

Acids and Bases Worksheet

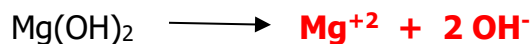
1. Indicate if each compound is an acid or base and name it.

	Acid/Base?	Name		Acid/Base?	Name
HNO ₃	Acid	nitric acid	H ₂ CO ₃	Acid	carbonic acid
Mg(OH) ₂	Base	magnesium hydroxide	HF	Acid	hydrofluoric acid
H ₃ PO ₄	Acid	phosphoric acid	Fe(OH) ₃	Base	iron (III) hydroxide

2. Write the formula for each of the following acids/bases:

hydrochloric acid	HCl	hydrochloric acid	HCl
aluminum hydroxide	Al(OH)₃	sodium hydroxide	NaOH
lithium hydroxide	LiOH	calcium hydroxide	Ca(OH)₂
sulfuric acid	H₂SO₄	sulfurous acid	H₂SO₃

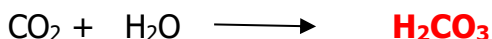
3. Write chemical equations showing how each of the following dissolves (ionizes) in water:



4. For each reaction type, complete the equations and balance them.

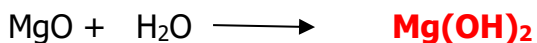
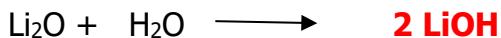
a) Making Acids from Non-metal Oxides

General form: *non-metal oxide + water* \longrightarrow *acid*



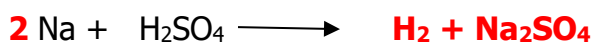
b) Making Bases from Metal Oxides:

General form: *metal oxide + water* \longrightarrow *base*



c) Reactions of Acids 1: Reaction with Metals

General form: *metal + acid* \longrightarrow *salt + hydrogen*



d) Reactions of Acids 2: Reaction with Carbonates

General form: *acid + carbonate* \longrightarrow *salt + water + carbon dioxide*

