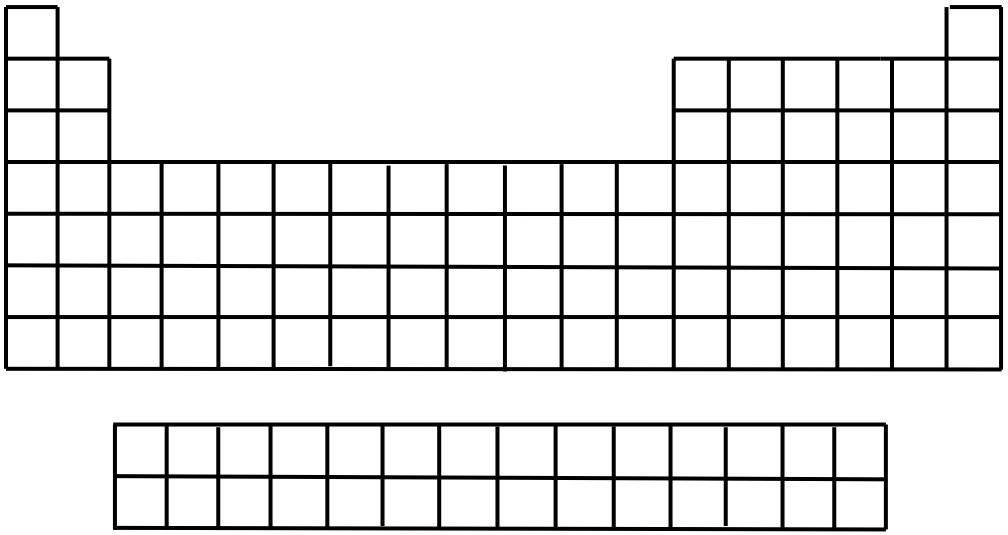
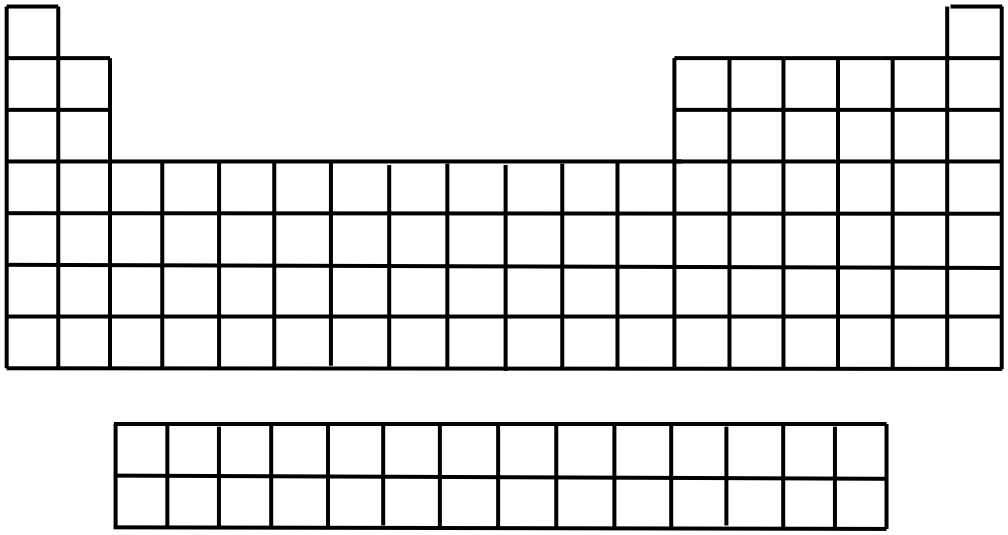
# Periodic Table Search

On the periodic tables provided, locate the following using colored pencils, cross-hatching, or labels.
Draw in the demarcation line (staircase), periods, and group numbers on both sets before you begin.

**USE THE FIRST PERIODIC TABLE**

1. Identify the parts of the chart which contain
   a. metals
   b. nonmetals
   c. metalloids (semi-metals)
2. Identify the following families (groups)
   a. alkali metals (note: hydrogen is NOT an alkali metal)
      How many valence electrons do alkali metals have? _____
      How many valence electrons do alkali metals lose to obtain an octet? _____
   b. alkaline earth metals
      How many valence electrons do alkaline earth metals have? _____
      How many valence electrons do alkali metals lose to obtain an octet? _____
   c. noble gases
      How many valence electrons do noble gases have? _____
   d. halogens
      How many valence electrons do halogens have? _____
      How many valence electrons do halogens gain to obtain an octet? _____
3. Identify the location of all the members of Group 3A
4. Identify the location of all the members of the 4th period
5. Identify the location of all the members of Group 5A
6. Identify the location of all the members of the 6th period

**USE THE SECOND PERIODIC TABLE**

7. Identify the transition elements (B group elements).
8. Locate the inner transition elements.
9. Identify the members of the
   a. Lanthanide series
   b. Actinide series
10. Find the representative elements (main group elements, A group elements).