ENGLAND GCSE COMBINED SCIENCE AQA SYNERGY FOUNDATION · UNIT 3 · 25 QUESTIONS

Interactions with the Environment — 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 **Rabbits in a meadow show variation in fur colour. What causes this variation?**

- A natural selection only, acting over time
- B the rabbits' diet only
- C different alleles and the environment
- D the number of rabbits

Understand It with Pulse | Flag a mistake

2 **A honeybee is an insect. How many legs does it have?**

- A 10
- B 8
- C 6
- D 4

Understand It with Pulse | Flag a mistake

3 **A river provides drinking water. Why must the water be treated before drinking?**

- A to make it taste better for drinking
- B to remove harmful substances
- C to heat it up for use
- D to add minerals for health

Understand It with Pulse | Flag a mistake

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

- A they eat more fish
- B their numbers rise
- C their numbers fall
- D they move to the sea

Understand It with Pulse | Flag a mistake

5 **A thermometer is placed in hot water. What happens to the liquid inside the thermometer?**

- A it freezes
- B it contracts
- C it expands
- D it evaporates

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

7 **A population grows from 100 to 200. What is the increase?**

- A 200
- B 100
- C 110
- D 90

Understand It with Pulse | Flag a mistake

8 **What is a biotic factor?**

A a living factor, like a predator

B a physical factor, like light

C a chemical factor, like pH

D a non-living factor, like temperature

Understand It with Pulse | Flag a mistake

9 **Eggs can carry Salmonella bacteria. How can food poisoning from eggs be avoided?**

A cook the eggs thoroughly

B keep the eggs in the fridge for a week

C eat the eggs raw

D wash the eggs in cold water

Understand It with Pulse | Flag a mistake

10 **What is a producer?**

A an organism that makes its own food

B an organism that breaks down dead matter

C an organism that eats plants

D an organism that eats animals

Understand It with Pulse | Flag a mistake

11 **What do white blood cells do to pathogens?**

A carry them in the blood

B engulf and digest them

C make them reproduce

D feed them

Understand It with Pulse | Flag a mistake

12 **Which of these is a risk factor for type 2 diabetes?**

A obesity

B being slim

C eating fruit

D exercising daily

Understand It with Pulse | Flag a mistake

13 **Which pathogen causes HIV?**

A a virus

B a protist

C a fungus

D a bacterium

Understand It with Pulse | Flag a mistake

14 **Which of these is a risk factor for heart disease?**

A eating vegetables

B exercising daily

C smoking

D drinking water

Understand It with Pulse | Flag a mistake

15 **A brown dog is vaccinated. What does the vaccine contain?**

A white blood cells

B an antibiotic

C a live dangerous pathogen that causes disease

D a dead or weakened pathogen

Understand It with Pulse | Flag a mistake

16 **What is herd immunity?**

A everyone in the population catches the disease at once

B vaccines work on animals

C animals protect humans

D most people are immune so disease cannot spread

Understand It with Pulse | Flag a mistake

17 **A population grows from 200 to 250. What is the increase?**

A 100

B 50

C 60

D 40

Understand It with Pulse | Flag a mistake

18 **Which of these increases the risk of cancer?**

A drinking water

B exercising

C eating fruit

D smoking

Understand It with Pulse | Flag a mistake

19 **What is a habitat?**

A a food web

B a population

C all the organisms in an area

D where an organism lives

Understand It with Pulse | Flag a mistake

20 **How does mucus in the nose protect the body?**

A it makes antibodies

B it traps pathogens

C it kills pathogens with acid

D it warms the air

Understand It with Pulse | Flag a mistake

21 **Which of these diseases is caused by a virus?**

A athlete's foot

B malaria

C salmonella food poisoning

D measles

Understand It with Pulse | Flag a mistake

22 **What does a vaccine contain?**

A a live dangerous pathogen that causes disease

B an antibiotic

C a dead or weakened pathogen

D white blood cells

Understand It with Pulse | Flag a mistake

23 **How does stomach acid protect the body?**

A it kills pathogens in food

B it makes antibodies

C it digests white blood cells

D it blocks the nose

Understand It with Pulse | Flag a mistake

24 **Which of these is a risk factor for lung cancer?**

A smoking

B eating vegetables

C exercising

D drinking water

Understand It with Pulse | Flag a mistake

25 **Why are quadrats placed randomly?**

A to avoid counting

B to find the most organisms

C to get a fair sample

D to save time

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.