

Name:

Date:

Reacting Masses - 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

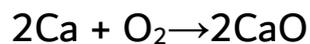
Instructions

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

Information

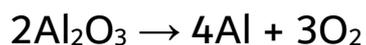
- The marks for the questions are shown in brackets

1. Calculate the mass of oxygen needed to react 10.0g of calcium to form calcium oxide.



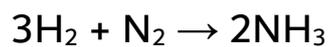
Answer:

2. Aluminium is extracted from aluminium oxide as shown. Calculate the mass of aluminium that can be formed from 1020 g of aluminium oxide.



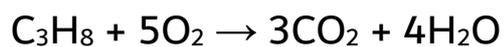
Answer:

3. What mass of ammonia can be made from 20.0 g of hydrogen?



Answer:

4. What mass of propane could burn in 48.0 g of oxygen?



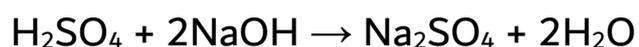
Answer:

5. What mass of carbon dioxide is formed when 7.41 g of copper(II) carbonate decomposes on heating?



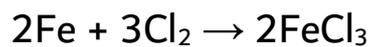
Answer:

6. What mass of sodium hydroxide is needed to neutralise 24.5 kg of sulfuric acid?



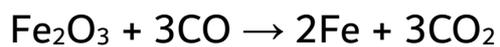
Answer:

7. What mass of chlorine reacts with 20.0 g of iron to form iron (III) chloride?



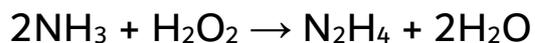
Answer:

8. What mass of carbon monoxide is needed to react with 2.08 kg of iron oxide?



Answer:

9. Hydrazine (N₂H₄) is used as a rocket fuel. It can be made by reacting ammonia with hydrogen peroxide. What mass of ammonia is needed to make 148 g of hydrazine?



Answer:

10. Titanium is extracted from titanium chloride as shown. Calculate the mass of sodium needed to react with 126 g of titanium chloride.



Answer: