ENGLAND GCSE CHEMISTRY AQA HIGHER · UNIT 9 · 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 river is polluted by fertiliser. What grows too fast in the water?**

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

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

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

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

A they displace enough water

B they have sails that catch the wind

C they are made of metal, which floats

D they are heavy and sink slowly

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4 **A sailing ship crosses the sea. What is the sea mostly made of?**

A salt water

B sand

C fresh water

D oil

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5 **A thermometer measures temperature in degrees Celsius. What is the freezing point of water on this scale?**

- A 32
- B 0
- C 10
- D 100

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

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

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7 **Carbon dioxide levels rose from 300 ppm to 400 ppm. What is the increase?**

A 120 ppm

B 140 ppm

C 80 ppm

D 100 ppm

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8 **Which human activity releases methane?**

A driving electric cars

B burning coal

C farming cattle

D planting trees

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

A the distance from the Sun changing

B the rotation of the Earth

C the tilt of the Earth's axis

D the Moon's orbit

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

A 790 L

B 1560 L

C 780 L

D 770 L

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11 **What is the ozone layer?**

A a layer that absorbs visible light

B a layer that absorbs infrared

C a layer that absorbs ultraviolet

D a layer that absorbs sound

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

A 420 L

B 200 L

C 220 L

D 210 L

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13 **What is one effect of climate change on weather?**

A colder summers everywhere

B more extreme weather

C less rain everywhere

D weather stays the same

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14 **Why are nitrogen oxides a problem?**

A they damage the ozone layer

B they warm the Earth directly

C they cause acid rain and smog

D they poison drinking water fast

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

A 31

B 295

C 315

D 3150

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16 **What did volcanoes release into the early atmosphere?**

A nitrogen and oxygen gases from the air

B oxygen and nitrogen gases from the air

C argon and helium gases from deep down

D water vapour and carbon dioxide

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17 **About what percentage of the air is nitrogen?**

A 21%

B 78%

C 1%

D 0.04%

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

A argon

B methane

C nitrogen

D oxygen

Understand It with Pulse | Flag a mistake

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

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

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20 **Carbon dioxide levels rose from 320 ppm to 440 ppm. What is the increase?**

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

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21 **What is the enhanced greenhouse effect?**

A cooling from extra cloud cover

B warming from the Sun getting hotter over time

C extra warming from human activities

D warming from volcanoes erupting

Understand It with Pulse | Flag a mistake

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

A it makes the Earth spin

B it keeps the Earth warm

C it stops the Sun shining

D it makes the Earth cold

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23 **Oxygen is 21 percent of the air. How much oxygen is there in 100 litres of air?**

A 42 L

B 11 L

C 31 L

D 21 L

Understand It with Pulse | Flag a mistake

24 **What is happening to sea levels?**

A they are falling

B they rise and fall equally

C they stay the same

D they are rising

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25 **Which pollutant comes from burning coal with sulfur in it?**

A carbon monoxide

B sulfur dioxide

C nitrogen oxides

D particulates

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ANSWER KEY

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

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