ENGLAND GCSE COMBINED SCIENCE OCR TWENTY FIRST CENTURY FOUNDATION · UNIT 7 · 25 QUESTIONS

Air and Water — 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 sunflower grows taller over the summer. Where does most of the extra mass come from?**

- A carbon dioxide from the air
- B water absorbed from the soil
- C sunlight captured by the leaves
- D minerals absorbed from the soil

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2 **An ice cream cone is put in a freezer. What happens to the liquid?**

- A it freezes
- B it evaporates
- C it boils
- D it condenses

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

A it disappears

B it is released

C it is stored forever

D it turns to oxygen

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4 **A river flows to the sea. What is this part of?**

A the water cycle

B the rock cycle

C the nitrogen cycle

D the carbon cycle

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5 **A swimming pool is filled with water. What is the density of water?**

- A about 1 kilogram per cubic metre
- B about 1000 kilograms per cubic metre
- C about 100 kilograms per cubic metre, roughly
- D about 10 kilograms per cubic metre

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6 **A cup of coffee is left for an hour. What happens to its temperature?**

- A it stays the same all day
- B it falls to zero degrees
- C it rises above room temperature
- D it falls to room temperature

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

A by burning fossil fuels

B by using solar power to make electricity

C by recycling waste

D by planting trees

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8 **What damages the ozone layer?**

A nitrogen

B CFCs

C oxygen

D carbon dioxide

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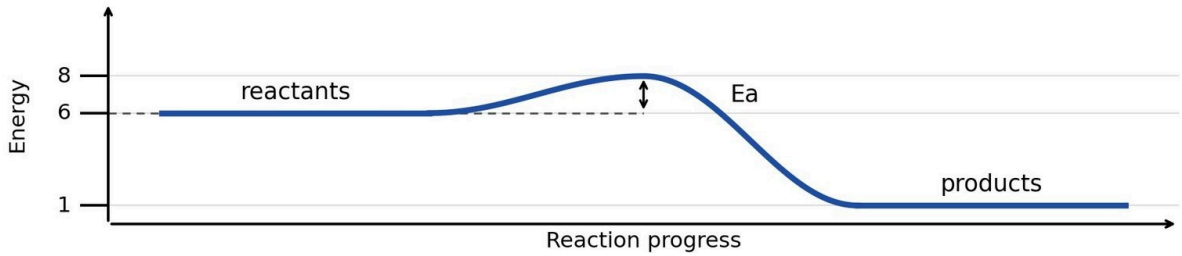
9 **The diagram shows the energy profile for a reaction. The reactants are at energy 6 and the products are at 1. Is the reaction exothermic or endothermic?**



A endothermic, energy is taken in

B exothermic, energy is taken in

C exothermic, energy is given out

D endothermic, energy is given out

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10 **When did oxygen start to build up in the atmosphere?**

A when plants evolved

B when the oceans formed

C when humans appeared

D when volcanoes erupted

Understand It with Pulse | Flag a mistake

11 **How is pure water made from sea water?**

A by sedimentation

B by distillation

C by chlorination

D by filtration

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

A 770 L

B 790 L

C 780 L

D 1560 L

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13 **What do catalytic converters change nitrogen oxides into?**

A carbon dioxide and water

B sulfur dioxide

C nitrogen and oxygen

D ammonia and water

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

A 115 L

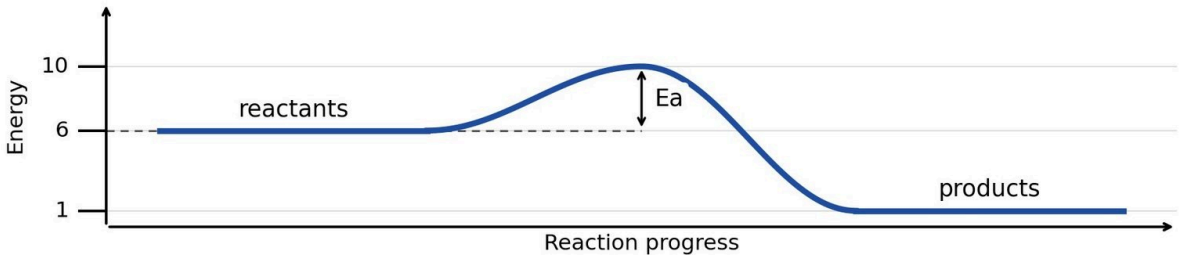
B 95 L

C 210 L

D 105 L

Understand It with Pulse | Flag a mistake

15 **The diagram shows the energy profile for a reaction. The reactants are at energy 6, the peak is at 10 and the products are at 1. What is the activation energy?**



A 9

B 16

C 5

D 4

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16 **About what percentage of the air is oxygen?**

A 1%

B 21%

C 0.04%

D 78%

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

A more extreme weather

B less rain everywhere

C weather stays the same

D colder summers everywhere

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18 **What does chlorination do to drinking water?**

A it removes solid bits

B it adds fluoride to it

C it makes it taste better

D it kills bacteria

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19 **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

20 **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

21 **Which of these is endothermic?**

A photosynthesis

B neutralisation

C burning a fuel

D respiration

Understand It with Pulse | Flag a mistake

22 **What happens to sea levels as the Earth warms?**

A they disappear

B they rise

C they stay the same

D they fall

Understand It with Pulse | Flag a mistake

23 **What is the atmosphere?**

A the layer of water around the Earth, the sea

B the layer of ice around the Earth, the poles

C the layer of gases around the Earth

D the layer of rock around the Earth, the crust

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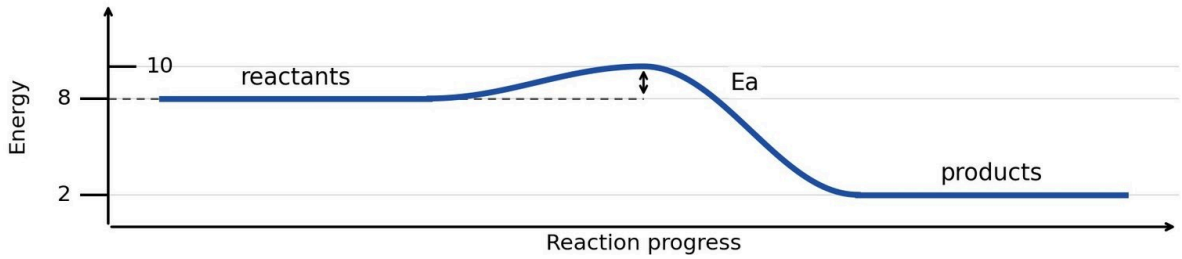
24 **The diagram shows the energy profile for a reaction. The reactants are at energy 8 and the products are at 2. Is the reaction exothermic or endothermic?**



A endothermic, energy is taken in

B exothermic, energy is taken in

C endothermic, energy is given out

D exothermic, energy is given out

Understand It with Pulse | Flag a mistake

25 **Where did the water in the oceans come from?**

A rivers flowing from the land

B rain from the clouds in the sky

C water vapour from volcanoes

D ice melting at the poles

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ANSWER KEY

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

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