

(Reactions of acids with metals, bases, and carbonates)

Q1. (2018)

Soluble salts are formed by reacting metal oxides with acids.

Give **one** other type of substance that can react with an acid to form a soluble salt.

[1 mark]

Q2. (2019)

Calcium hydroxide solution reacts with an acid to form calcium chloride.

Complete the word equation for the reaction.

[2 marks]

calcium hydroxide + _____ acid → calcium chloride + _____

Q3. (2021)

This question is about salts.

Name the salt produced by the neutralisation of hydrochloric acid with potassium hydroxide.

[1 mark]

Q4. (2021)

Write an ionic equation for the neutralisation of hydrochloric acid with potassium hydroxide.

[1 mark]

_____ + _____ → _____

Q5. (2021)

Soluble salts can be produced by reacting dilute hydrochloric acid with an insoluble solid.

Copper, copper carbonate and copper oxide are insoluble solids.

Which of these insoluble solids can be used to make a copper salt by reacting the solid with dilute hydrochloric acid?

[1 mark]

Tick (✓) **one** box.

Copper and copper carbonate only

☐

Copper and copper oxide only

☐

Copper carbonate and copper oxide only

☐

Copper, copper carbonate and copper oxide

☐

Q6. (2023)

Name **two** other substances that can each be reacted with a dilute acid to make zinc chloride.

Do **not** refer to zinc carbonate in your answer.

[2 marks]

1 _____

2 _____

Q7. (2023)

Barium (Ba) is an element in Group 2 of the periodic table.

Barium reacts with hydrochloric acid.

Suggest **two** observations that could be made when barium reacts with hydrochloric acid.

[2 marks]

1 _____

2 _____

Q8. (2023)

Write a balanced symbol equation for the reaction between barium and hydrochloric acid.

[3 marks]

_____ + _____ → _____ + _____

Q9. (2024)

A calcium atom is larger than a magnesium atom.

Explain why calcium reacts more vigorously than magnesium with hydrochloric acid of the same concentration.

[3 marks]
