**Reactivity of Elements**  Name \_\_\_\_\_\_\_\_

1. What do most metals do when you put them in water?
2. Write down what happened with each element when they were placed in water.

|  |  |
| --- | --- |
| Li |  |
| Na |  |
| K |  |

1. Now you try:

What happens when you put a small piece of:

|  |  |
| --- | --- |
| Mg |  |
| Ca |  |

1. What happens to how reactive the elements are as you go down in the first column? (Alkali metals)
2. What happens to how reactive the elements are as you go down in the second column? (Alkali Earth Metals)
3. Define the following terms:
   1. Family or group (on periodic table)
   2. Period (on periodic table)
4. Study figure 4.7 on p. 175 and figure 4.12B on p. 178 to help answer the following.
   1. What are the Alkali metals and what do they have in common?
   2. What are the Alkaline Earth metals and what do they have in common?
   3. What are the Halogens and what do they have in common?
   4. What are the Noble gases and what do they have in common?
   5. Look at group 15, list the first 2 elements in this group. What do they have in common?
   6. Look at any group on the periodic table, what happens to the number of electrons as you move down the group?
5. As you move from left to right on the periodic table, what happens to:
   1. the atomic number
   2. the number of protons
   3. the atomic mass
6. Classify the following as alkali metals, alkaline earth metals, transition metals, halogens, or noble gases.

Calcium 🡪 Carbon 🡪

Radium 🡪 Fluorine 🡪

Manganese 🡪 Magnesium 🡪

Strontium 🡪 Xenon 🡪