

Acids and Bases Worksheet

1. Acids and bases share some properties but are different in others. Use the samples at the side of the class to complete the chart. If both acids and bases share the property, place it in both columns.

Property	Acids	Bases
Conductivity in Aqueous Solution		
Taste		
Feel		
Reaction with Metal		
Reaction with Carbonate		
Colour on Litmus Paper		
Colour with Universal Indicator		
Colour with phenolphthalein		

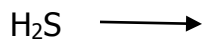
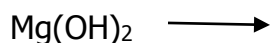
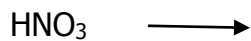
2. Indicate if each compound is an acid or base and name it.

	Acid/Base?	Name
HNO ₃	_____	_____
Mg(OH) ₂	_____	_____
H ₃ PO ₄	_____	_____
H ₂ CO ₃	_____	_____
HF	_____	_____
Fe(OH) ₃	_____	_____

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

hydrochloric acid	_____	hydrochloric acid	_____
aluminum hydroxide	_____	sodium hydroxide	_____
lithium hydroxide	_____	calcium hydroxide	_____
sulfuric acid	_____	sulfurous acid	_____

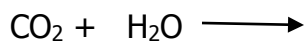
4. Write chemical equations showing how each of the following dissolves in water:



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

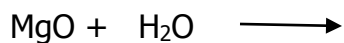
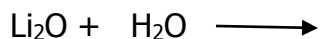
a) Making Acids from Non-metal Oxides

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*

