

# Sept 26, 2019

Molecular Compounds cont

**Test Tuesday!!**

## Naming Molecular Compounds

- named similarly to ionic compounds (remember though molecular compounds are two non-metals)

### Steps

- Name first element listed, with a prefix to count number of atoms  
**(do not use a prefix for one atom of the first element)**
- Name second element, with a prefix to count number of atoms.
- Change the suffix of second non-metal to -ide

# of Atoms	Prefix
1	mono
2	di
3	tri
4	tetra
5	penta

**Examples of Naming Molecular compounds:**

PCl<sub>5</sub> phosphorous pentachloride

NO nitrogen monoxide

NH<sub>3</sub> nitrogen trihydride

N<sub>2</sub>O<sub>5</sub> dinitrogen pentaoxide

## Writing Formulas

When writing the formulas for molecular compounds. Look at the prefix given and that is what you write as a subscript.

Examples:

dihydrogen monooxide = H<sub>2</sub>O

carbon tetrahydride = CH<sub>4</sub>

# Try these

Name each of the following molecular compounds:

1. NH<sub>3</sub> nitrogen trihydride
2. CO carbon monoxide
3. N<sub>2</sub>O<sub>4</sub> dinitrogen tetroxide

Write the formulas for each of the following molecular compounds:

1. carbon tetrachloride CCl<sub>4</sub>
2. phosphorous tribromide PBr<sub>3</sub>
3. sulfur trioxide SO<sub>3</sub>

The following are molecular compounds which have common names

You can choose to write the common name or the molecular name when naming, however if given the common name you need to know how to write the formula.

i.e. CH<sub>4</sub> = carbon tetrahydride = methane

NH<sub>3</sub> = nitrogen trihydride = ammonia

H<sub>2</sub>O = dihydrogen monoxide = water

H<sub>2</sub>O<sub>2</sub> = dihydrogen dioxide = hydrogen peroxide

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