ENGLAND GCSE BIOLOGY OCR TWENTY FIRST CENTURY HIGHER · UNIT 4 · 25 QUESTIONS

Using Food and Controlling Growth — 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 **Red apples provide energy. Which nutrient in apples provides most energy?**

A carbohydrates

B fat, for insulation

C fibre, for digestion

D protein, for growth

Understand It with Pulse | Flag a mistake

2 **A school lunch tray holds a meal with bread, cheese and an apple. Which food group is the bread from?**

A fats, for insulation

B vitamins, for health

C proteins, for growth

D carbohydrates

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3 **A yellow school bus stops at a station. What happens to its speed?**

A it stays the same

B it becomes zero

C it increases

D it becomes negative

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4 **A peach is a fruit. Which part of the flower does it develop from?**

- A the stigma
- B the anther
- C the ovary
- D the petal

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5 **A sandwich contains bread, cheese and lettuce. Which enzyme starts breaking down the bread in the mouth?**

- A amylase
- B pepsin
- C lipase
- D protease

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6

A chocolate cake is baked. Is baking a chemical change?

A no

B never

C sometimes

D yes

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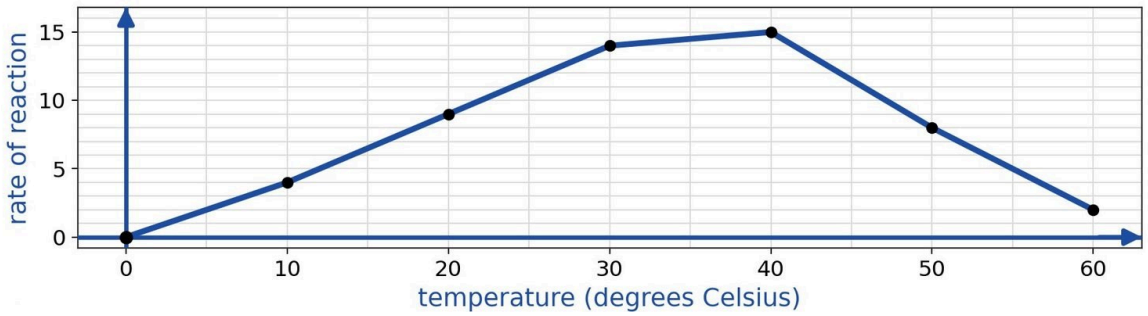
Flag a mistake

7 **The graph shows the rate of an enzyme reaction at different temperatures. At which temperature is the rate highest?**



A 20

B 30

C 60

D 40

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8 **An enzyme reaction is fastest at 30 degrees Celsius. At 50 degrees Celsius the rate is much lower. Why?**

- A the enzyme is digested
- B the substrate runs out
- C the enzyme is denatured
- D the enzyme works faster

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9 **What does anaerobic respiration in muscles produce?**

- A glucose and energy
- B lactic acid
- C oxygen and water
- D ethanol and carbon dioxide

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10 **What happens to an enzyme at a very high temperature?**

- **A** it changes into a different enzyme
- **B** it dissolves in the water
- **C** it works faster and faster
- **D** it denatures and stops working

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11 **Why is equipment sterilised before growing bacteria in a culture?**

- **A** to kill unwanted microbes
- **B** to feed the bacteria
- **C** to make the agar set firmly in the dish
- **D** to warm the bacteria up

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12 **Which test shows that a food contains protein?**

- **A** Biuret turns purple
- **B** Benedict's turns orange
- **C** Sudan III turns red
- **D** iodine turns blue-black

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13 **Why are embryonic stem cells useful in medicine?**

- **A** they carry no DNA at all
- **B** they can become any cell type
- **C** they are already specialised
- **D** they divide only once and then stop

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14 **What do gibberellins do?**

A they start germination

B they ripen fruit

C they stop roots growing

D they bend shoots to light

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15 **A cell is 15 mm long in a photograph. Its real length is 60 micrometres. What is the magnification?**

A × 25

B × 2500

C × 500

D × 250

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16 **Before a cell divides by mitosis, what happens to its chromosomes?**

A they leave the cell

B they are copied

C they are destroyed

D they are halved

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17 **A person breathes 12 times per minute. How many breaths is that in one hour?**

A 780

B 660

C 720

D 1440

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18 **Which pH is best for most enzymes in the small intestine?**

A very acidic

B slightly alkaline

C strongly alkaline

D strongly acidic

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19 **Which part of a plant cell gives the cell strength and support?**

A the chloroplast

B the vacuole

C the cell membrane

D the cell wall

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20 **One glucose molecule releases 30 molecules of ATP in respiration. How many ATP molecules are released from 2 glucose molecules?**

- A 120
- B 60
- C 90
- D 30

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21 **What is the basal metabolic rate?**

- A energy used at rest
- B energy stored as fat
- C energy from food
- D energy used in exercise

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22 **Which enzyme breaks down lipids?**

A amylase

B protease

C pepsin

D lipase

Understand It with Pulse | Flag a mistake

23 **Which cell has a cell wall made of cellulose?**

A a bacterial cell

B a sperm cell

C an animal cell

D a plant cell

Understand It with Pulse | Flag a mistake

24 **A single bacterium divides every 20 minutes. How many bacteria are there after 2 divisions?**

- A 6
- B 4
- C 8
- D 2

Understand It with Pulse | Flag a mistake

25 **An enzyme reaction is fastest at 20 degrees Celsius. At 40 degrees Celsius the rate is much lower. Why?**

- A the substrate runs out
- B the enzyme works faster
- C the enzyme is denatured
- D the enzyme is digested

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ANSWER KEY

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

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