ENGLAND GCSE BIOLOGY EDEXCEL FOUNDATION · UNIT 9 · 25 QUESTIONS

Ecosystems and Material Cycles — 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 **Seabirds nest on cliffs. What does the cliff provide?**

- A food for the chicks
- B a safe nesting site
- C water for drinking
- D warmth in winter

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

3 **Rabbits with white fur survive better in snow. What is this an example of?**

- A natural selection
- B extinction
- C mutation
- D artificial selection

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

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

Understand It with Pulse | Flag a mistake

5 **A honeybee collects nectar. What is nectar?**

- A a mineral solution
- B a sugary liquid
- C a fatty substance
- D a protein-rich food

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

A they are made of metal, which floats

B they displace enough water

C they have sails that catch the wind

D they are heavy and sink slowly

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7 **Producers in a food chain hold 100000 kJ of energy. About 10 percent passes to the primary consumers. How much energy reaches them?**

A 10000 kJ

B 5000 kJ

C 20000 kJ

D 100000 kJ

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8 **A field has 2000 kg of grass. If 5 percent of the energy passes to the rabbits, how much grass biomass supports the rabbits?**

- A 50 kg
- B 100 kg
- C 200 kg
- D 1000 kg

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9 **Which factors affect the rate of decay?**

- A soil type, light and wind
- B light, temperature and carbon dioxide
- C temperature, water and oxygen
- D rain, snow and frost only

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10 **Producers in a food chain have a biomass of 5000 kg. About 10 per cent of biomass passes to each level. What is the biomass of the secondary consumers?**

- A 5
- B 50
- C 100
- D 500

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11 **Where is carbon stored long term?**

- A in the air as oxygen
- B in living organisms only
- C in rain water
- D in fossil fuels

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12 **What shape is a pyramid of biomass?**

A a circle

B narrow at the bottom, wide at the top

C wide at the bottom, narrow at the top

D the same width all the way up

Understand It with Pulse | Flag a mistake

13 **What do decomposers return to the soil?**

A water

B oxygen

C nutrients

D carbon dioxide

Understand It with Pulse | Flag a mistake

14 **A quadrat of area 10 square metres contains on average 4 daisies. Estimate the number of daisies in a field of 100 square metres.**

- A 20
- B 400
- C 80
- D 40

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15 **What is a transect?**

- A a square frame on the ground
- B a trap for small animals
- C a way of counting trees
- D a line across a habitat

Understand It with Pulse | Flag a mistake

16 **What is a genetically modified crop?**

A a crop grown without any fertiliser

B a crop grown in a greenhouse

C a crop that needs no water

D a crop with a useful new gene

Understand It with Pulse | Flag a mistake

17 **Producers in a food chain hold 10000 kJ of energy. About 10 percent passes to the primary consumers. How much energy reaches them?**

A 1000 kJ

B 2000 kJ

C 500 kJ

D 10000 kJ

Understand It with Pulse | Flag a mistake

18 **A field has 1000 kg of grass. If 5 percent of the energy passes to the rabbits, how much grass biomass supports the rabbits?**

- A 100 kg
- B 50 kg
- C 500 kg
- D 25 kg

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19 **Why is decay important in an ecosystem?**

- A it removes carbon dioxide
- B it makes the soil warmer
- C it recycles nutrients
- D it stops plants growing

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20 **Producers in a food chain have a biomass of 1000 kg. About 10 per cent of biomass passes to the next level. What is the biomass of the primary consumers?**

- A 200
- B 10
- C 100
- D 1000

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21 **How does combustion affect carbon dioxide in the air?**

- A it stores carbon dioxide in rock
- B it removes carbon dioxide
- C it turns carbon dioxide into oxygen
- D it releases carbon dioxide

Understand It with Pulse | Flag a mistake

22 **A quadrat of area 50 square metres contains on average 6 daisies. Estimate the number of daisies in a field of 500 square metres.**

- A 30
- B 600
- C 60
- D 120

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23 **What is a quadrat used for?**

- A to count every plant exactly
- B to measure the height of trees
- C to catch small animals
- D to estimate a population

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24 **What threatens food security?**

A a growing population

B better farming methods

C fewer people in the world

D more food in shops

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25 **What are decomposers?**

A bacteria and fungi

B animals that eat dead plants

C green plants and algae

D worms and insects only

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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