## **Periodic Table of Elements**

1. Why did scientists in the 1800s decide that the list of known elements needed to be more organized?
2. How did Dmitri Mendeleev decide to organize his Periodic Table of the elements?
3. Write the group number and the name of the chemical family each of the four elements belong to on the lines below each element.
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A. Group 1A – Alkali Metal Family: Silver-colored, soft metals that are rarely found in elemental form in natu
due to how they react with other elements. Some alkali metals are involved in many biological functions.
B. Group 2A – Alkaline Earth Metal Family: Silver-colored, soft metals that are slightly less reactive than the alkaline earth metals are also important in many biological processes.
C. Group 7A – Halogen Family: Highly reactive non-metals that are rarely found in elemental form in nature do to their reactive nature.
D. Group 8A – Noble Gas Family: A non-reactive group of gases that are always found in elemental form in nature due to their unreactive nature.
4. What are the four other groups that make up the 8 families of Group A elements, the representative elements Write the group number and the element listed at the top of each group.
A. Group
B. Group
C. Group
D.Group

5. What are valence electrons of an atom?
6. How is the Group number related to the number of valence electrons for the representative elements, also called Group A elements?
7. What are Group B elements, where are they located on the Periodic Table, and what are some of the properti of these elements?

8. Write the name of the element, number of valence electrons, and group number for each representative element.

Symbol	Element Name	# of Valence Electrons	Group
Li			
s			
Ва			
Р			
Ge			
F			
Al			
Kr			