ENGLAND GCSE COMBINED SCIENCE OCR TWENTY FIRST CENTURY HIGHER · 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 **Silver coins are made of the element silver. What is the chemical symbol for silver?**

- A S
- B Ag
- C Si
- D Sv

Understand It with Pulse | Flag a mistake

2 **A chocolate cake is baked. Is baking a chemical change?**

- A no
- B never
- C yes
- D sometimes

Understand It with Pulse | Flag a mistake

3 **A river is polluted by fertiliser. What grows too fast in the water?**

- A reeds
- B fish
- C trees
- D algae

Understand It with Pulse | Flag a mistake

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

- A the paint burns in the water
- B the paint dissolves
- C the paint melts in the water
- D the paint freezes in the water

Understand It with Pulse | Flag a mistake

5 **Lemons contain citric acid. What do acids make with metals?**

- A a salt and hydrogen
- B a salt and water, never hydrogen
- C water only, nothing else
- D a salt and oxygen gas

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

7 **Why is graphene strong?**

- A it has weak forces between its atoms
- B it is made of metal ions in a lattice
- C its atoms are joined in a strong layer
- D its layers slide over each other easily

Understand It with Pulse | Flag a mistake

8 **An alloy is 50 percent copper. How much copper is in 400 kg of the alloy?**

- A 175 kg
- B 200 kg
- C 400 kg
- D 225 kg

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

10 **What is gold mixed with for jewellery?**

- A zinc and nickel mixed together
- B iron and steel mixed together
- C copper and silver
- D tin and lead mixed together

Understand It with Pulse | Flag a mistake

11 **What does adding carbon to iron do?**

A it makes it conduct less heat

B it makes it harder

C it makes it softer and weaker

D it makes it melt more easily

Understand It with Pulse | Flag a mistake

12 **In a chromatogram, a spot moves 4 cm and the solvent moves 12 cm. What is the Rf value?**

A 0.33

B 0.48

C 0.67

D 0.43

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

14 **A town recycles 25 percent of its 500 tonnes of waste. How many tonnes are recycled?**

- A 105 tonnes
- B 145 tonnes
- C 125 tonnes
- D 175 tonnes

Understand It with Pulse | Flag a mistake

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

A 2

B 0

C 3

D 1

Understand It with Pulse | Flag a mistake

16 **Which of these is a formulation?**

A oxygen

B water

C paint

D salt

Understand It with Pulse | Flag a mistake

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

A neither has any footprint

B they are exactly the same

C a plastic bag, over its lifetime

D a cotton bag, over its lifetime

Understand It with Pulse | Flag a mistake

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

A the paper is too short

B the sample is a pure substance

C the solvent is impure

D the sample is a mixture

Understand It with Pulse | Flag a mistake

19 **What happens to the surface area to volume ratio as particles get smaller?**

A it stays exactly the same

B it decreases to almost nothing

C it becomes zero for tiny particles

D it increases

Understand It with Pulse | Flag a mistake

20 **What type of bonding is in magnesium oxide?**

A ionic

B covalent

C intermolecular forces

D metallic

Understand It with Pulse | Flag a mistake

21 **What is galvanising?**

A coating iron with copper

B coating iron with zinc

C coating iron with plastic

D coating iron with paint

Understand It with Pulse | Flag a mistake

22 **What are fullerenes?**

A flat sheets of carbon one atom thick

B molecules of carbon in hollow shapes

C solid blocks of carbon atoms

D long chains of carbon atoms in a row

Understand It with Pulse | Flag a mistake

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

A 300 tonnes

B 150 tonnes

C 125 tonnes

D 175 tonnes

Understand It with Pulse | Flag a mistake

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

A it is very cheap to make

B it is very soft to shape

C it is magnetic and light

D it does not rust

Understand It with Pulse | Flag a mistake

25 **What is brass made from?**

A copper and tin mixed together

B copper and zinc

C iron and carbon mixed together

D zinc and tin mixed together

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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