ENGLAND GCSE COMBINED SCIENCE OCR GATEWAY FOUNDATION · UNIT 10 · 25 QUESTIONS

# Predicting and Identifying Reactions and Products — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button so it can be fixed.

1 **An ice cream cone melts in the Sun. What is happening to the particles in the ice cream?**

- A they lose energy and slow down a lot
- B they stop moving
- C they get smaller
- D they gain energy and move more

Understand It with Pulse | Flag a mistake

2 **Lemons taste sour. What does sour taste show?**

A an alkali is present

B a metal is present

C a salt is present

D an acid is present

Understand It with Pulse | Flag a mistake

3 **A chocolate cake rises in the oven. What makes it rise?**

A the flour melts

B the egg evaporates

C a gas is made

D the sugar freezes

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4 **Silver coins are made of a metal. Which property do metals have?**

A they dissolve in water

B they do not conduct electricity at all

C they are brittle

D they conduct electricity

Understand It with Pulse | Flag a mistake

5 **A castle wall is made of stone. What type of rock is limestone?**

A sedimentary

B igneous

C metamorphic

D volcanic

Understand It with Pulse | Flag a mistake

6 **A cup of coffee is hot. How is energy transferred to the air?**

- A by evaporation only, from the top
- B by conduction and convection
- C by condensation on the cold cup
- D by radiation only, from the surface

Understand It with Pulse | Flag a mistake

7 **A metal is added to a salt solution and no reaction happens. What does that tell you?**

- A the salt is not soluble
- B the metal is less reactive than the metal in the salt
- C the metal is a gas
- D the metal is more reactive than the metal in the salt

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8 **A sample containing potassium is put in a flame. What colour is the flame?**

- A bright yellow
- B crimson red
- C orange-red flame
- D lilac

Understand It with Pulse | Flag a mistake

9 **How do you test for carbon dioxide gas?**

- A it relights a glowing splint
- B it burns with a pop
- C it turns limewater cloudy
- D it turns litmus blue

Understand It with Pulse | Flag a mistake

10 **What are the products when an acid reacts with a metal oxide?**

A a salt and hydrogen

B an oxide and water

C a salt and carbon dioxide

D a salt and water

Understand It with Pulse | Flag a mistake

11 **Which metal is least reactive?**

A iron

B magnesium

C gold

D zinc

Understand It with Pulse | Flag a mistake

**12** **Why are instrumental methods better than chemical tests?**

- A they work on solids only
- B they need no sample at all
- C they are fast, sensitive and accurate
- D they are cheap and need no training at all

Understand It with Pulse | Flag a mistake

**13** **Which metal reacts most vigorously with cold water?**

- A potassium
- B iron
- C magnesium
- D zinc

Understand It with Pulse | Flag a mistake

14 **Iron is more reactive than copper. What happens when iron is added to copper sulfate solution?**

A the solution turns blue

B copper displaces iron

C nothing happens at all

D iron displaces copper

Understand It with Pulse | Flag a mistake

15 **A sample containing sodium is put in a flame. What colour is the flame?**

A yellow

B crimson red

C orange-red flame

D pale lilac

Understand It with Pulse | Flag a mistake

16 **What are the products when an acid reacts with a metal carbonate?**

A a salt and oxygen only

B salt, water and carbon dioxide

C water and oxygen only

D a salt, water and hydrogen gas

Understand It with Pulse | Flag a mistake

17 **Will zinc displace copper from copper sulfate?**

A yes, copper is more reactive

B no, copper is more reactive

C no, zinc is less reactive

D yes, zinc is more reactive

Understand It with Pulse | Flag a mistake

18 **What is the reactivity series?**

A metals in order of their colour

B metals in order of their mass

C metals in order of their price

D metals in reactivity order

Understand It with Pulse | Flag a mistake

19 **Copper is less reactive than iron. What happens when copper is added to iron sulfate solution?**

A nothing happens

B the solution turns brown

C iron displaces copper

D copper displaces iron

Understand It with Pulse | Flag a mistake

20 **How do you test for hydrogen gas?**

A it relights a glowing splint

B it burns with a squeaky pop

C it turns limewater cloudy

D it turns damp litmus red

Understand It with Pulse | Flag a mistake

21 **What are the products when a metal reacts with dilute hydrochloric acid?**

A a salt and oxygen

B an oxide and hydrogen

C a salt and water

D a salt and hydrogen

Understand It with Pulse | Flag a mistake

22 **Will copper displace zinc from zinc sulfate?**

A no, copper is less reactive

B yes, zinc is less reactive

C yes, copper is more reactive

D no, zinc is more reactive

Understand It with Pulse | Flag a mistake

23 **Which of these metals does not react with dilute acid?**

A zinc

B magnesium

C iron

D copper

Understand It with Pulse | Flag a mistake

24 **A sample containing copper is put in a flame. What colour is the flame?**

A crimson red

B bright yellow

C green

D pale lilac

Understand It with Pulse | Flag a mistake

25 **What is made when sodium hydroxide reacts with hydrochloric acid?**

A sodium chloride and water

B sodium oxide and hydrogen

C sodium carbonate and water

D sodium and chlorine

Understand It with Pulse | Flag a mistake

# ANSWER KEY

| | | | | | |
|---|---|---|---|---|---|
| **1.** | D | **10.** | D | **19.** | A |
| **2.** | D | **11.** | C | **20.** | B |
| **3.** | C | **12.** | C | **21.** | D |
| **4.** | D | **13.** | A | **22.** | A |
| **5.** | A | **14.** | D | **23.** | D |
| **6.** | B | **15.** | A | **24.** | C |
| **7.** | B | **16.** | B | **25.** | A |
| **8.** | D | **17.** | D | | |
| **9.** | C | **18.** | D | | |

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