

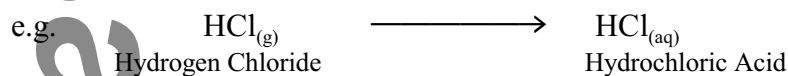
NAMING COMPOUNDS: BINARY ACIDS

Binary acids contain hydrogen and one other atom.

The names of all binary acids start with the prefix **hydro** — and end with the suffix — **ic** on the root of the second atom in the formula.

All acids produce hydrogen ions in aqueous solution. H^+ (aq).

Some acids are made by dissolving polar covalent gaseous molecules in water.



Usually acids have the subscript (aq) for AQUEOUS

(Aqueous: refers to the fact that it is a solution in water)

To name a Binary acids:

Hydro — _____ — ic acid
non-metal

Ionic name

Hydrogen ___ -ide

hydrogen fluoride

Hydrogen chloride

hydrogen bromide

hydrogen iodide

hydrogen sulphide

hydrophosphide

hydronitride

Acid name

Hydro ___ -ic acid

hydrofluoric acid

hydrochloric acid

hydrobromic acid

hydroiodic acid

hydro sulphuric acid

hydro phosphoric acid

hydro nitric acid

Formula

$HX_{(aq)}$

HF

HCl

HBr

HI

H_2S

H_3P

H_3N

(H^{+1} S^{-2})

(H^{+1} P^{-3})

I. Name the following, (note they are all in aqueous solution):

1. H_2S _____

4. H_2Te _____

2. HBr _____

5. HAt _____

3. H_2Se _____

6. H_3N _____

II Write the formula for the following:

1. hydrofluoric acid _____

4. hydronitric acid _____

2. hydrosulphuric acid _____

5. hydroboric acid _____

3. hydrotelluric acid _____

6. hydrocarbonic acid _____