

**AQA, OCR, Edexcel**

**GCSE Science**

# **GCSE Chemistry**

Reaction of acids

Answers

**M M E**

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Total Marks: /22

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Q1: What is produced when acids react with metals that are not in group 1?

A= Acids react with metals to produce salts (1 mark) and hydrogen (1 mark).

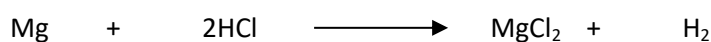
(2 marks)

Q2: Fill in the spaces with the words in the boxes.

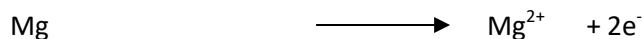
Oxidation is loss (1 mark) of electrons. Reduction is gain (1 mark) of electrons.

(2 marks)

Q3: Magnesium reacts with hydrochloric acid in the equation below. Label which reaction is oxidised and which is reduced.



Oxidised

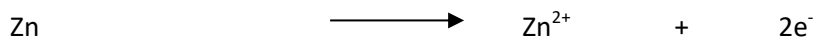
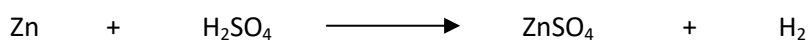


Reduced



(2 marks)

Q4: Zinc reacts with sulphuric acid in the equation below. Write out two separate equations for the species that are oxidised and reduced.



Oxidised

Reduced

Then label the species that has been oxidised or reduced.

(4 marks)

Q5: Acids can be neutralised by bases. This produces two products, what are they?

A= Salts and water

(2 marks)

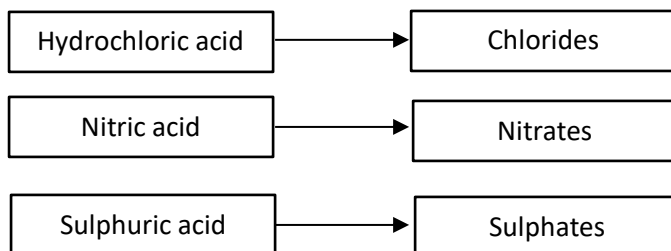
Q6: Acids are also neutralised by metal carbonates. Another product is made, what is it?

A= carbon dioxide

(1 mark)

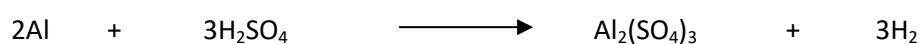
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Q7: The salt that is produced depends on the acid used. For example, hydrochloric acid produces chlorides. Which salts are produced for the following acids?



(2 marks)

Q8: Fill in the products for the equation.



A = 1 mark for each product.

(2 marks)

Q9: Describe how soluble salts can be made.

A= Soluble salts can be made from acids by reacting them with solid insoluble substances, such as metals, metal oxides, hydroxides or carbonates (1 mark). The solid is added to the acid until no more reacts (1 mark). The excess solid is filtered off to produce to solution of the salt (1 mark).

(3 marks)

Q10: How are solid salts produced from salt solutions?

A= salt solutions can be crystallised to produce solid salts/ Heat and evapourate water to leave solid salt.

(2 mark)