ENGLAND GCSE COMBINED SCIENCE OCR TWENTY FIRST CENTURY FOUNDATION · UNIT 10 · 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 chocolate cake rises in the oven. What makes it rise?**

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

Understand It with Pulse | Flag a mistake

2 **A river provides drinking water. Why must the water be treated before drinking?**

- A to make it taste better for drinking
- B to heat it up for use
- C to remove harmful substances
- D to add minerals for health

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

A the weight of the people

B the wind blowing across it

C the wood of the bridge itself

D the water flowing under it

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4 **Silver coins conduct electricity well. Why?**

A they are shiny and reflective

B they are heavy

C they have free electrons

D they are cold

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5 **Paintbrushes apply paint to a wall. What is the paint made of?**

A a mixture of substances

B a single compound, nothing else

C a single element, nothing else

D pure water with nothing in it

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

A 12

B 14

C 7

D 2

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7 **What does a life cycle assessment compare?**

- A the environmental impact of products
- B the colour of products
- C the strength of products
- D the cost of products in shops over time

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8 **A town recycles 75 percent of its 200 tonnes of waste. How many tonnes are recycled?**

- A 200 tonnes
- B 170 tonnes
- C 150 tonnes
- D 130 tonnes

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9 **Glass is recycled at 50 percent. How much of 200 tonnes of glass is recycled?**

A 100 tonnes

B 125 tonnes

C 75 tonnes

D 200 tonnes

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10 **What is galvanising?**

A coating iron with zinc

B coating iron with plastic

C coating iron with paint

D coating iron with copper

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11 **In a chromatogram, a spot moves 5 cm and the solvent moves 10 cm. What is the Rf value?**

- A 0.65
- B 0.6
- C 1
- D 0.5

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12 **What does it mean if a chromatogram shows several spots?**

- A the sample is a mixture
- B the solvent is impure
- C the sample is a pure substance
- D the paper is too short

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13 **What type of bonding is in sodium chloride?**

A metallic

B intermolecular forces

C covalent

D ionic

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

A 300 kg

B 150 kg

C 125 kg

D 175 kg

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

A chromium

B nickel

C iron

D carbon

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

A 10300 tonnes

B 20800 tonnes

C 10500 tonnes

D 10400 tonnes

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17 **How many atoms of oxygen are there in one molecule of water?**

A 2

B 1

C 3

D 0

Understand It with Pulse | Flag a mistake

18 **Why is diamond a good material for cutting tools?**

A it conducts electricity very well

B it is very hard

C it is soft and easy to shape

D it melts at a low temperature

Understand It with Pulse | Flag a mistake

19 **What is brass made from?**

A copper and zinc

B copper and tin mixed together

C iron and carbon mixed together

D zinc and tin mixed together

Understand It with Pulse | Flag a mistake

20 **Which product has a bigger carbon footprint, a plastic bag or a cotton bag?**

A they are exactly the same

B a cotton bag, over its lifetime

C a plastic bag, over its lifetime

D neither has any footprint

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21 **In a chromatogram, a spot moves 3 cm and the solvent moves 12 cm. What is the Rf value?**

- A 0.35
- B 0.4
- C 0.25
- D 0.5

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

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

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23 **What type of bonding is in water?**

- A metallic
- B ionic
- C covalent
- D intermolecular forces

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24 **An alloy is 50 percent copper. How much copper is in 200 kg of the alloy?**

- A 200 kg
- B 75 kg
- C 100 kg
- D 125 kg

Understand It with Pulse | Flag a mistake

25

Why is stainless steel used for cutlery?

A it does not rust

B it is very cheap to make

C it is magnetic and light

D it is very soft to shape

Understand It with Pulse

Flag a mistake

ANSWER KEY

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

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