

## Covalent Bonding Review

- Covalent bonds form when nonmetals \_\_\_\_\_ their valence electrons in order to get the electron configuration of a \_\_\_\_\_.
- Structures that are covalently bonded are called \_\_\_\_\_. ONLY covalently bonded structures can be called \_\_\_\_\_.

Circle the compounds that are covalently bonded.



For each compound above that is covalently bonded, calculate its molar mass, rounding to the element masses to the nearest whole number. Use a periodic table and show your work. Then, provide its binary covalent name.

Mass	Mass	Mass	Mass	Mass
Name	Name	Name	Name	Name

- A single bond ( - ) represents \_\_\_\_\_ shared pair of electrons. A double bond ( = ) represents \_\_\_\_\_ shared pairs of electrons. A triple bond ( ≡ ) represents \_\_\_\_\_ shared pairs of electrons.
- Triple bonds are generally \_\_\_\_\_ and \_\_\_\_\_ than double bonds. Double bonds are \_\_\_\_\_ and \_\_\_\_\_ than single bonds.
- According to the HONC rule,
  - H**ydrogen and the **H**alogens form \_\_\_\_\_ covalent bond
  - O**xxygen (and the other nonmetals in its family, such as sulfur) form \_\_\_\_\_ covalent bonds
  - N**itrogen (and the other nonmetals in its family, such as phosphorus) form \_\_\_\_\_ covalent bonds
  - C**arbon (and silicon) form \_\_\_\_\_ covalent bonds
- Hydrogen peroxide has the formula  $\text{H}_2\text{O}_2$ . Which of these is the correct Lewis Structure for  $\text{H}_2\text{O}_2$ ?

