ENGLAND GCSE COMBINED SCIENCE AQA SYNERGY FOUNDATION · 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** trees
- **B** fish
- **C** algae
- **D** reeds

Understand It with Pulse | Flag a mistake

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

A upthrust

B friction

C gravity

D air resistance

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

A they have sails that catch the wind

B they are heavy and sink slowly

C they displace enough water

D they are made of metal, which floats

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4

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

- A by evaporation only, from the top
- B by conduction and convection
- C by radiation only, from the surface
- D by condensation on the cold cup

Understand It with Pulse | Flag a mistake

5

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

- A the sugar freezes
- B the egg evaporates
- C the flour melts
- D a gas is made

Understand It with Pulse | Flag a mistake

6 **A cheese pizza provides energy. Which nutrient provides most energy?**

- A protein
- B fat
- C vitamins
- D fibre

Understand It with Pulse | Flag a mistake

7 **A castle is built of limestone. What is limestone made of?**

- A sodium chloride, common salt
- B calcium sulfate, found in plaster
- C magnesium oxide, a white powder
- D calcium carbonate

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8 **A forest absorbs carbon dioxide. Which process does this?**

- A combustion of the wood
- B photosynthesis
- C respiration in the trees
- D decomposition in the soil

Understand It with Pulse | Flag a mistake

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

- A to make it taste better
- B to add fluoride
- C to remove solids
- D to kill bacteria

Understand It with Pulse | Flag a mistake

10 **A solar panel produces 100 W of power. How much energy does it produce in 10 hours?**

A 2000 Wh

B 900 Wh

C 1100 Wh

D 1000 Wh

Understand It with Pulse | Flag a mistake

11 **Which gas causes acid rain?**

A oxygen

B sulfur dioxide

C nitrogen

D carbon dioxide

Understand It with Pulse | Flag a mistake

12 **How does deforestation affect the atmosphere?**

A less carbon dioxide is absorbed

B more carbon dioxide is absorbed

C the air gets cleaner

D more oxygen is made

Understand It with Pulse | Flag a mistake

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

A they eat more fish

B they move to the sea

C their numbers fall

D their numbers rise

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

15 **Which energy resource is sustainable?**

- A oil
- B natural gas
- C coal
- D solar power

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

A naphtha

B kerosene

C petrol

D bitumen

Understand It with Pulse | Flag a mistake

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

A 1%

B 21%

C 78%

D 0.04%

Understand It with Pulse | Flag a mistake

18 **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

19 **Which fraction is used as fuel for cars?**

A diesel

B kerosene

C bitumen

D petrol

Understand It with Pulse | Flag a mistake

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

A the air getting cleaner

B less rain everywhere

C sea levels rising

D colder winters everywhere

Understand It with Pulse | Flag a mistake

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

A 4000 Wh

B 2000 Wh

C 2100 Wh

D 1900 Wh

Understand It with Pulse | Flag a mistake

22 **Which of these is a non-renewable energy resource?**

A coal

B tidal

C wind

D solar

Understand It with Pulse | Flag a mistake

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

A adding fluoride

B chlorination

C boiling

D filtration

Understand It with Pulse | Flag a mistake

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

A 900 Wh

B 1100 Wh

C 2000 Wh

D 1000 Wh

Understand It with Pulse | Flag a mistake

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

A timber

B coal

C natural gas

D iron ore

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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