

Name:

Date:

Titration - 1

GCSE CHEMISTRY

Mark

Grade

Materials

For this paper you must have:

- Ruler
- Pencil and Rubber
- Scientific calculator, which you are expected to use when appropriate

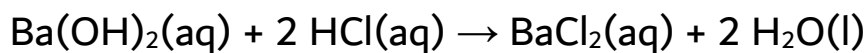
Instructions

- Answer all questions
- Answer questions in the space provided
- All working must be shown

Information

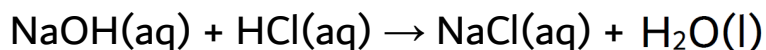
- The marks for the questions are shown in brackets

1. 25.0 cm³ of 0.200 mol/dm³ barium hydroxide solution reacted with 22.8 cm³ of hydrochloric acid. Calculate the concentration of the hydrochloric acid in mol/dm³. Give your answer to 3 significant figures.



Answer:

2. 22.5 cm³ of sodium hydroxide solution reacted with 25.0 cm³ of 0.100 mol/dm³ hydrochloric acid.



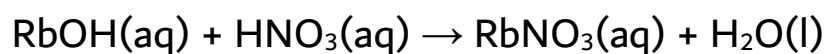
- a) Calculate the concentration of the sodium hydroxide solution in mol/dm³. Give your answer to 3 significant figures.

Answer:

b) Calculate the concentration of the sodium hydroxide solution in g/dm³. Give your answer to 3 significant figures.

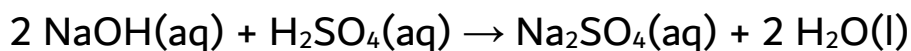
Answer:

3. What volume of 0.150 mol/dm³ rubidium hydroxide reacts with 25.0 cm³ of 0.240 mol/dm³ nitric acid? Give your answer to 3 significant figures.



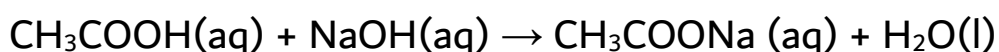
Answer:

4. 25.0 cm³ of 0.200 mol/dm³ sodium hydroxide solution reacted with 28.7 cm³ sulfuric acid. Calculate the concentration of the sulfuric acid in mol/dm³. Give your answer to 3 significant figures.



Answer:

5. 25.0 cm³ of 0.150 mol/dm³ sodium hydroxide reacted with 30.3 cm³ of a solution of ethanoic acid.



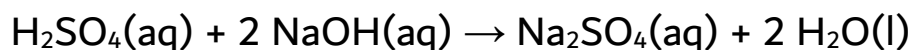
- a) Calculate the concentration of the ethanoic acid in mol/dm³. Give your answer to 3 significant figures.

Answer:

b) Calculate the concentration of the ethanoic acid in g/dm³. Give your answer to 3 significant figures.

Answer:

6. 25.0 cm³ of a solution of sodium hydroxide solution required 21.5 cm³ of 0.100 mol/dm³ sulfuric acid for neutralisation.



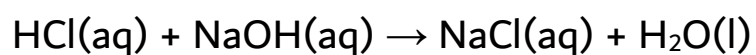
a) Find the concentration of the sodium hydroxide solution in mol/dm³. Give your answer to 3 significant figures.

Answer:

b) Find the concentration of the sodium hydroxide solution in g/dm³. Give your answer to 3 significant figures.

Answer:

7. Find the volume of 1.20 mol/dm³ hydrochloric acid that reacts with 25.0 cm³ of 1.50 mol/dm³ sodium hydroxide. Give



Answer: