

Cumbernauld Academy

CfE Science

Chemistry

Acids and Alkalis

Name:- _____

Class:- _____

Teacher:- _____

Homework

Exercise 1 - / 10

Exercise 2 - / 10



Homework Activity 1

1. Name two common household acids:

(2)

2. Name two common household alkalis:

(2)

3. Describe how you would get the pH number of a solution using universal indicator or pH paper.

(2)

4. Complete this table

pH	Colour of universal indicator	Type of solution
<7	Red	
=7	Green	Neutral
> 7		Alkali

(2)

5. (a) Adding water to an acid makes it less acidic. What happens to the pH as a solution is made less acidic?

(b) Adding water to an alkali makes it less alkaline. What happens to the pH as a solution is made less alkaline?

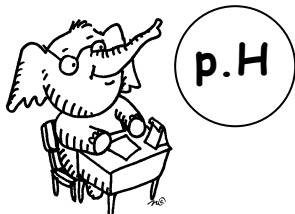
(2) (10)

Homework Activity 2



1. Think about this

A pupil added alkali (2 drops at a time) to neutralise an acid



p.H

remember less than 7 is acid
7 is neutral
more than 7 is alkali

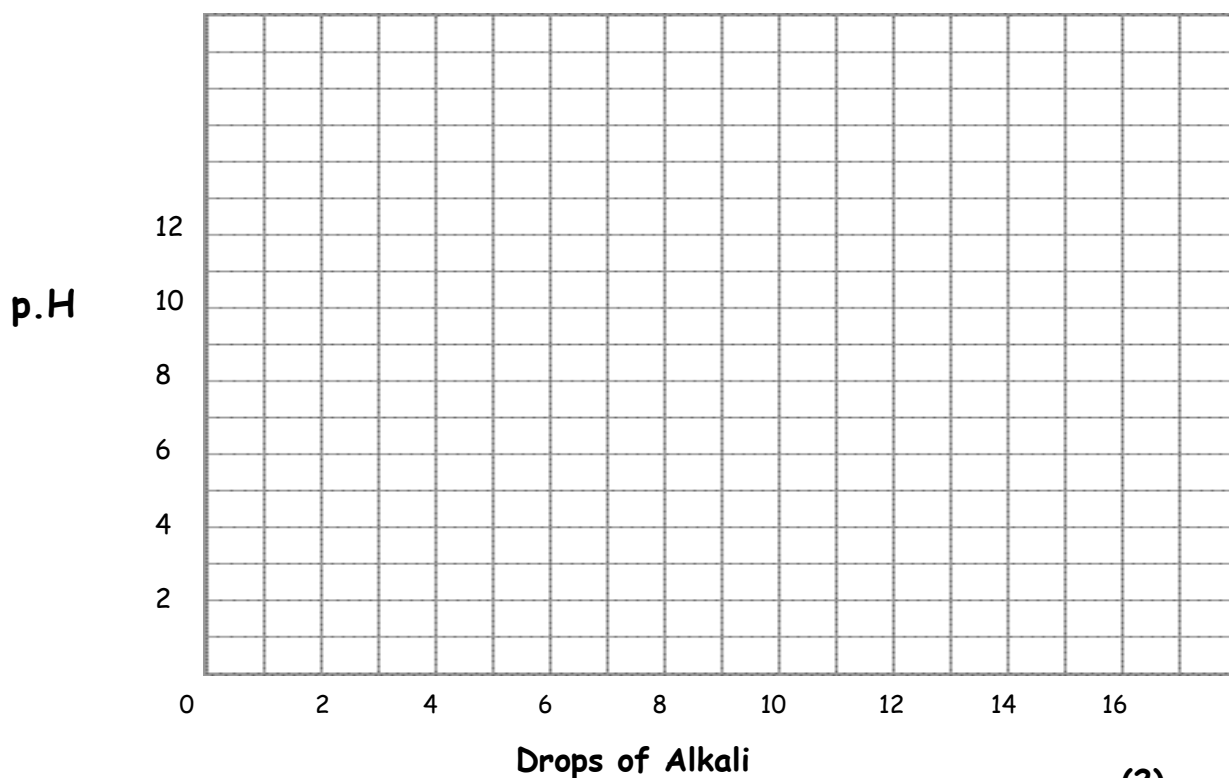
Here is a table of results

Drops of alkali	0	2	4	6	8	10	12	14	16
pH	2	2	2	5	7	9	11	12	12



Draw a line graph of the results

Neutralising an acid with an alkali



2.



red		pH = 4	acid
orange		pH = 5	
yellow		pH = 6	
green		pH = 7	neutral
turquoise		pH = 8	alkali
blue		pH = 9	
purple		pH = 10	

Drops of alkali	0	2	4	6	8	10	12	14	16
pH		2	2	2	5	7	9	11	12

Use the tables above to help you complete these sentences

- a. p.H of 7 means the solution is _____
 ____ drops of alkali were needed to neutralise the acid (2)
- b. When 4 drops of alkali were added the pH would be _____
 The colour of the pH paper would be _____ (2)
- c. When 12 drops of alkali were added the pH would be _____
 The colour of the pH paper would be _____ (2)

3. Complete the following word equations:

- (a) Acid + Alkali → _____ + _____
- (a) Acid + Metal oxide → _____ + _____
- (a) Acid + metal carbonate → _____ + _____ + _____
- (a) Acid + reactive metal → _____ + _____

(2) (10)