

## Hydrates and Acids ANSWERS

### 1. Give the correct names for each of the acids listed below.

a) hydrochloric acid	$\text{HCl(aq)}$	n) hydroiodic acid	$\text{HI(aq)}$
b) citric acid	$\text{H}_3\text{C}_6\text{H}_5\text{O}_7\text{(aq)}$	o) phosphoric acid	$\text{H}_3\text{PO}_4\text{(aq)}$
c) benzoic acid	$\text{HC}_6\text{H}_5\text{COO(aq)}$	p) nitrous acid	$\text{HNO}_2\text{(aq)}$
d) acetic acid	$\text{HC}_2\text{H}_3\text{O}_2\text{(aq)}$	q) thiosulfurous acid	$\text{H}_2\text{S}_2\text{O}_2\text{(aq)}$
e) periodic acid	$\text{HIO}_4\text{(aq)}$	r) nitric acid	$\text{HNO}_3\text{(aq)}$
f) lactic acid	$\text{HC}_3\text{H}_5\text{O}_3\text{(aq)}$	s) hydrotelluric acid	$\text{H}_2\text{Te(aq)}$
g) formic acid	$\text{HCOOH(aq)}$	t) hydrocyanic acid	$\text{HCN(aq)}$
h) iodic acid	$\text{HIO}_3\text{(aq)}$	u) hydroselenic acid	$\text{H}_2\text{Se(aq)}$
i) oxalic acid	$\text{H}_2\text{C}_2\text{O}_4\text{(aq)}$	v) nitrous acid	$\text{HNO}_2\text{(aq)}$
j) sulfurous acid	$\text{H}_2\text{SO}_3\text{(aq)}$	w) hypoxalous acid	$\text{H}_2\text{C}_2\text{O}_2\text{(aq)}$
k) sulfuric acid	$\text{H}_2\text{SO}_4\text{(aq)}$	x) hydrofluoric acid	$\text{HF(aq)}$
l) carbonic acid	$\text{H}_2\text{CO}_3\text{(aq)}$	y) boric acid	$\text{H}_3\text{BO}_3\text{(aq)}$
m) phosphorous acid	$\text{H}_3\text{PO}_3\text{(aq)}$	z) hydrosulfuric acid	$\text{H}_2\text{S(aq)}$

### 2. Write the correct name for each of the following acids.

a) $\text{HC}_2\text{H}_3\text{O}_2\text{(aq)}$	acetic acid	m) $\text{HC}_5\text{H}_8\text{NO}_4\text{(aq)}$	glutamic acid
b) $\text{H}_2\text{B}_4\text{O}_7\text{(aq)}$	tetraboric acid	n) $\text{H}_3\text{PO}_4\text{(aq)}$	phosphoric acid
c) $\text{H}_3\text{AsO}_3\text{(aq)}$	arsenous acid	o) $\text{HClO(aq)}$	hypochlorous acid
d) $\text{HI(aq)}$	hydroiodic acid	p) $\text{HBr(aq)}$	hydrobromic acid
e) $\text{H}_3\text{BO}_3\text{(aq)}$	boric acid	q) $\text{H}_2\text{C}_2\text{O}_4\text{(aq)}$	oxalic acid
f) $\text{HF(aq)}$	hydrofluoric acid	r) $\text{H}_2\text{CO}_3\text{(aq)}$	carbonic acid
g) $\text{HCNO(aq)}$	cyanic acid	s) $\text{H}_2\text{SiO}_2\text{(aq)}$	silicous acid
h) $\text{H}_2\text{SO}_4\text{(aq)}$	sulfuric acid	t) $\text{HFO}_2\text{(aq)}$	fluorous acid
i) $\text{H}_2\text{C}_4\text{H}_4\text{O}_6\text{(aq)}$	tartric acid	u) $\text{HC}_{17}\text{H}_{35}\text{COO(aq)}$	stearic acid
j) $\text{HCN(aq)}$	hydrocyanic acid	v) $\text{H}_3\text{PO}_3\text{(aq)}$	phosphorous acid
k) $\text{H(HCOO)(aq)}$	formic acid	w) $\text{HCl(aq)}$	hydrochloric acid
l) $\text{HNO}_3\text{(aq)}$	nitric acid	x) $\text{HBrO}_2\text{(aq)}$	bromous acid