

Worksheet 9

For the following write SA if it is a strong acid, SB if it is a strong base, WA if it is a weak acid, WB if it is a weak base and Salt if it is a salt.

KOH		HNO ₃	
HClO		H ₂ CO ₃	
HClO ₄		K ₂ CO ₃	
NH ₃		HBr	
KBr		LiOH	

For the following write the pH. If it is impossible to tell write a question mark (?)

Solution	pH	Solution	pH	Solution	pH
.0001 M HNO ₃		.00001 M KOH		.001 M LiOH	
.01 M NaOH		.0000000001 M H ₃ O ⁺		.1 M OH ⁻	
.000001 M HCl		.00001 M NH ₃		.00001 M HClO ₄	
.0001 M NaCl		.1 M KBr		.00001 M HCl	
.000001 M HF		.001 HC ₂ H ₃ O ₂		.000001M NaOH	

For the following write S if it is a strong electrolyte, W if it is a weak electrolyte and N if it is a non electrolyte. (Don't forget to check the solubility rules)

KCl		HCl	
C ₂ H ₅ OH (polar)		CCl ₄ (nonpolar)	
NaOH		HF	
HNO ₃		AgCl	
NaC ₂ H ₃ O ₂		NH ₃	
Zn(OH) ₂		HNO ₂	
HC ₂ H ₃ O ₂		BaSO ₄	

For the following write yes if it is a buffer and no if it is not a buffer

HCl and NaOH		NaCl and KCl	
HF and NaF		KCl and HCl	
HNO ₂ and KNO ₂		HC ₂ H ₃ O ₂ and NaC ₂ H ₃ O ₂	
HNO ₃ and KNO ₃		NaCl and NaOH	