

Chemistry 20	Unit 3
Lesson 7 - Arrhenius Acids and Bases	84 mins

Arrhenius Acids	Arrhenius Bases
<ul style="list-style-type: none"> - Substances containing H and will dissociate, producing $H^+_{(aq)}$ 	<ul style="list-style-type: none"> - Substances containing OH and will dissociate, producing $OH^-_{(aq)}$ $NaOH_{(aq)} \rightarrow Na^+_{(aq)} + OH^-_{(aq)}$ $LiOH_{(aq)} \rightarrow Li^+_{(aq)} + OH^-_{(aq)}$ $Ba(OH)_{2(aq)} \rightarrow Ba^{2+}_{(aq)} + 2OH^-_{(aq)}$ $Ca(OH)_{2(aq)} \rightarrow Ca^{2+}_{(aq)} + 2OH^-_{(aq)}$ <p>Although both Ba and Ca don't dissolve in water well when they do it will be 100% dissolved making both strong bases...</p>

Understanding the pH Scale

<ul style="list-style-type: none"> - Power of Hydrogen - Logarithmic Scale (powers of ten) 	
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Chemical Compound	Predict - Acid or Base?	Observation - Acid or Base?
$H_2CO_{3(aq)}$		Acid
$H_2SO_{3(aq)}$		Acid
$NH_{3(aq)}$		Base
$LiOH_{(aq)}$		Base
$NaOCl_{(aq)}$		Base
$Na_2CO_{3(aq)}$		Base

Chemistry 20 - Unit 2 - Arrhenius Acids and Bases

Name: _____

1. Determine if each of the following ionic compounds are water soluble. Write a balanced dissociation equation for each soluble ionic compound as appropriate. Label each compound as being acidic or basic based on the products formed. Finally, give each acid a proper name.

a. hydrogen chloride	r. hydrogen bromide
b. hydrogen iodate	s. hydrogen chlorate
c. hydrogen iodide	t. hydrogen fluoride
d. aluminum chloride	u. aluminum iodide
e. cesium bromide	v. copper (I) bromide
f. barium hydroxide	w. strontium hydroxide
g. strontium nitrate	x. barium nitrate
h. ammonium nitrite	y. ammonium phosphate

i. calcium acetate

j. hydrogen sulfate

k. aluminum hydroxide

l. lithium hydroxide

m. sodium hydroxide

n. ammonium nitrate

o. ammonium bromide

p. rubidium perchlorate

q. sodium hypochlorite