

## Dot diagrams and symbols.

In the last unit we learned how to make dot diagrams. The Symbol is written with dots around it to represent the number of valence electrons you would expect that element to have. Use the Periodic Table to find the symbol for each element.

**Write the symbol and the correct dot diagram for each element.**

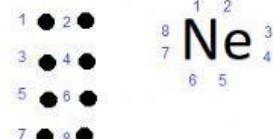
**Identify the family number and the elements expected oxidation number.**

a. hydrogen



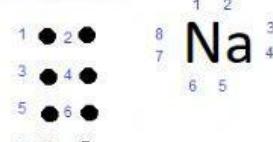
Family\_\_\_\_\_  
Oxidation Number\_\_\_\_\_

b. neon



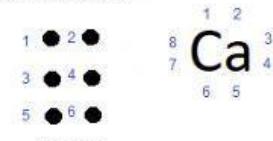
Family\_\_\_\_\_  
Oxidation Number\_\_\_\_\_

c. sodium



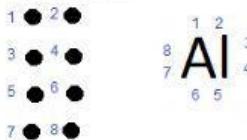
Family\_\_\_\_\_  
Oxidation Number\_\_\_\_\_

d. calcium



Family\_\_\_\_\_  
Oxidation Number\_\_\_\_\_

e. aluminum



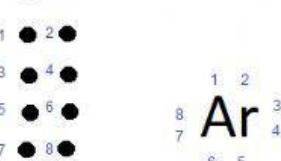
Family\_\_\_\_\_  
Oxidation Number\_\_\_\_\_

f. fluorine



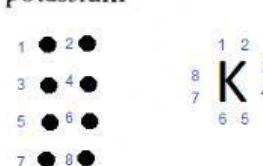
Family\_\_\_\_\_  
Oxidation Number\_\_\_\_\_

g. argon



Family\_\_\_\_\_  
Oxidation Number\_\_\_\_\_

h. potassium



Family\_\_\_\_\_  
Oxidation Number\_\_\_\_\_

Why do sodium and potassium have the same number of dots in their diagrams?

What does this tell you about the chemistry (chemical properties) of these two elements?