ENGLAND GCSE COMBINED SCIENCE OCR GATEWAY HIGHER · UNIT 1 · 25 QUESTIONS

Cell Level Systems — 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 **Glass marbles are shaken in a tray. What does this model?**

- A particles bonding together
- B particles disappearing completely
- C particles gaining energy
- D particles freezing into place

Understand It with Pulse | Flag a mistake

2 **A forest absorbs carbon dioxide from the air. Which process is responsible?**

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

Understand It with Pulse | Flag a mistake

3 **Hens' eggs have a large yolk. The yolk is one very large cell. Which part of the cell is the yolk?**

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

Understand It with Pulse | Flag a mistake

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

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

Understand It with Pulse | Flag a mistake

5 **A sunflower is left in bright light. Its leaves photosynthesise faster than in dim light. What else would increase the rate?**

- A less chlorophyll in the leaves of the plant
- B more carbon dioxide in the air
- C a lower temperature
- D less water in the soil

Understand It with Pulse | Flag a mistake

6 **A peach contains a stone. What is inside the stone?**

- A a seed
- B a root
- C a flower
- D a leaf

Understand It with Pulse | Flag a mistake

7 **What is produced by anaerobic respiration in muscle cells?**

A lactic acid

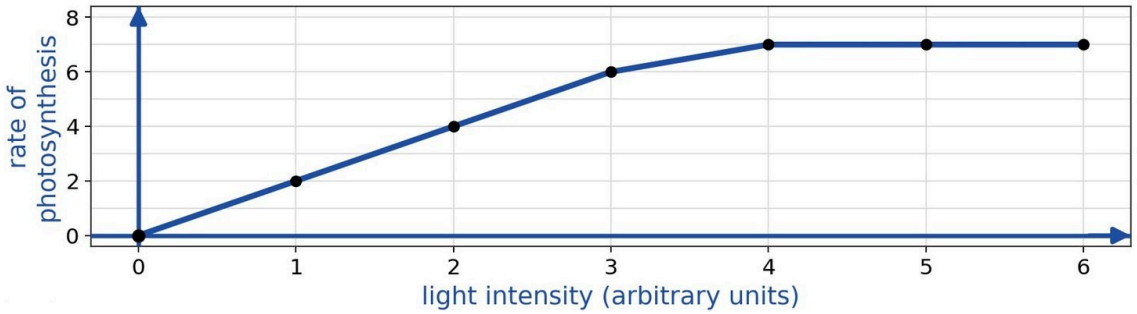
B oxygen

C ethanol

D carbon dioxide

Understand It with Pulse | Flag a mistake

8 **The graph shows the rate of photosynthesis at different light intensities. At which light intensity does the rate first reach its maximum?**



A 6

B 2

C 4

D 3

Understand It with Pulse | Flag a mistake

9 **A cell is 36 mm long in a photograph. Its real length is 30 micrometres. What is the magnification?**

- A × 1200
- B × 2400
- C × 12000
- D × 120

Understand It with Pulse | Flag a mistake

10 **Strips cut from potatoes are left in salt water overnight. What happens to the strips?**

- A they stay the same
- B they lose water and become limp
- C they dissolve in the water
- D they gain water and become firm

Understand It with Pulse | Flag a mistake

11 **A pondweed plant releases 30 bubbles of oxygen in 3 minutes. How many bubbles does it release per minute?**

- A 11
- B 9
- C 20
- D 10

Understand It with Pulse | Flag a mistake

12 **During mitosis, how many daughter cells are produced from one cell?**

- A 4
- B 2
- C 1
- D 3

Understand It with Pulse | Flag a mistake

13 **A cell is 9 mm long in a photograph. Its real length is 0.03 mm. What is the magnification?**

A × 400

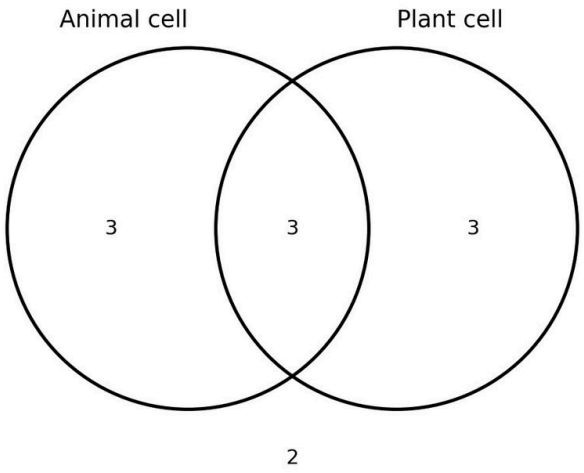
B × 600

C × 300

D × 150

Understand It with Pulse | Flag a mistake

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



A 3

B 4

C 2

D 5

Understand It with Pulse | Flag a mistake

15 **One glucose molecule releases 30 molecules of ATP in respiration. How many ATP molecules are released from 5 glucose molecules?**

- A 300
- B 180
- C 150
- D 120

Understand It with Pulse | Flag a mistake

16 **What is a meristem?**

- A plant tissue that makes new cells
- B a plant hormone that stops growth
- C a type of root hair cell
- D the part of a leaf that catches light

Understand It with Pulse | Flag a mistake

17 **Why are cultures grown near a Bunsen burner flame?**

A the flame lights the bench

B the flame dries the agar

C rising air keeps microbes away

D the flame warms the bacteria so they grow faster

Understand It with Pulse | Flag a mistake

18 **A person breathes 15 times per minute. How many breaths is that in one hour?**

A 900

B 840

C 960

D 1800

Understand It with Pulse | Flag a mistake

19 **A piece of potato weighs 4 g. After soaking in pure water it weighs 4.5 g. What is the percentage increase in mass?**

A 12.5%

B 25%

C 6.25%

D 17.5%

Understand It with Pulse | Flag a mistake

20 **Which of these is a use of glucose in a plant?**

A transpiration

B photosynthesis

C respiration

D pollination

Understand It with Pulse | Flag a mistake

21 **Which part of a cell controls all the activities of the cell?**

A the vacuole

B the cell membrane

C the nucleus

D the cytoplasm

Understand It with Pulse | Flag a mistake

22 **A microscope has an eyepiece lens of 10 times and an objective lens of 40 times. What is the total magnification?**

A × 400

B × 40

C × 4000

D × 50

Understand It with Pulse | Flag a mistake

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

- A amino acids
- B starch
- C cellulose
- D glycogen

Understand It with Pulse | Flag a mistake

24 **Which of these is found in both animal cells and plant cells?**

- A a cell wall
- B a chloroplast
- C a large vacuole
- D a mitochondrion

Understand It with Pulse | Flag a mistake

25

What is plasmolysis?

A a cell dividing into two cells

B a plant cell shrinking

C a root hair cell absorbing minerals

D a plant cell bursting in water

Understand It with Pulse | Flag a mistake

ANSWER KEY

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

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