PERIODIC PUZZLE

- OBJECTIVE: By placing the periodic table in the correct order, including the inner transition metals, one should be able to see that it is organized such that trends in elemental properties can be predicted and assessments made without knowing actual values

- MATERIALS:
  Periodic Puzzle worksheet
  colored pencils, crayons, markers, etc.
  scissors
  2 sheets of white paper
  Paste/glue
  Tape

- PROCEDURE:
  1) Attach two sheets of white paper end to end, using tape, creating a single piece approx. 21.5 cm x 53 cm.
  2) Cut out the pieces of the periodic table, and put the table together with the Lanthanide & Actinide series up in the main table (where they belong, should look like picture below).
  3) Label/identify the following on your periodic table. Create some sort of "key", by color, shading, etc.

1. Metals
2. Non-metals
3. Metalloids
4. Group numbers
5. Group names
6. Period numbers
7. Inner transition metals
8. Outer transition metals
9. Liquids (at room temp)
10. Gases (at room temp)
11. Ionic charges (for groups)
12. Valence electron locations (s block, p block, d block, f block)
13. Label and develop understanding of all periodic trends; (atomic size, ionic radius, electronegativity, ionization energy, shielding effect, nuclear charge)