

# SCIENCE 10 PERIODIC TABLE CHALLENGE:

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

Date: \_\_\_\_\_

Period: \_\_\_\_\_

WITHOUT USING YOUR PERIODIC TABLE, SEE IF YOU CAN FILL IN THE FOLLOWING BLANKS:

Write the names for each of the following elements: (spelling them correctly!)

H: \_\_\_\_\_ Ru: \_\_\_\_\_

Mg: \_\_\_\_\_ S: \_\_\_\_\_

I: \_\_\_\_\_ Ne: \_\_\_\_\_

Cr: \_\_\_\_\_ B: \_\_\_\_\_

As: \_\_\_\_\_ Kr: \_\_\_\_\_

Write the symbols for each of these elements:

Gold: \_\_\_\_\_ Silver: \_\_\_\_\_

Beryllium: \_\_\_\_\_ Aluminum: \_\_\_\_\_

Iron: \_\_\_\_\_ Bromine: \_\_\_\_\_

Scandium: \_\_\_\_\_ Platinum: \_\_\_\_\_

Mercury: \_\_\_\_\_ Tin: \_\_\_\_\_

Lead: \_\_\_\_\_ Chlorine: \_\_\_\_\_

Write the chemical formulas for three polyatomic elements:

\_\_\_\_\_

Write the chemical symbols for three nonmetallic elements:

\_\_\_\_\_

Write the chemical symbols for three metallic elements:

\_\_\_\_\_

1. Write the combining capacity of:                      2. Write the combining capacity of:  
*Combining capacity also means "charge"*

- |              |       |       |       |
|--------------|-------|-------|-------|
| a) Sulphur   | _____ | a) Mg | _____ |
| b) Potassium | _____ | b) Ga | _____ |
| c) Beryllium | _____ | c) Bi | _____ |
| d) Neon      | _____ | d) Fr | _____ |
| e) Silver    | _____ | e) Rn | _____ |

3. What element is at the following Periodic Table location?

- |                      |       |
|----------------------|-------|
| a) Period 2 Group 5  | _____ |
| b) Period 5 Group 14 | _____ |
| c) Period 3 Group 13 | _____ |
| d) Period 6 Group 11 | _____ |
| e) Period 4 Group 18 | _____ |

4. What is the Periodic Table location of the following elements?  
 (give Period and Group #)

Element	Period	Group
Silicon		
Iron		
Francium		
Uranium		
Osmium		

5. List 3 diatomic elements (at least one in a different family)

\_\_\_\_\_

6. What is the most metallic element on the Periodic Table? \_\_\_\_\_

What is the most nonmetallic element on the Periodic Table? \_\_\_\_\_

7. Mark the metallic elements as **M** and the non metallic elements as **NM**.

- |          |           |           |    |
|----------|-----------|-----------|----|
| 1. _____ | Potassium | 6. _____  | Sm |
| 2. _____ | Chlorine  | 7. _____  | Os |
| 3. _____ | Mercury   | 8. _____  | As |
| 4. _____ | Silicon   | 9. _____  | H  |
| 5. _____ | Antimony  | 10. _____ | B  |