ENGLAND GCSE COMBINED SCIENCE EDEXCEL HIGHER · UNIT 1 · 25 QUESTIONS

Key Concepts in Biology — 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 **Hens' eggs have a large yolk. The yolk is one very large cell. Which part of the cell is the yolk?**

- A the cytoplasm with stored food
- B the nucleus
- C the cell membrane, controlling what enters
- D the mitochondria

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

3 **Potatoes are placed in pure water. What happens to the potato cells?**

- A they gain water
- B they stay the same
- C they lose water
- D they burst

Understand It with Pulse | Flag a mistake

4 **A thermometer shows a patient's temperature is 39 degrees Celsius. Is this above or below normal body temperature?**

- A exactly normal
- B impossible to tell
- C above normal
- D below normal

Understand It with Pulse | Flag a mistake

5 **Red apples contain vitamin C. What is vitamin C needed for?**

- A making red blood cells
- B good eyesight at night
- C healthy skin and gums
- D strong bones and teeth

Understand It with Pulse | Flag a mistake

6 **Glass marbles in a tray are used as a model for particles in a solid. What do the marbles show?**

- A particles flow past each other easily
- B particles move freely through space
- C particles vibrate in fixed positions
- D particles are far apart from each other

Understand It with Pulse | Flag a mistake

7 **One glucose molecule releases 30 molecules of ATP in respiration. How many ATP molecules are released from 3 glucose molecules?**

A 60

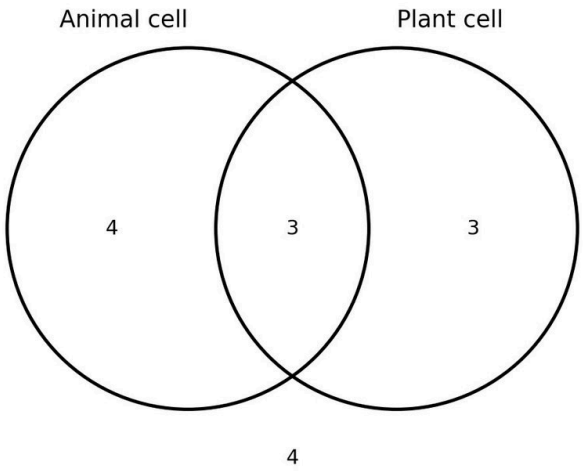
B 90

C 120

D 180

Understand It with Pulse | Flag a mistake

8 **The Venn diagram shows features of animal cells and plant cells. How many features are found in both types of cell?**



A 5

B 3

C 4

D 2

Understand It with Pulse

Flag a mistake

9 **A peach tree flowers in spring. What do bees carry between flowers?**

- A leaves
- B pollen
- C water
- D seeds

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

11 **Photosynthesis produces oxygen at a rate of 5 cm cubed per minute. How much oxygen is produced in 20 minutes?**

A 200 cm^3

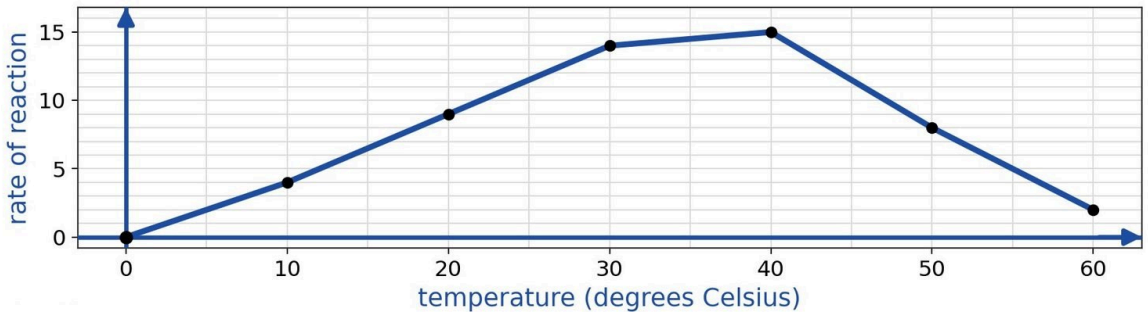
B 100 cm^3

C 90 cm^3

D 110 cm^3

Understand It with Pulse | Flag a mistake

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



A 30

B 40

C 20

D 60

Understand It with Pulse | Flag a mistake

13 **A school lunch tray holds a meal with milk. Which nutrient is milk rich in?**

- A iron
- B fibre
- C calcium
- D vitamin C

Understand It with Pulse | Flag a mistake

14 **A cell is 24 mm long in a photograph. Its real length is 60 micrometres. What is the magnification?**

- A × 4000
- B × 400
- C × 800
- D × 40

Understand It with Pulse | Flag a mistake

15 **Why does a plant cell not burst in pure water?**

- A the cell membrane is waterproof
- B the chloroplasts use the water up
- C the vacuole absorbs all the water
- D the cell wall stops it swelling

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

17 **Which part of a cell is where most of the chemical reactions happen?**

A the nucleus

B the cytoplasm

C the cell membrane

D the ribosome

Understand It with Pulse | Flag a mistake

18 **What is glucose used to make in cell walls?**

A glycogen

B starch

C cellulose

D amino acids

Understand It with Pulse | Flag a mistake

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

A energy used at rest

B energy from food

C energy used in exercise

D energy stored as fat

Understand It with Pulse | Flag a mistake

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

A the substrate runs out

B the enzyme is digested

C the enzyme works faster

D the enzyme is denatured

Understand It with Pulse | Flag a mistake

21 **What happens to heart rate during exercise?**

A it stays the same

B it increases

C it decreases

D it stops

Understand It with Pulse | Flag a mistake

22 **Which structure is found in a bacterial cell but not in an animal cell?**

A a ribosome

B a nucleus

C a plasmid

D a mitochondrion

Understand It with Pulse | Flag a mistake

23 **What is the lock and key model?**

- A a substrate fits any enzyme
- B an enzyme fits one substrate
- C an enzyme fits any substrate
- D enzymes work at any pH

Understand It with Pulse | Flag a mistake

24 **A red blood cell in pure water will do what?**

- A swell and burst
- B shrink and shrivel
- C divide in two
- D stay the same size

Understand It with Pulse | Flag a mistake

25

A cheek cell has no cell wall and no chloroplasts. What does this show?

A it is a dead cell

B it is a plant cell

C it is an animal cell

D it is a bacterial cell

Understand It with Pulse

Flag a mistake

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.