ENGLAND GCSE COMBINED SCIENCE AQA SYNERGY HIGHER · UNIT 8 · 25 QUESTIONS

Guiding Spaceship Earth towards a Sustainable Future — 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 fish

B trees

C reeds

D algae

Understand It with Pulse | Flag a mistake

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

A air resistance

B friction

C upthrust

D gravity

Understand It with Pulse | Flag a mistake

3 **Seabirds on a rocky island eat fish. If the fish population falls, what happens to the seabirds?**

A they move to the sea

B their numbers fall

C their numbers rise

D they eat more fish

Understand It with Pulse | Flag a mistake

4 **A cup of coffee is hot. How is energy transferred to the air?**

A by condensation on the cold cup

B by conduction and convection

C by evaporation only, from the top

D by radiation only, from the surface

Understand It with Pulse | Flag a mistake

5 **A chocolate cake rises in the oven. What makes it rise?**

A the egg evaporates

B the sugar freezes

C a gas is made

D the flour melts

Understand It with Pulse | Flag a mistake

6 **A castle built of limestone is damaged by acid rain. Which gas causes acid rain?**

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

Understand It with Pulse | Flag a mistake

7 **What is the Haber process used to make?**

- A nitric acid
- B ammonia
- C hydrogen
- D sulfuric acid

Understand It with Pulse | Flag a mistake

8 **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

Understand It with Pulse | Flag a mistake

9 **A cheese pizza contains cheese made from milk. What is milk rich in?**

A vitamin C

B fibre

C calcium

D iron

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

11 **A solar panel produces 100 W of power. How much energy does it produce in 5 hours?**

- A 500 Wh
- B 600 Wh
- C 1000 Wh
- D 400 Wh

Understand It with Pulse | Flag a mistake

12 **Which fraction is used for road surfaces?**

A petrol

B bitumen

C naphtha

D kerosene

Understand It with Pulse | Flag a mistake

13 **Which of these is a renewable resource?**

A natural gas

B iron ore

C timber

D coal

Understand It with Pulse | Flag a mistake

14 **What is the first step in treating water?**

A adding fluoride

B chlorination

C filtration

D boiling

Understand It with Pulse | Flag a mistake

15 **A solar panel produces 200 W of power. How much energy does it produce in 5 hours?**

A 900 Wh

B 1000 Wh

C 1100 Wh

D 2000 Wh

Understand It with Pulse | Flag a mistake

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

A 78%

B 1%

C 0.04%

D 21%

Understand It with Pulse | Flag a mistake

17 **What is a finite resource?**

A a resource that will run out

B a resource that is recycled

C a resource from the sea

D a resource that never runs out

Understand It with Pulse | Flag a mistake

18 **What is one effect of climate change?**

A sea levels rising

B colder winters everywhere

C less rain everywhere

D the air getting cleaner

Understand It with Pulse | Flag a mistake

19 **A solar panel produces 200 W of power. How much energy does it produce in 10 hours?**

A 2100 Wh

B 4000 Wh

C 1900 Wh

D 2000 Wh

Understand It with Pulse | Flag a mistake

20 **How can we reduce our carbon footprint?**

A using more plastic

B driving more

C using less energy

D eating more meat

Understand It with Pulse | Flag a mistake

21 **What catalyst is used in the Haber process?**

A platinum

B iron

C nickel

D copper

Understand It with Pulse | Flag a mistake

22 **Which gas causes acid rain?**

A sulfur dioxide

B oxygen

C carbon dioxide

D nitrogen

Understand It with Pulse | Flag a mistake

23 **Why is recycling metals useful?**

A it saves energy and resources

B it stops rust

C it makes metals stronger

D it makes metals cheaper to mine

Understand It with Pulse | Flag a mistake

24

Why is chlorine added to drinking water?

A to make it taste better

B to remove solids

C to kill bacteria

D to add fluoride

Understand It with Pulse | Flag a mistake

25

About what percentage of the air is nitrogen?

A 78%

B 0.04%

C 1%

D 21%

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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