Elite Private School

Worksheet

Acids/Bases Worksheet

Drag and drop the words/phrases from this bank to complete the blank spaces in the worksheet.

Sour taste	Is colourless when added	Hydrogen ion acceptor	$CH_3NH_3^+$	High because of the presence of hydroxide ions.	Feels slippery
Donates electron pairs	Produces a red colour when added	HNO_3/NO_3^- acid-conjugate base pair	Turns blue litmus red	Proton donor	NO_3^-
$CH_3NH_2/CH_3NH_3^+$ base-conjugate acid pair	High due to presence of hydrogen ions	Has hydrogen and dissociates to produce H^+	H_2O/OH^- acid-conjugate base pair	Has hydroxide and splits to produce OH^-	Produces a purple colour when added
H_2O/H_3O^+ base-conjugate acid pair.	H_3O^+	OH^-	Bitter taste	Turns red litmus blue	Has a pinkish hue when added
Has a corrosive feel	Electron pair acceptor				

1. Define the terms acid and base using the different models.

	Arrhenius Model	Bronsted-Lowry Model	Lewis Model
Acid			
Base			

2. Below are some properties that are associated with acids and bases. Use words from the bank to fill in the correct blank space.

Property	Acid	Base
Conductivity in aqueous solution		
Taste		
Feel		
Reaction with metal	Produces H_2 gas	Produces H_2 gas and a salt
Reaction with carbonate	Produces CO_2 gas	Produces CO_2 gas
Colour with litmus paper		
Colour with universal indicator		
Colour with phenolphthalein		

3. Using your knowledge of the Bronsted-Lowry model of acid and bases, complete the equation and indicate each conjugate acid-base pair.

a. $HNO_3 + H_2O \rightarrow$ +

1st Conjugate acid-base pair 2nd Conjugate acid-base pair

b. $CH_3NH_2 + H_2O \rightarrow$ +

1st Conjugate acid-base pair 2nd Conjugate acid-base pair