



# Science 1206

## Hydrated Compounds



## Hydrated Compounds

- Ionic compounds sometime have water molecules held loosely
- when heated the water is released

Ex:

Copper(II) sulfate pentahydrate

Cobalt chloride dihydrate

## Name → Formula

- Give the formula as usual
- Add “ • \_\_\_H<sub>2</sub>O ” on the end using the corresponding number for the prefixes

Ex. Zinc chloride hexahydrate

1 = mono  
2 = di  
3 = tri  
4 = tetra  
5 = penta  
6 = hexa  
7 = hepta  
8 = octa  
9 = nona  
10 = deca



Ex: copper(II) sulfate pentahydrate

1 = mono  
2 = di  
3 = tri  
4 = tetra  
5 = penta  
6 = hexa  
7 = hepta  
8 = octa  
9 = nona  
10 = deca

## Formula → Name

- 1. Name the ionic compound
- 2. Add prefixhydrate on the end
- Ex:  $\text{Ba}(\text{OH})_2 \cdot 8\text{H}_2\text{O}$

1 = mono  
2 = di  
3 = tri  
4 = tetra  
5 = penta  
6 = hexa  
7 = hepta  
8 = octa  
9 = nona  
10 = deca

*only use the prefix for the water part....*



Ex:



1 = mono  
2 = di  
3 = tri  
4 = tetra  
5 = penta  
6 = hexa  
7 = hepta  
8 = octa  
9 = nona  
10 = deca

Don't forget to check if the cation is MULTIVALENT!!!

**Try construcng some now:**

1. sodium carbonate decahydrate

2. chromium III bromide tetrahydrate

3. calcium bromate dihydrate

**Name these...**

