ENGLAND GCSE COMBINED SCIENCE AQA TRILOGY FOUNDATION · UNIT 16 · 25 QUESTIONS

# Chemistry of the Atmosphere — 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 castle built of limestone is damaged by acid rain. Which gas causes acid rain?**

- A sulfur dioxide
- B oxygen
- C nitrogen
- D carbon dioxide

Understand It with Pulse | Flag a mistake

**2** **A forest is cut down. What happens to the carbon stored in the trees?**

- A it turns to oxygen
- B it is released
- C it disappears
- D it is stored forever

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

4 **A thermometer shows a patient's temperature is 39 degrees Celsius. Is this above or below normal body temperature?**

- A impossible to tell
- B below normal
- C exactly normal
- D above normal

Understand It with Pulse | Flag a mistake

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

A they are made of metal, which floats

B they displace enough water

C they are heavy and sink slowly

D they have sails that catch the wind

Understand It with Pulse | Flag a mistake

6 **A sailing ship floats. What force pushes it up?**

A friction

B upthrust

C gravity

D air resistance

Understand It with Pulse | Flag a mistake

7 **Carbon dioxide is 420 parts per million in the air. How many carbon dioxide molecules are there per million air molecules?**

- A 420
- B 400
- C 42
- D 4200

Understand It with Pulse | Flag a mistake

8 **Oxygen is 21 percent of the air. How much oxygen is there in 1000 litres of air?**

- A 200 L
- B 420 L
- C 210 L
- D 220 L

Understand It with Pulse | Flag a mistake

9 **Nitrogen is 78 percent of the air. How much nitrogen is there in 1000 litres of air?**

- A 790 L
- B 1560 L
- C 770 L
- D 780 L

Understand It with Pulse | Flag a mistake

10 **What is the atmosphere?**

- A the layer of rock around the Earth, the crust
- B the layer of gases around the Earth
- C the layer of water around the Earth, the sea
- D the layer of ice around the Earth, the poles

Understand It with Pulse | Flag a mistake

11 **A factory emits 50 tonnes of carbon dioxide per day. How much does it emit in one week?**

- A 350 tonnes
- B 340 tonnes
- C 360 tonnes
- D 700 tonnes

Understand It with Pulse | Flag a mistake

12 **Why does the Earth have seasons?**

- A the tilt of the Earth's axis
- B the rotation of the Earth
- C the distance from the Sun changing
- D the Moon's orbit

Understand It with Pulse | Flag a mistake

13 **Carbon dioxide levels rose from 280 ppm to 380 ppm. What is the increase?**

- A 120 ppm
- B 140 ppm
- C 100 ppm
- D 80 ppm

Understand It with Pulse | Flag a mistake

14 **Carbon dioxide is 315 parts per million in the air. How many carbon dioxide molecules are there per million air molecules?**

- A 3150
- B 295
- C 31
- D 315

Understand It with Pulse | Flag a mistake

15 **Which of these is a greenhouse gas?**

A nitrogen

B argon

C oxygen

D methane

Understand It with Pulse | Flag a mistake

16 **Nitrogen is 78 percent of the air. How much nitrogen is there in 100 litres of air?**

A 156 L

B 88 L

C 68 L

D 78 L

Understand It with Pulse | Flag a mistake

17 **What is the main greenhouse gas?**

A nitrogen gas from the air

B carbon dioxide

C argon gas from the air

D oxygen gas from the air

Understand It with Pulse | Flag a mistake

18 **What is a carbon footprint?**

A the amount of carbon stored in a footprint in the soil

B the size of a person's shoe

C the carbon in the soil

D the total carbon dioxide a person or product causes

Understand It with Pulse | Flag a mistake

19 **Carbon dioxide levels rose from 320 ppm to 460 ppm. What is the increase?**

A 180 ppm

B 120 ppm

C 140 ppm

D 160 ppm

Understand It with Pulse | Flag a mistake

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

A 95 L

B 210 L

C 115 L

D 105 L

Understand It with Pulse | Flag a mistake

21 **What does the greenhouse effect do?**

A it makes the Earth cold

B it keeps the Earth warm

C it makes the Earth spin

D it stops the Sun shining

Understand It with Pulse | Flag a mistake

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

A 70 tonnes

B 80 tonnes

C 140 tonnes

D 60 tonnes

Understand It with Pulse | Flag a mistake

**23** **What is the carbon cycle?**

- **A** the movement of carbon between living things and the air
- **B** the movement of nitrogen between the soil and the air
- **C** the movement of water between the sea, the air, the land and living things
- **D** the movement of oxygen between plants and animals

Understand It with Pulse | Flag a mistake

**24** **Carbon dioxide levels rose from 300 ppm to 440 ppm. What is the increase?**

- **A** 120 ppm
- **B** 160 ppm
- **C** 140 ppm
- **D** 180 ppm

Understand It with Pulse | Flag a mistake

25

**Carbon dioxide is 280 parts per million in the air. How many carbon dioxide molecules are there per million air molecules?**

A 2800

B 260

C 280

D 28

Understand It with Pulse

Flag a mistake

# ANSWER KEY

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

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