Webquest: Periodic Table Name:_____Period:_____

http://www.qacps.k12.md.us/qhs/teachers/WeedonD/Atoms%20page%202.htm

1. The basic unit of all matter is the _____.
2. All atoms are made of three types of particles _____, _____, and _____.
3. The _____is used to identify an atom.
4. Protons are found in the _____of atoms. They have a _____charge.
5. How can you calculate the number of protons in an atom?
   _____
6. What happens when the number of protons in an atom changes?
   _____
7. Where are neutrons found in an atom?
   _____
8. How can you calculate the number of neutrons in an atom?
   _____
9. How are isotopes formed?
   _____
10. What is the charge on an electron?_____
11. How can you calculate the number of electrons in an atom?
    _____
12. An atom can gain or lose electrons to become an_____.
13. A sodium atom has _____ protons and____ electrons and a sodium ion would have _____protons and _____electrons.
14. The removal of an electron results in a _____charge.
15. THINK!! If 2 electrons were removed from magnesium, what would the charge on magnesium be?_____
16. Atom that are involved in bonding are called _____ electrons.
17. What does this word mean?_____.
18. How can you find the valance electrons for an atom?
    _____
19. What are valance electrons used for?_____

Go to http://tinyurl.com/rmsperiodic2

1. Why are the elements placed in specific places on the Periodic Table?

2. Periods are _____ that run from _____ to _____.

3. Elements in the same period have the same _____.

4. Every element in the first period has _____ shell for its _____. Every element in the second period has _____ for its _____. See the pattern?

5. Groups are _____ that run from _____ to _____.

6. The elements of a group have the same number of _____ in their _____ shell.

7. Every element in group one has _____ electron in its outer shell. Every element in group two has _____ electrons in its outer shell.

8. Hydrogen is special because it can act like two groups, _____ and _____.

9. Hydrogen sometimes is _____ an electron and sometimes it has an_____ electron.

10. Although helium has only _____ electrons in its outer shell, it is grouped with elements that have _____.

11. The green elements on this table are called _____ elements. They each have two electrons in their outer shell.

Go To http://www.teachersdomain.org/asset/phy03_int_ptable/

1. Click on the "Mystery Elements" Tab. Solve the mystery elements in order and write them in:
   a. _____
   b. _____
   c. _____
   d. _____
   e. _____
   f. _____
   g. _____
   h. _____
   i. _____
   j. _____
   k. _____
   l. _____

   Click on the "Chemical Bonds" Tab.
2. What kind of bond do Sodium and Chlorine make?_____
   a. When Sodium loses one valence electron, it becomes a _____ _____.
   b. When Chlorine gains an electron, it becomes a _____ _____.
3. What kind of bond do Copper and Zinc make? _____
   a. Metals often have _____ electrons in their outer shell.
   b. When these electrons come loose, they can form an _____ _____.
   c. The electrons for a cloud. This could is _____ charged and attracts the _____ charged atoms.
   d. Why are the atoms positively charged?_____
4. What kind of bond do Carbon and Oxygen make?_____
   a. These atoms are (choose one) Metals-----Metalloids----nonmetals.
   b. This bond is formed because these atoms _____ electrons.

Go to http://tinyurl.com/rmsperiodic3

1. Click on Alkali Metals (left bar) and answer the following questions.

a. What is the group number? _____

b. Are these metals reactive? _____

c. Do these metals occur freely in nature? _____

d. How many electrons are in their outer shell? _____

e. What are the three characteristics of ALL metals? _____

f. Are these metals soft or hard? _____

g. Name the two most reactive elements in this group? _____ and _____

h. What happens when they are exposed to water? _____

2. Click on Transition Metals (left bar) and answer these questions.

a. How many elements are in this group? _____

b. Name the three elements in this family that produce a magnetic field. _____, _____, and _____.

3. Click on Noble Gases (left bar) and answer these questions.

a. What is the group number? _____

b. Why were these gases considered to be inert or stable? _____

c. What is their oxidation number? _____

Go To http://periodictable.com/

You can put the mouse cursor over the element for some of these answers
For the following and give:

Name	# protons	#neutrons	#electrons	Atomic Mass	Atomic Number	#valence electrons	#electron shells	density
Ca								
Ga								
Pb								
Br								
Po								
B								
Kr								
Ne								