**Atoms: Periodic Trends: Quiz 5a**

/5

Please show work where necessary!

1. Identify each element as a **metal**, **metalloid**, or **nonmetal**.
   1. Fluorine
   2. Germanium
2. Which block (s, p, d, or f) are the transition metals found?
3. Circle the element with the largest atomic radius and put a square around the element with the smallest atomic radius: **Cu K Ni Br**
4. Circle the element with the highest electronegativity and put a square around the element with the lowest electronegativity: **Cu K Ni Br**
5. Circle the element with the highest ionization energy and put a square around the element with the lowest ionization energy: **Cu K Ni Br**

Answers:

1. Identify each element as a **metal**, **metalloid**, or **nonmetal**. (1/2 mark each)
   1. Fluorine **nonmetal**
   2. Germanium **metalloid**
2. Which block (s, p, d, or f) are the transition metals found? **D**
3. Circle the element with the largest atomic radius and put a square around the element with the smallest atomic radius: **Cu K Ni Br**

*Atomic radius decreases as you go left to right across a period. Potassium is in the far left group of period 4, and bromine is the farthest to the right of the four elements.*

1. Circle the element with the highest electronegativity and put a square around the element with the lowest electronegativity: **Cu K Ni Br**

*Electronegativity increases as you go left to right across a period. Potassium is in the far left group of period 4, and bromine is the farthest to the right of the four elements*



1. Circle the element with the highest ionization energy and put a square around the element with the lowest ionization energy: **Cu K Ni Br**

*Ionization energy increases as you go left to right across a period. Potassium is in the far left group of period 4, and bromine is the farthest to the right of the four elements.*