DESIGNER	PERIODIC	TABLE

Name	Period

### **Instructions:**

Using the blank periodic table provided. Within each of the blank boxes on the table create a designer periodic table according to the following criteria.

### Part A:

Select a color for labeling each of the following groups on the periodic table:

1. Alkali Metals

7. Oxygen Family

2. Alkaline Earth Metals

8. Halogens

3. Transition Metals/Elements

9. Noble Gases

4. Boron Family

10. Lanthanide Series

5. Carbon Family

11. Actinide Series

6. Nitrogen Family

# Part B:

Create a distinct division line (stair step) between the metals and nonmetals.

#### Part C:

Design a symbol for labeling each of the groups on the periodic table:

- 1. Metals
- 2. Nonmetals
- 3. Metalloids

## Part D:

Design a 2<sup>nd</sup> simple symbol for labeling each of the following groups on the periodic table:

- 1. Elements with an Oxidation Number of 1+
- 2. Elements with an Oxidation Number of 2+
- 3. Elements with an Oxidation Number of 3+
- 4. Elements with an Oxidation Number of 4+
- 5. Elements with an Oxidation Number of 3-
- 6. Elements with an Oxidation Number of 2-
- 7. Elements with an Oxidation Number of 1-
- 8. Elements with an Oxidation Number of 0

### Part E:

Select a 3<sup>rd</sup> simple symbol for labeling each of the following groups on the periodic table:

- 1. Elements within the "s" block
- 2. Elements within the "p" block
- 3. Elements within the "d" block
- 4. Elements within the "f" block

### Part F:

Select simple symbols to show the periodic trends in atom size and ion size.