

CANOSSA SECONDARY SCHOOL
CHEMISTRY ALTERNATIVE A PRACTICAL
FORM FOUR (IV)

TIME:1HR

NAME.....

You are provided with the following solution

- 1.1 Solution R containing 4g of pure sodium hydroxide per dm^3 of solution
- 1.2 Solution Q containing 8.5g of impure sulphuric acid in 1 litre.
- 1.3 Methyl orange indicator.

Procedure:-

Pipette 25cm^3 or 20cm^3 of solution R into a conical flask. Add two or three drops of methyl orange indicator. Titrate the solution R against solution Q until a color change is observed. Repeat the procedure to obtain three more readings and record your results in a tabular form as shown below

a) Table of results

Titration	Pilot	1	2	3
Final reading (cm^3)				
Initial reading (cm^3)				
Volume used (cm^3)				

- i) The volume of pipette used was _____ cm^3
 - ii) Calculate the mean titre volume.
 - iii) The volume of solution R needed for complete neutralization of _____ cm^3 of solution Q was _____ cm^3
 - iv) The color change during titration was from _____ to _____
- b). i) Write down a well balanced equation for this reaction.
ii) Calculate the molarity of R
iii) Calculate the molarity of Q
- c) i) Calculate the concentration of pure sulphuric acid in g/dm^3
ii) Calculate the percentage purity of sulphuric acid.

BEST WISHES!