

Periodic Table of Elements

		Alkali Metal		Alkaline Earth		Transition Metal				Basic Metal		Metalloid		Nonmetal		Halogen		Noble Gas		Lanthanide		Actinide				
1	1	1	2																			8	18			
1	1	2																			3	4	5	6	7	2
1	1	2																			3	4	5	6	7	2
2	3	4																			5	6	7	8	9	10
2	3	4																			5	6	7	8	9	10
3	11	12																			13	14	15	16	17	18
3	11	12																			13	14	15	16	17	18
4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36								
4	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36								
5	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54								
5	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54								
6	55	56	57-71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86								
6	55	56	57-71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86								
7	87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118								
7	87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118								
6	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71											
6	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71											
7	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103											
7	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103											

Periodic Table Review

Part A: Answer these questions based on your knowledge of the periodic table.

1. How do you determine the number of protons OR electrons element has?

Use its atomic number (usually found at the top of a square)

2. How do you determine the number of valence electrons in an atom?

Use its location - the column it is in.

3. Which number tells you how many protons & neutrons are in the nucleus?

Use its atomic mass (usually found at the bottom of a square)

4. How do you determine the number of neutrons an element has?

Subtract the atomic number from the atomic mass

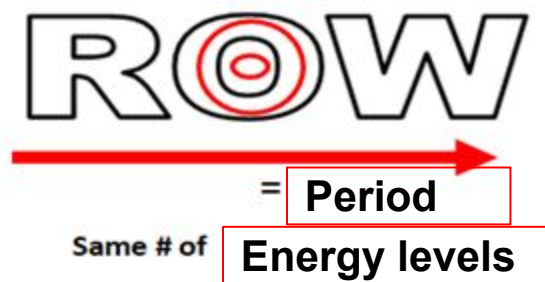
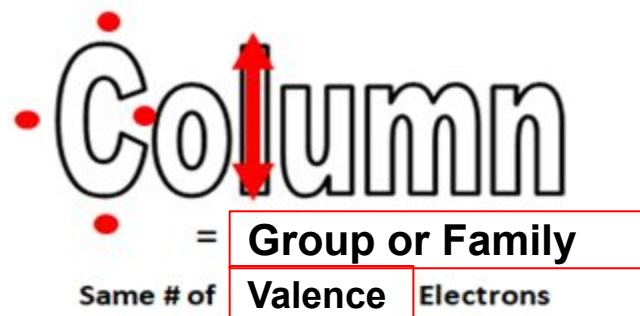
5. How do you determine the family or class for an element?

Use its location - the column is its family.

6. How do you determine the number of energy levels in an atom?

Use its location - the row # is the # of energy levels it has

7. Label the diagrams.



Part B: Mystery Element Challenge- Use your periodic table and the clues to determine the mystery element. Write its symbol in the correct format!

Cl 1. I am a gas with three energy levels and 7 valence electrons.

At 2. I am a halide with 6 energy levels.

Hg 3. I am a liquid metal with 80 electrons.

P 4. I am a member of the nitrogen family with 16 neutrons.

Au 5. I am a transition metal with 79 electrons.

As 6. I am a metalloid in the Nitrogen family with 42 neutrons.

Cr 7. I am a transition metal with 4 energy levels and a mass of 52.

Si 8. I am a metalloid with 3 valence electrons.

Kr 9. I am a Noble gas with 4 energy levels.

Br 10. I am a nonmetal that is a liquid at room temperature.

I 11. I am a solid Halogen with 74 neutrons.

Cf 12. I am a transition metal with 99 electrons.

Sr 13. I am an Alkaline Earth metal with 5 energy levels.

Be 14. I have 2 valence electrons in my second energy level.

Te 15. I am a metalloid in the Oxygen family with 5 energy levels.

Ca 16. I have 20 neutrons and 2 valence electrons.

Lv 17. I am a Chalcogen with 7 energy levels.

Fe 18. I have 26 electrons and 30 neutrons.

Ne 19. I have a full outer shell and a total of 2 energy levels.

?? 20. Create your own:

