

## Part A: Periodic Table Project

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 mass on periodic table.
  - 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.



Periodic table rubric:

Name: \_\_\_\_\_

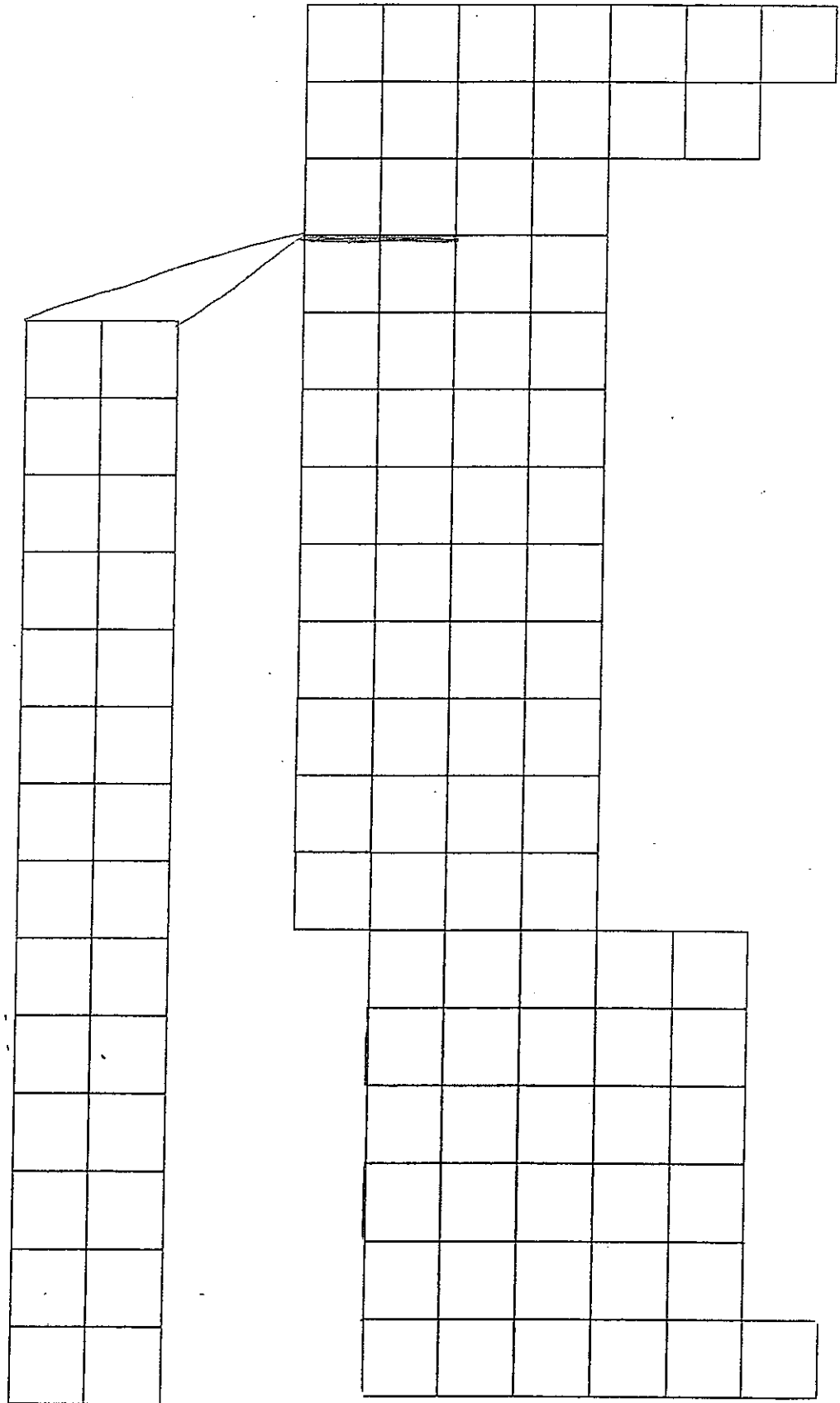
transition metals striped blue	
alkali and alkaline solid blue	
all other metals dotted blue	
halogens dotted red	
noble gases striped red	
all other nonmetals solid red	
rain drop around liquids	
circle around gases	
semi metal are purple	
subtotal	/9

**Metal**

periodic table box	
bohr model	
ground and excited state electron configuration	
data table (neutral)	
data table (ion)	
data table (isotope)	
identification of isotope (isotope notation)	
importance of isotope (3pts)	
picture depicting importance	
subtotal	/11

**Nonmetal**

periodic table box	
bohr model	
ground and excited state electron configuration	
data table (neutral)	
data table (ion)	
data table (isotope)	
identification of isotope (isotope notation)	
importance of isotope (3pts)	
picture depicting importance	
subtotal	/11





Metal or Nonmetal (circle one)

Bohr Model

Ground state electron configuration \_\_\_\_\_

Excited state electron configuration \_\_\_\_\_

	Neutral	Ion	Isotope
Number of protons			
Number of electrons			
Number of neutrons			

Isotope notation = \_\_\_\_\_

Description:

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Image:(may be placed on back if needed)

Metal or Nonmetal (circle one)

Bohr Model

Ground state electron configuration \_\_\_\_\_

Excited state electron configuration \_\_\_\_\_

	Neutral	Ion	Isotope
Number of protons			
Number of electrons			
Number of neutrons			

Isotope notation = \_\_\_\_\_

Description:

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Image:(may be placed on back if needed)