ENGLAND GCSE COMBINED SCIENCE OCR GATEWAY FOUNDATION · UNIT 12 · 25 QUESTIONS

Global Challenges in Chemistry — 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 is polluted by fertiliser. What grows too fast in the water?**

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

Understand It with Pulse | Flag a mistake

2 **Fishing boats float on water. Why do they float?**

A they displace enough water

B they are made of metal, which floats

C they have sails that catch the wind

D they are heavy and sink slowly

Understand It with Pulse | Flag a mistake

3 **A thermometer is placed in hot water. What happens to the liquid inside the thermometer?**

A it evaporates

B it contracts

C it expands

D it freezes

Understand It with Pulse | Flag a mistake

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

- A volcanic
- B sedimentary
- C metamorphic
- D igneous

Understand It with Pulse | Flag a mistake

5 **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

Understand It with Pulse | Flag a mistake

6 **A forest provides a habitat. What does habitat mean?**

- A how an organism breeds
- B where an organism lives
- C what an organism eats
- D when an organism sleeps

Understand It with Pulse | Flag a mistake

7 **What is the general formula of the alkenes?**

- A CnH_2n
- B CnH_2n+_2
- C CnH_2n-_2
- D CnHn

Understand It with Pulse | Flag a mistake

8 **A factory emits 10 tonnes of carbon dioxide per day. How much does it emit in one week?**

- A 60 tonnes
- B 80 tonnes
- C 70 tonnes
- D 140 tonnes

Understand It with Pulse | Flag a mistake

9 **Carbon dioxide levels rose from 300 ppm to 420 ppm. What is the increase?**

- A 140 ppm
- B 100 ppm
- C 120 ppm
- D 160 ppm

Understand It with Pulse | Flag a mistake

10 **Why is chlorine added to drinking water?**

A to make it taste better

B to kill bacteria

C to add fluoride

D to remove solids

Understand It with Pulse | Flag a mistake

11 **How did nitrogen build up in the atmosphere?**

A volcanoes released it directly

B plants released it by photosynthesis

C bacteria released it from ammonia

D it came from the oceans

Understand It with Pulse | Flag a mistake

12 **How does sacrificial protection work?**

A a more reactive metal corrodes instead

B the iron is kept very dry

C the iron is painted over with a very thick coat

D the iron is coated in oil

Understand It with Pulse | Flag a mistake

13 **Which human activity releases methane?**

A planting trees

B farming cattle

C burning coal

D driving electric cars

Understand It with Pulse | Flag a mistake

14 **What is the atmosphere?**

A the layer of rock around the Earth, the crust

B the layer of water around the Earth, the sea

C the layer of ice around the Earth, the poles

D the layer of gases around the Earth

Understand It with Pulse | Flag a mistake

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

A 400 kg

B 200 kg

C 225 kg

D 175 kg

Understand It with Pulse | Flag a mistake

16 **Oxygen is 21 percent of the air. How much oxygen is there in 500 litres of air?**

- A 115 L
- B 95 L
- C 105 L
- D 210 L

Understand It with Pulse | Flag a mistake

17 **How do humans increase carbon dioxide?**

- A by planting trees
- B by recycling waste
- C by using solar power to make electricity
- D by burning fossil fuels

Understand It with Pulse | Flag a mistake

18 **Glass is recycled at 75 percent. How much of 400 tonnes of glass is recycled?**

A 275 tonnes

B 600 tonnes

C 300 tonnes

D 325 tonnes

Understand It with Pulse | Flag a mistake

19 **In fractional distillation, where do the smallest molecules come out?**

A at the bottom

B they do not come out

C at the top

D in the middle

Understand It with Pulse | Flag a mistake

20 **A cheese pizza is cooked in an oven. How is energy transferred in the oven?**

A by evaporation from the cheese

B by condensation on the oven walls

C by radiation and convection

D by conduction only, through the tray

Understand It with Pulse | Flag a mistake

21 **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

Understand It with Pulse | Flag a mistake

22 **A town uses 1000 litres of water per day. How much water does it use in one week?**

A 8000 L

B 6000 L

C 7000 L

D 14000 L

Understand It with Pulse | Flag a mistake

23 **An alkane with 12 carbon atoms is cracked. One product is an alkene with 2 carbon atoms. How many carbon atoms does the other product have?**

A 11

B 12

C 9

D 10

Understand It with Pulse | Flag a mistake

24 **What is an alkene?**

A a hydrocarbon with no bonds

B a hydrocarbon with a triple bond

C a hydrocarbon with a double bond

D a hydrocarbon with a single bond

Understand It with Pulse | Flag a mistake

25 **What happens in sewage treatment?**

A the water is made drinkable at once

B the water is heated up

C harmful substances are removed

D nutrients are added to it

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.