NAMING ACIDS

A. Fill in the blanks.

You can recognize the formula of an acid because every formula begins with ___ for hydrogen.

_____ are compounds that contain hydrogen and one other element. For example, hydrochloric acid is a binaryacid because it contains ___ and ___ .

To name a binary acid, use the prefix " _____ ". Change the ending of the element to"___". For example, the name of HBr is _____ .

Ternary acids contain hydrogen and a polyatomic ion. DO NOT USE "HYDRO" WHEN NAMING THESE ACIDS.

If the polyatomic ion used in the acid ends in " ____", change the ending of the polyatomic acid to "___ ". For example, in H_2SO_4, SO_4^{2-} is called _____ , and the acid is called _____ .

If the polyatomic ion used in the acid ends in " ____", change the ending of the polyatomic acid to " ____". For example, in H_2SO_3, SO_3^{2-} is called _____ , and the acid is called _____ .

B. When given the formula of the acid, write the name. If given the name of the acid, write the formula.

HNO_3	H_3PO_3	Acetic acid	Boric acid
HCOOH	HI	Phosphoric acid	Arsenic acid
H_2S	$HClO_3$	Hydroselenic acid	Nitrous acid
$H_2C_2O_4$	HBr	Hydrochloric acid	Chloric acid
HCN	H_3PO_2	Sulfurous acid	Perbromic acid

NAMING ACIDS

Answers

A. Fill in the blanks.

You can recognize the formula of an acid because every formula begins with H for hydrogen.

Binary acids are compounds that contain hydrogen and one other element. For example, hydrochloric acid is a binaryacid because it contains H and Cl .

To name a binary acid, use the prefix " hydro- ". Change the ending of the element to" -ic ". For example, the name of HBr is hydrobromic acid .

Ternary acids contain hydrogen and a polyatomic ion. DO NOT USE "HYDRO" WHEN NAMING THESE ACIDS.

If the polyatomic ion used in the acid ends in " -ate ", change the ending of the polyatomic acid to " -ic ". For example, in H_2SO_4, SO_4^{2-} is called sulfate , and the acid is called sulfuric acid .

If the polyatomic ion used in the acid ends in " -ite ", change the ending of the polyatomic acid to " ous ". For example, in H_2SO_3, SO_3^{2-} is called sulfite , and the acid is called sulfurous acid .

B. When given the formula of the acid, write the name. If given the name of the acid, write the formula.

HNO_3 Nitric acid	H_3PO_3 Phosphorous acid	Acetic acid CH_3COOH	Boric acid H_3BO_3
HCOOH Formic acid	HI Hydroiodic acid	Phosphoric acid H_3PO_4	Arsenic acid H_3AsO_4
H_2S Hydrosulfuric acid	$HClO_3$ Chloric acid	Hydroselenic acid H_2S	Nitrous acid HNO_2
$H_2C_2O_4$ Oxalic acid	HBr Hydrobromic acid	Hydrochloric acid HCl	Chloric acid $HClO_3$
HCN Hydrocyanic acid	H_3PO_2 Hypophosphorous acid	Sulfurous acid H_2SO_3	Perbromic acid HBrO