Start

No

Yes

Is the compound ionic?

Does the

compound include any multivalent metals?

Does the

compound include any

polyatomic

Ions?

Does the

compound include any multivalent metals?

Is it a

"special" molecular compound?

End

Yes

Yes

No

Yes

No

No

Yes

No

Write the name of the metal first, then add the name of the polyatomic ion. It'll usually end in "ate"

|  |  |
| --- | --- |
| Polyatomic Ion | Formula and Charge |
| hydroxide | OH­- |
| nitrate | NO3- |
| bicarbonate | HCO3- |
| chlorate | ClO3- |
| sulphate | SO4-2 |
| carbonate | CO3-2 |
| phosphate | PO4-3 |
| dichromate | Cr2O7-2 |
| ammonium | NH4+ |

Write the name of the metal first, then add the name of the polyatomic ion. It'll usually end in "ate" Remember to add the relevant roman numeral after the metal

|  |  |  |  |
| --- | --- | --- | --- |
| Element | Symbol | Ionic Charges | Roman Numeral |
| Copper | Cu | 1+,2+ | I,II |
| Iron | Fe | 2+,3+ | I,III |
| Lead | Pb | 2+,4+ | II,IV |
| Tin | Sn | 2+,4+ | II,IV |
| Nickel | Ni | 2+,3+ | II,III |
| Gold | Au | 1+,3+ | I,III |

|  |  |
| --- | --- |
| Polyatomic Ion | Formula and Charge |
| hydroxide | OH­- |
| nitrate | NO3- |
| bicarbonate | HCO3- |
| chlorate | ClO3- |
| sulphate | SO4-2 |
| carbonate | CO3-2 |
| phosphate | PO4-3 |
| dichromate | Cr2O7-2 |
| ammonium | NH4+ |

Write the name of the metal first, followed by the name of the non metal. The non metal's name should be changed to end in "ide" Remember to add the relevant roman numeral after the metal

|  |  |  |  |
| --- | --- | --- | --- |
| Element | Symbol | Ionic Charges | Roman Numeral |
| Copper | Cu | 1+,2+ | I,II |
| Iron | Fe | 2+,3+ | I,III |
| Lead | Pb | 2+,4+ | II,IV |
| Tin | Sn | 2+,4+ | II,IV |
| Nickel | Ni | 2+,3+ | II,III |
| Gold | Au | 1+,3+ | I,III |

Write the name of the metal first, followed by the name of the non metal. The non metal's name should be changed to end in "ide"

"Special" molecular compounds

|  |  |
| --- | --- |
| Formula | Name |
| HNO3 | nitric acid |
| H2SO4 | sulphuric acid |
| HCl | hydrochloric acid |
| H2PO4 | phosphoric acid |
| NH3 | ammonia |
| O3 | ozone |
| H2O2 | hydrogen peroxide |
| H20 | water |
| CH4 | methane |

These compounds are used so frequently, that they have their own names (at least in SNC2D)

Write the elements in the order they were initially written. To add prefixes, count the number of each element's atoms, and consult the chart. Remember to change the name of the last element, so it ends in "ide"

|  |  |
| --- | --- |
| # of atoms | Prefix |
| 1 | mono |
| 2 | di |
| 3 | tri |
| 4 | tetra |
| 5 | penta |
| 6 | hexa |
| 7 | hepta |
| 8 | octa |
| 9 | nona |
| 10 | deca |