

Naming Acids and Bases

Review Answer Key

1.

Name of pure substance	IUPAC name for acid	Classical name for acid	Chemical Formula
hydrogen cyanide	<i>aqueous hydrogen cyanide</i>	<i>hydrocyanic acid</i>	<i>H₂CN(aq)</i>
<i>hydrogen bromide</i>	<i>aqueous hydrogen bromide</i>	<i>hydrobromic acid</i>	<i>HBr(aq)</i>
<i>hydrogen sulfate</i>	<i>aqueous hydrogen sulfate</i>	<i>sulfuric acid</i>	<i>H₂SO₄(aq)</i>
<i>hydrogen nitrite</i>	<i>aqueous hydrogen nitrite</i>	<i>nitrous acid</i>	<i>HNO₂(aq)</i>
<i>hydrogen thiocyanate</i>	<i>aqueous hydrogen thiocyanate</i>	<i>thiocyanic acid</i>	<i>HSCN(aq)</i>
hydrogen phosphate	<i>aqueous hydrogen phosphate</i>	<i>phosphoric acid</i>	<i>H₃PO₄(aq)</i>
<i>hydrogen chlorite</i>	<i>aqueous hydrogen chlorite</i>	<i>chlorous acid</i>	<i>HClO₂(aq)</i>
<i>hydrogen iodide</i>	<i>aqueous hydrogen iodide</i>	<i>hydroiodic acid</i>	<i>HI(aq)</i>
<i>hydrogen borate</i>	<i>aqueous hydrogen borate</i>	<i>boric acid</i>	<i>H₃BO₃(aq)</i>

2.

Ending of name of pure substance	Classical name of acid
-ate	<i>-ic acid</i>
<i>hydrogen ----ide</i>	<i>hydro----ic acid</i>
<i>-ite</i>	<i>-ous acid</i>

3.

- (a) NaOH *sodium hydroxide* (c) strontium hydroxide *Sr(OH)₂(aq)*
 (b) Mg(OH)₂ *magnesium hydroxide* (d) potassium hydroxide *KOH(aq)*
 (c) NH₃ *ammonia* (e) cesium hydroxide *CsOH(aq)*

(Answers appear in italics.)