

Part A:

1. On the blank periodic table

a. color metals blue

1. transition metals should be striped blue

a. lanthanoids and actinoids are transition elements

2. alkali and alkaline metals should be solid blue

3. all other metals should be dotted blue

b. color nonmetals red

1. halogens should be dotted red

2. noble gases should be striped red

3. all others should be solid red

4. hydrogen is considered a nonmetal

c. Color semi metals or metalloids purple

d. Place a rain drop symbol around the element symbol for those elements that are liquid at STP.

e. Place a circle around the element symbol for those elements that are a gas at STP

f. Place the letter symbol in the box for elements with an atomic number 1-20,26,28-30, 35,53,47,79,80, and 82

g. make a key for how you colored the periodic table in the lower left hand corner

Part B:

1. On the sheets provided or on your own sheets:

a. Make a periodic table box of any group 1 or group 2 metal being sure to include the symbol, name, atomic number, atomic mass, and electron configuration in the appropriate locations

b. Draw the Bohr Model of your element

c. Write the electron configuration for the element in the ground state as well as the possible electron configuration of your element in the excited state

d. Fill in the data table the number of protons, electrons, and neutrons for your element as a neutral atom, ion, and any isotope other than when neutral.

e. Research a metal isotope and indicate it's importance.

f. Include a picture of your isotope depicting it's use and importance.

g. repeat steps a-f above for any non metal that is **not** a noble gas.