

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

## ***Alien Periodic Table Clues***

*There are only 30 elements on the planet Blzzrritt. Your job is to develop a Periodic table for the Blzzrrittians using the clues provided below.*

The inert gasses are **bombal** (Bo), **wobble** (Wo); **jeptum** (J); and **logon** (L). Among these gasses, wobble has the greatest atomic mass and bombal the least. Logon is lighter than jeptum.

The most reactive group of metals are **xtalt** (X), **byyou** (By), **chow** (Ch), and **quackzil** (Q). Of these metals, chow has the lowest atomic mass. Quackzil is in the same period as wobble.

**Apstrom** (A), **vulcania** (V), and **kratt** (Kt) are non-metals whose atoms typically gain or share one electron. Vulcania is in the same period as quackzil and wobble.

The semimetals are **Ernst** (E), **highho** (Hi), **terriblum** (T), and **sississ** (Ss) is the semimetal with the greatest atomic mass. Ernst is the semimetal with the lowest atomic mass. Highho and terriblum are in Group 14. Terriblum has more protons than highho. **Yazzer** (Yz) touches the zigzag line, but it's a metal, not a semimetal.

The lightest of all is called **pfsst** (Pf). The heaviest element in the group of 30 elements is **eldorado** (El). The most chemically active nonmetal is apstrom. Kratt reacts with byyou to form table salt.

The element **doggone** (D) has only 4 protons in its atoms.

**Floxit** (Fx) is important in the chemistry of life. It forms compounds made of long chains of Floxit atoms called polymers. **Rhaatrap** (R) and **doadeer** (Do) are metals in the fourth period, but rhaatrap is less reactive than doadeer.

**Magnificon** (M), **goldy** (G), and sississ are all members of Group 15. Goldy has fewer electrons than magnificon.

**Urrp** (Up), **oz** (Oz), and **nuutye** (Nu) all gain 2 electrons when they react. Nuutye is found as a diatomic molecule and has the same properties as a gas found in that far away planet called Earth. Oz has a lower atomic number than urrp.

The element **anatom** (An) has atoms with a total of 49 electrons. **Zapper** (Z) and **pie** (Pi) lose two electrons when they react. Zapper is used to make lightweight alloys.

	1								18
		2		13	14	15	16	17	
						1	2	3	4

**Transition Metals**

Alien Questions:

- 1.) In the box labeled #1 in the Alien Periodic Table above would the element be a metal, non-metal or a semi-metal (metalloid)? \_\_\_\_\_
- 2.) How many outer electrons would be found in the Alien Element that belongs in box #2 in the Alien Periodic Table above? \_\_\_\_\_
- 3.) In box #3 in the Alien Periodic Table above would the element most likely be a solid, a liquid or a gas? \_\_\_\_\_
- 4.) Put in the correct symbols for the elements in each box as they would be named here on Earth.  
Example Pfsst = Hydrogen
- 5.) What type of element would be put into box #4 above by the Alien scientists? \_\_\_\_\_  
What would be its Atomic Number \_\_\_\_\_ Atomic Mass \_\_\_\_\_ Reactivity \_\_\_\_\_ State \_\_\_\_\_?
- 6.) There are only 92 naturally occurring elements in the Universe. Alien civilizations would no doubt call them by different names than we do here on Earth.  
Give three reasons why an Alien Periodic Table would have the same shape and organization as ours.
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
- 7.) Which Alien element in Column #1 would be most reactive? \_\_\_\_\_
- 8.) Which Alien metallic element would be most reactive? \_\_\_\_\_
- 9.) Which Alien non-metallic element would be most reactive? \_\_\_\_\_
- 10.) Name the Alien chemical compound that would be formed from the Alien elements #11 and #17?  
\_\_\_\_\_ What would this compound be called on Earth?
- 11.) In the following list which Alien elements are a metal? non-metal; metalloid? "Ernsst" \_\_\_\_\_;  
"Xtalt" \_\_\_\_\_; Apstrom \_\_\_\_\_
- 12.) In the following list which elements are an Alkali Metal; Alkali Earth metal; Halogen; Noble Gas?  
Chow \_\_\_\_\_; Zapper \_\_\_\_\_; Vulcania \_\_\_\_\_; Jeptum \_\_\_\_\_