

Name:

Date:

Percentage Yield

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

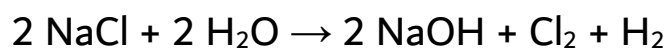
Instructions

- 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. Chlorine can be made by the electrolysis of sodium chloride solution.



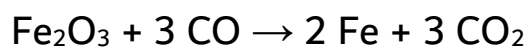
- a) Calculate the mass of chlorine that can be formed from 50.0 g of sodium chloride.

Answer:

- b) 25.0 g of chlorine was formed in this reaction. Calculate the percentage yield.

Answer:

2. Iron is made by reduction of iron oxide with carbon monoxide.



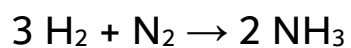
a) Calculate the mass of iron that can be formed from 126 g of iron oxide.

Answer:

b) 78.5 g of iron was formed in this reaction. Calculate the percentage yield.

Answer:

3. Ammonia is made by reacting hydrogen with nitrogen.



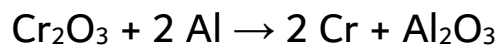
a) Calculate the mass of ammonia that can be formed from 12.0 g of hydrogen.

Answer:

b) 20.3 g of ammonia was formed in this reaction. Calculate the percentage yield.

Answer:

4. Chromium is a useful metal. It is extracted from chromium oxide by reaction with aluminium.



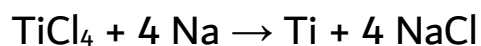
- a) Calculate the mass of chromium that can be formed from 1.25 kg of chromium oxide.

Answer:

- b) 756 g of chromium was formed in this reaction. Calculate the percentage yield.

Answer:

5. Titanium is made by the reaction of titanium chloride with sodium.



a) Calculate the mass of titanium that can be formed from 10.0 kg of titanium chloride.

Answer:

b) 1950 g of titanium was formed in this reaction. Calculate the percentage yield.

Answer: