest atomic mass in its family
- T is more metallic than B
- J has 20 protons
- P has the lowest ionization energy in its family
- N has 6 neutrons in its nucleus
- S's atomic radius is greater than that of C
- C is more closely related to S than to M
- Y is a liquid whereas Q is a gas
- X has the lowest electronegativity in its family
- K has the largest radius in its family
- W is a gas
- R has a higher ionization energy than U
- Atom Z has 2 neutrons
- D contains 10 protons
- The electrons of atom G are distributed over 3 energy levels
- H is the least metallic element in its group
- The electrons of atom O are distributed over 3 energy levels
- A is more metallic than either O or E