Periodic Table: Special Families Pg. 56

• Groups/Columns/Families: vertical columns. Have similar properties.





Hydrogen - 1 Lithium - 3 Sodium - 11

1. Group IA: <u>Alkali Metals</u> - 1 electron in the valence (outermost) level.

Periodic Table: Special Families

Group IIA: <u>Alkaline Earth Metals</u> - 2 electrons in the valence (outermost) level.





Beryllium-4 Magnesium-12

Periodic Table: Special Families

Group VIIA: <u>Halogens</u> - 7 electrons in the valence level.





Fluorine - 9 Chlorine - 17



- Stable atoms: ones with full energy levels.
- All atoms try to become "stable" = chemical bonding
 - 1. Gain or lose electrons = ionic bond
 - 2. Share electrons = covalent bond

This will get folded in half and glued on page 55 of your IAN

Activity: You will be "color coding" your Periodic Table

- 1. Alkali Metals- Group 1A (choose a color pencil)
 - 2. Alkaline Earth Metals Group IIA (choose a different color)
- 3. Halogens- Group VIIA (choose a different color)
- 4. Noble Gases- Group VIIIA (choose a different color)
- 5. Metalloids- found along "stairstep-line", separating metals from non- metals. (B, Si, Ge, As, Sb, Te, Po) **Pick a color**
- 6. Metals- to the left of metalloids (choose a different color and do not color over those already colored)
- 7. Non-metals- to the right of metalloids.
- 8. WRITE- 1 energy level next to period 1, 2 energy levels next to period 2, 3 energy levels next to period 3, etc...

Pg. 37 of IAN QUESTIONS

- What happens to the atomic number as you move from left to right across a period?
- 2. What happens to the atomic mass as you move down a family?