

Acids/Bases Worksheet

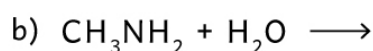
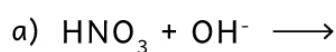
1. Define the terms acid and base using the Arrhenius and Bronsted/Lowry definitions.

	Arrhenius	Bronsted/Lowry
Acid		
Base		

2. Acids and bases share some properties but are different in others. Using your knowledge of acids and bases, fill in the column in the table below.

Property	Acids	Bases
Conductivity in Aqueous Solution		
Taste		
Feel		
Reaction with Metal		
Reaction with Carbonate		
Color with Litmus Paper		
Color with Universal Indicator		
Color with Phenolphthalein		

3. Using your knowledge of the Brønsted-Lowry theory of acids and bases, complete the equations for the following acid-base reactions and indicate each conjugate acid-base pair.



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Answers

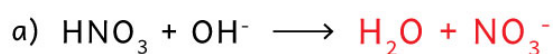
1. Define the terms acid and base using the Arrhenius and Bronsted/Lowry definitions.

	Arrhenius	Bronsted/Lowry
Acid	A compound that dissociates in water to yield a hydrogen ion (H^+)	A compound that can transfer a proton to another compound
Base	A compound that ionizes in water to yield hydroxide ions (OH^-)	A compound that accepts the proton from another compound

2. Acids and bases share some properties but are different in others. Using your knowledge of acids and bases, fill in the column in the table below.

Property	Acids	Bases
Conductivity in Aqueous Solution	High	High
Taste	Sour	Bitter
Feel	Corrosive	Slippery
Reaction with Metal	Produces H_2 gas	Produces salt and H_2 gas
Reaction with Carbonate	Produces CO_2 gas	Produces CO_2 gas
Color with Litmus Paper	Red	Blue
Color with Universal Indicator	Red	Purple
Color with Phenolphthalein	Colorless	Pink

3. Using your knowledge of the Brønsted-Lowry theory of acids and bases, complete the equations for the following acid-base reactions and indicate each conjugate acid-base pair.



HNO_3 and NO_3^- make one pair. OH^- and H_2O make the other.



CH_3NH_2 and $CH_3NH_3^+$ make one pair. OH^- and H_2O make the other.