

# Naming covalent compounds

1. Find each element on the periodic table.
2. Write the name of the first element in the formula. If there is only one atom of this element in the formula no prefix is needed, but if there is more than one you must include a prefix (di, tri, tetra).
3. Add the name of the second element with a prefix to show how many atoms of this element are in the formula. Use the prefix mono if there is only one atom of this element.
4. Change the ending to "ide".

## Examples:



- Elements: Carbon and oxygen
- Carbon (only one so no prefix)
- Carbon mono-oxygen (prefix always needed)
- Carbon monoxide



- Elements: Carbon and oxygen
- Carbon (only one so no prefix)
- Carbon di-oxygen (prefix always needed)
- Carbon dioxide



- Elements: Carbon and oxygen
- Di-Carbon (more than one so prefix needed)
- Dicarbon mono-oxygen (prefix always needed)
- Dicarbon monoxide

Prefixes
1 –
2 –
3 –
4 –
5 –
6 –
7 –
8 –
9 –
10 –

# Naming covalent compounds Practice 1

For each of the following formulas write the proper name for the covalent compound.

1.  $\text{H}_2\text{O}_2$  – \_\_\_\_\_

2.  $\text{H}_2\text{O}$  – \_\_\_\_\_

3.  $\text{N}_2\text{O}_3$  – \_\_\_\_\_

4.  $\text{HF}$  – \_\_\_\_\_

5.  $\text{SO}_3$  – \_\_\_\_\_

6.  $\text{SO}_2$  – \_\_\_\_\_

7.  $\text{PH}_3$  – \_\_\_\_\_

8.  $\text{CH}_4$  – \_\_\_\_\_

9.  $\text{NH}_3$  – \_\_\_\_\_

10.  $\text{NH}_4$  – \_\_\_\_\_

# Naming covalent compounds Practice 1

For each of the following formulas write the proper name for the covalent compound.

11.  $\text{H}_3\text{O}$  – \_\_\_\_\_

12.  $\text{SCl}_2$  – \_\_\_\_\_

13.  $\text{P}_2\text{O}_3$  – \_\_\_\_\_

14.  $\text{CBr}_4$  – \_\_\_\_\_

15.  $\text{C}_4\text{H}_8$  – \_\_\_\_\_

16.  $\text{H}_2\text{S}$  – \_\_\_\_\_

17.  $\text{N}_2\text{O}_5$  – \_\_\_\_\_

18.  $\text{OF}_2$  – \_\_\_\_\_

19.  $\text{ClO}_2$  – \_\_\_\_\_

20.  $\text{SiF}_4$  – \_\_\_\_\_

# How to write formulas for covalent compounds

1. Write the symbols for each element and the charges for each element.
2. For each element write a subscript for the numbers indicated. Remember if they don't mention a prefix for the first element it is one\*.  
\* subscripts are not needed if there is only one of that element.

## Examples:

### Carbon Monoxide

- One carbon, one oxygen
- CO

### Diphosphorus trioxide

- Two phosphorous, three oxygen
- P<sub>2</sub>O<sub>3</sub>

### Nitrogen tribromide

- One nitrogen, three bromine
- NBr<sub>3</sub>