Acids and Alkalis

Finish the word equations:

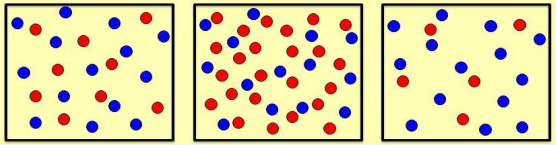
Metal Carbonate + Acid ↠ Metal salt + Carbon dioxide + water

1. Lithium carbonate + Hydrochloric Acid ↠ Lithium chloride + _____ + _____
2. Copper carbonate + _____ ↠ Copper chloride + _____ + Water

Which box has the highest concentration of acid particles?

● = water particle

● = acid particle



What do these symbols mean?

1. 

_____

2. 

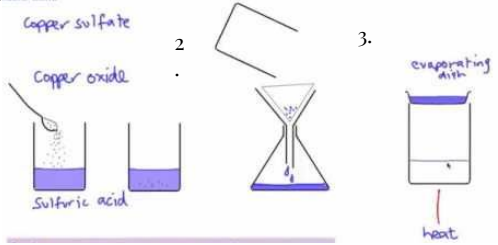
_____

Explain what is happening in each diagram:

1.

2.

3.



What is an indicator?

A substance that tells us whether something is acid or alkali

Complete the table:

Name of Indicator	Colour with acid	Colour with alkali
Blue Litmus Paper		
Red Litmus Paper		
Universal Indicator		

Which acid produces which salt.?

Name of Acid	Name of Salt Made
Hydrochloric	
	Sulfate
Nitric	

Label the pH scale to show: a) The acids
b) The alkalis
c) Where neutral is

Complete the equation and write in the pH numbers:

50cm³ ___
pH _____

+

50cm³ acid
pH ____

=

metal salt
pH ___

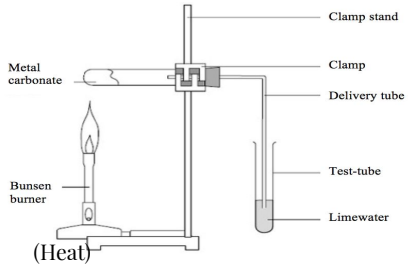
+

_____
pH ___

Balance the equation:

__NaOH + __H_2SO_4 ↠ __Na_2SO_4 + __H_2O

Write the equation to show the reaction happening (HINT: the limewater turns cloudy)



(Heat)

_____ –↠ _____ + _____

Finish the word equations:

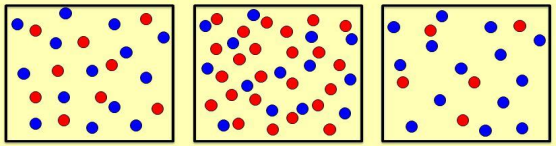
Metal Carbonate + Acid ⇾ Metal salt + Carbon dioxide + water

1. Lithium carbonate + Hydrochloric acid ⇾ Lithium chloride + Carbon dioxide + Water
2. Copper carbonate + Hydrochloric acid ⇾ Copper chloride + Carbon dioxide + Water

Which box has the highest concentration of acid particles?

● = water particle

● = acid particle



A B C

What do these symbols mean?

1. 

Corrosive

2. 

Irritant

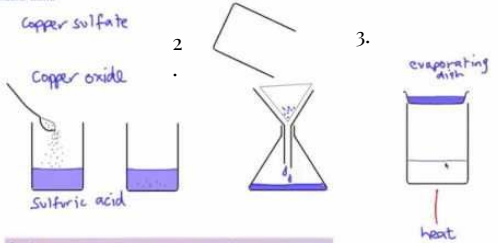
Acids and Alkalis

Explain what is happening in each diagram:

1. Insoluble salt added to excess in acid to Form a soluble salt

2. Excess salt filtered off

3.Water evaporated from Dissolved salt so crystals form



What is an indicator?

A substance that tells us whether something is acid or alkali

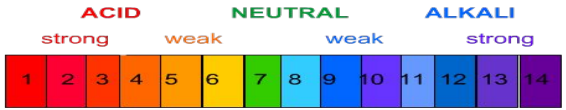
Complete the table:

Name of Indicator	Colour with acid	Colour with alkali
Blue Litmus Paper	Red	Blue
Red Litmus Paper	Red	Blue
Universal Indicator	Yellow, orange, red.	Blue, Purple

Which acid produces which salt.?

Name of Acid	Name of Salt Made
Hydrochloric	Chloride
Sulfuric	Sulfate
Nitric	Nitrate

Label the pH scale to show: a) The acids
b) The alkalis
c) Where neutral is



Complete the equation and write in the pH numbers:

50cm³ alkali — pH 8-14

50cm³ acid — pH 1-6

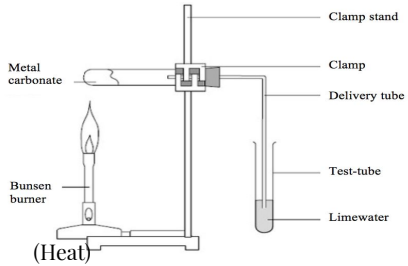
metal salt — pH 7

water — pH 7

Balance the equation:

$2NaOH + H_2SO_4 \rightarrow Na_2SO_4 + 2H_2O$

Write the equation to show the reaction happening (HINT: the limewater turns cloudy)



(Heat)

Metal carbonate -⇾ Metal oxide + Carbon dioxide