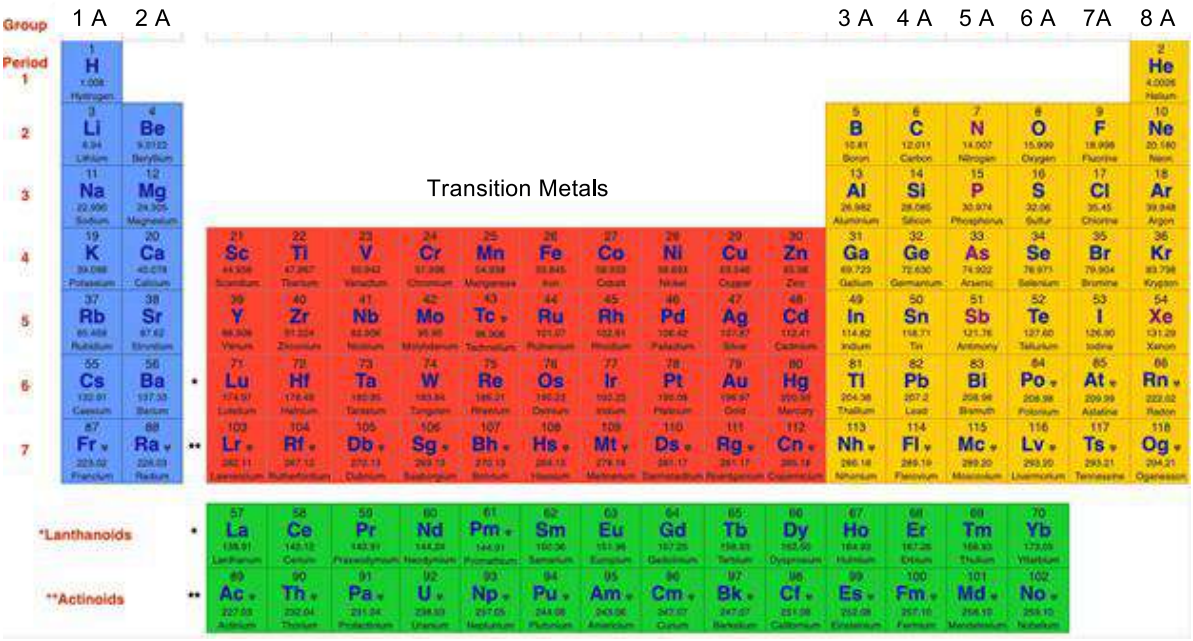
CHEMISTRY A: HONORS CHEMISTRY

GROUP PROJECT – CONSTRUCT THE PERIODIC TABLE OF THE ELEMENTS

For this project, you will work together as a class to construct your own, unique Periodic Table of the Elements similar to the one shown below, although we will use different colors. This project will serve two purposes. You will be producing a Periodic Table that we will keep in the classroom for future reference and, at the same time, you will be learning about the elements!



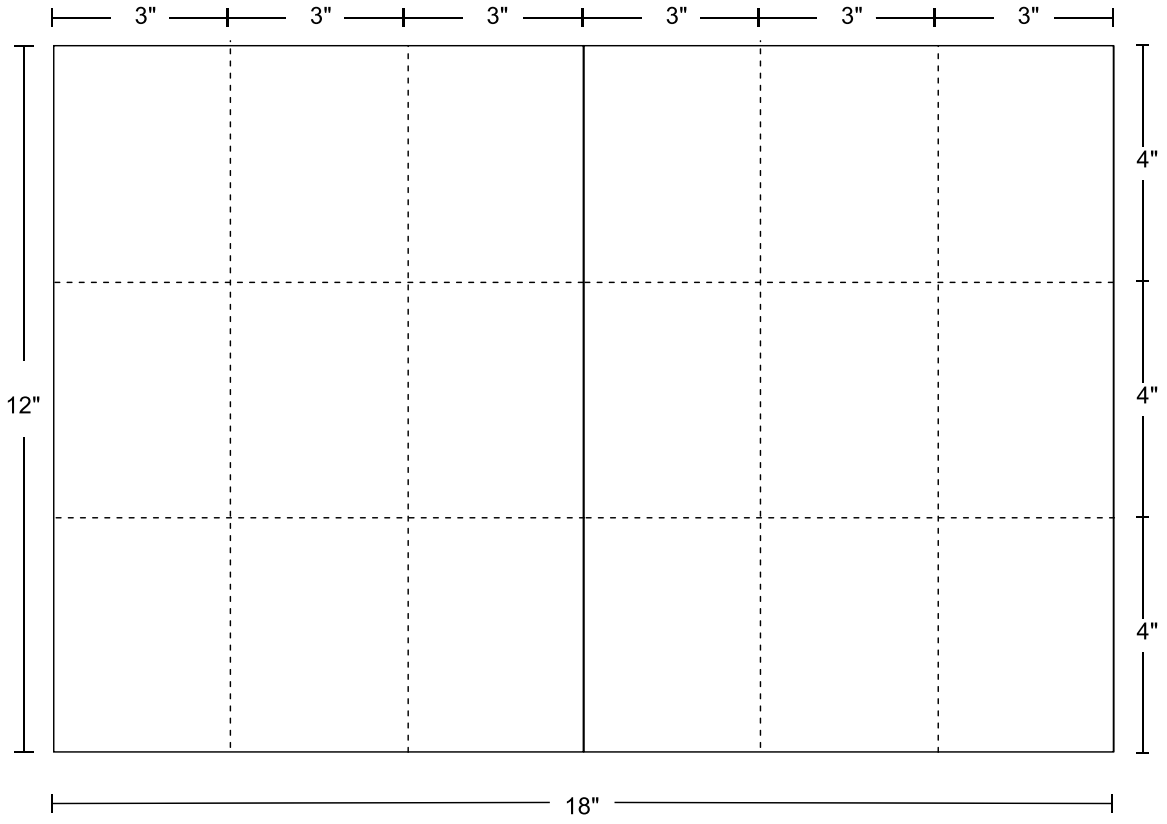
Each girl will be assigned four different elements from the Periodic table to look up and learn as much about as possible. Using construction paper of the appropriate color, you will then create a "block' for each of your elements that contains the atomic symbol, the atomic number (Z), the name of the element, and the atomic mass of the element. Once all the blocks have been created, we will paste them together in the correct order on a large sheet of poster board to construct the Periodic Table.

