ENGLAND GCSE CHEMISTRY OCR TWENTY FIRST CENTURY FOUNDATION · UNIT 4 · 25 QUESTIONS

Material Choices — 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 **A river flows to the sea. What is this part of?**

- A the carbon cycle
- B the rock cycle
- C the water cycle
- D the nitrogen cycle

Understand It with Pulse | Flag a mistake

2 **A wooden footbridge carries people. What is the load on the bridge?**

- A the water flowing under it
- B the wood of the bridge itself
- C the wind blowing across it
- D the weight of the people

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3 **Paintbrushes are cleaned in water. Why does the paint wash off?**

A the paint burns in the water

B the paint freezes in the water

C the paint dissolves

D the paint melts in the water

Understand It with Pulse | Flag a mistake

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

A they are brittle

B they do not conduct electricity at all

C they conduct electricity

D they dissolve in water

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

- A a gas is made
- B the sugar freezes
- C the flour melts
- D the egg evaporates

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6 **Lemons contain citric acid. What is the pH of lemon juice likely to be?**

- A 2
- B 7
- C 12
- D 14

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7 **A town sends 200 tonnes of waste to landfill per week. How much waste is that in one year?**

- A 10400 tonnes
- B 10300 tonnes
- C 10500 tonnes
- D 20800 tonnes

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8 **What is the main metal in steel?**

- A iron
- B chromium
- C nickel
- D carbon

Understand It with Pulse | Flag a mistake

9 **How many spots does a pure substance give on a chromatogram?**

A no spots at all

B three spots in a row

C one spot

D two spots side by side

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10 **In which state do particles move most freely?**

A liquid

B solid

C gas

D plasma

Understand It with Pulse | Flag a mistake

11 **What is brass made from?**

A zinc and tin mixed together

B iron and carbon mixed together

C copper and tin mixed together

D copper and zinc

Understand It with Pulse | Flag a mistake

12 **Why is graphene strong?**

A its layers slide over each other easily

B its atoms are joined in a strong layer

C it is made of metal ions in a lattice

D it has weak forces between its atoms

Understand It with Pulse | Flag a mistake

13 **What is galvanising?**

A coating iron with zinc

B coating iron with paint

C coating iron with plastic

D coating iron with copper

Understand It with Pulse | Flag a mistake

14 **What type of bonding is in diamond?**

A covalent

B ionic

C intermolecular forces

D metallic

Understand It with Pulse | Flag a mistake

15 **What is the use stage of a life cycle assessment?**

A how the product is used

B how the product is thrown away

C how the product is made

D how the product is transported

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16 **A town recycles 50 percent of its 400 tonnes of waste. How many tonnes are recycled?**

A 220 tonnes

B 250 tonnes

C 180 tonnes

D 200 tonnes

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17 **Glass is recycled at 75 percent. How much of 200 tonnes of glass is recycled?**

- A 150 tonnes
- B 175 tonnes
- C 300 tonnes
- D 125 tonnes

Understand It with Pulse | Flag a mistake

18 **An alloy is 75 percent copper. How much copper is in 200 kg of the alloy?**

- A 175 kg
- B 300 kg
- C 150 kg
- D 125 kg

Understand It with Pulse | Flag a mistake

19 **In a chromatogram, a spot moves 6 cm and the solvent moves 10 cm. What is the Rf value?**

- A 0.75
- B 0.7
- C 0.6
- D 1.2

Understand It with Pulse | Flag a mistake

20 **How many atoms of hydrogen are there in one molecule of water?**

- A 3
- B 1
- C 2
- D 4

Understand It with Pulse | Flag a mistake

21 **Why is stainless steel used for cutlery?**

- A it is very cheap to make
- B it does not rust
- C it is very soft to shape
- D it is magnetic and light

Understand It with Pulse | Flag a mistake

22 **What does an Rf value of 0 mean?**

- A the solvent did not move at all
- B the spot dissolved completely
- C the spot did not move
- D the spot moved with the solvent

Understand It with Pulse | Flag a mistake

23 **In which state are the particles closest together?**

- A gas
- B plasma
- C solid
- D liquid

Understand It with Pulse | Flag a mistake

24 **What is steel?**

- A iron with a little carbon
- B iron with a lot of copper added
- C pure iron with nothing added
- D iron mixed with aluminium only

Understand It with Pulse | Flag a mistake

25 **Why is graphite soft and slippery?**

A it has strong bonds between its layers

B its layers slide over each other

C its atoms are joined to four other atoms

D it has no covalent bonds at all

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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