Needed Supplies

- Foam poster board, 60" x 40" (provided)
- Multi-colored construction paper (provided)
- Glue sticks (provided)
- Ruler
- Pencil
- Fine tip black marker / pen
- Course tip marker / Sharpie (black, red, blue)
- Scissors, box cutter or razor blade for cutting construction paper
- Cutting board (if box cutter or razor blade is used)

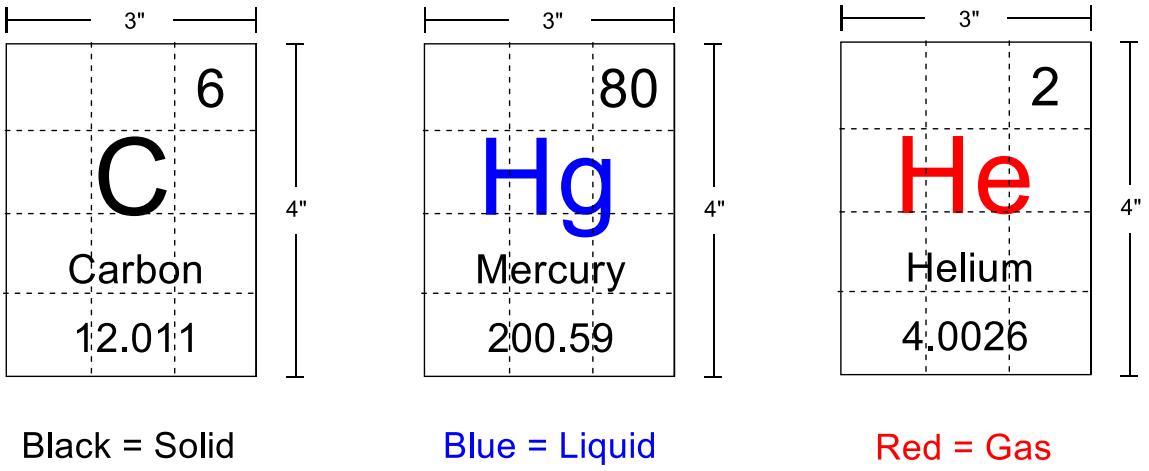
Activities

1. Done at home. You will be given a single sheet of construction paper that is 18” long by 12” wide. Using a ruler and a pencil, carefully draw straight lines that will divide the paper into 18 identical 3” x 4” blocks. Now, using scissors, cut along the lines to produce the individual blocks. Alternatively, you may use a box cutter or razor blade with the ruler as a straight edge to make the cuts. If you chose this option, be sure to work on a cutting board so as not to damage your table, floor, or counter top. Be patient and work slowly. The straighter and more accurate your cuts are, the better our Periodic Table will look!



2. Homework. Use your textbook, or search online (Wikipedia?) to learn all that you can about your assigned four elements. Report your findings on the last two pages of this handout and turn it in for evaluation.

3. Use the information that you learned in the second step above to create your elements' blocks. Again, be patient and work slowly. It is a good idea to use a ruler and pencil to make measurements and to mark what you wish to write before filling it all in with permanent marker.



Black = Solid Blue = Liquid Red = Gas

4. Once all the elements' blocks have been constructed, we will paste them together on the poster board as a class, and we will have our new periodic table!

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MY FOUR ELEMENTS

Name:_____

Element Name:_____

Atomic Symbol:_____

Atomic Number (Z):_____

Atomic Mass (amu):_____

Electron Configuration:_____

Known Isotopes:_____

Metal, Nonmetal, or Metalloid:_____

Main Group, Transition Metal, Lanthanide or Actinide:_____

State at room temperature and pressure (solid, liquid, gas):_____

Common Uses (may not apply to all elements):_____

_____

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Atomic Symbol:_____

Atomic Number (Z):_____

Atomic Mass (amu):_____

Electron Configuration:_____

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