ENGLAND GCSE BIOLOGY OCR GATEWAY FOUNDATION · 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 **Potatoes left in salty water go soft. Why?**

- A salt enters the cells
- B the cells divide
- C water enters the cells
- D water leaves the cells

Understand It with Pulse | Flag a mistake

2 **Glass marbles are used to model atoms. What is a limitation of the model?**

- A marbles cannot be counted accurately at all
- B marbles are too small to see properly
- C marbles are the wrong colour for atoms
- D marbles are much bigger than atoms

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3 **A sunflower grows taller over the summer. Where does most of the extra mass come from?**

- A sunlight captured by the leaves
- B water absorbed from the soil
- C minerals absorbed from the soil
- D carbon dioxide from the air

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4 **A thermometer measures temperature in degrees Celsius. What is the freezing point of water on this scale?**

- A 0
- B 10
- C 100
- D 32

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

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

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6 **Eggs can carry Salmonella bacteria. What should you do before eating eggs?**

- A leave them in the sun
- B wash them in cold water
- C eat them raw
- D cook them thoroughly

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7 **What does a plant make from glucose for energy storage in seeds?**

A lipids

B protein

C cellulose

D starch

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8 **In the microscopy required practical, why is iodine stain added to onion cells?**

A to magnify the cells

B to make the nucleus easy to see

C to kill the onion cells

D to keep the cells alive for longer

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9 **Which type of cell has no nucleus?**

A a root hair cell

B an animal cell

C a plant cell

D a bacterial cell

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10 **What is glucose converted into for storage in plants?**

A glycogen

B protein

C cellulose

D starch

Understand It with Pulse | Flag a mistake

11 **Which type of respiration releases the most energy per glucose molecule?**

A fermentation

B photosynthesis

C anaerobic respiration

D aerobic respiration

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12 **A cell of real length 0.025 mm is viewed at a magnification of 500 times. How long is the image of the cell?**

A 25 mm

B 6.25 mm

C 17.5 mm

D 12.5 mm

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

A 120

B 90

C 180

D 60

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14 **What gas is released by photosynthesis?**

A carbon dioxide

B oxygen

C hydrogen

D nitrogen

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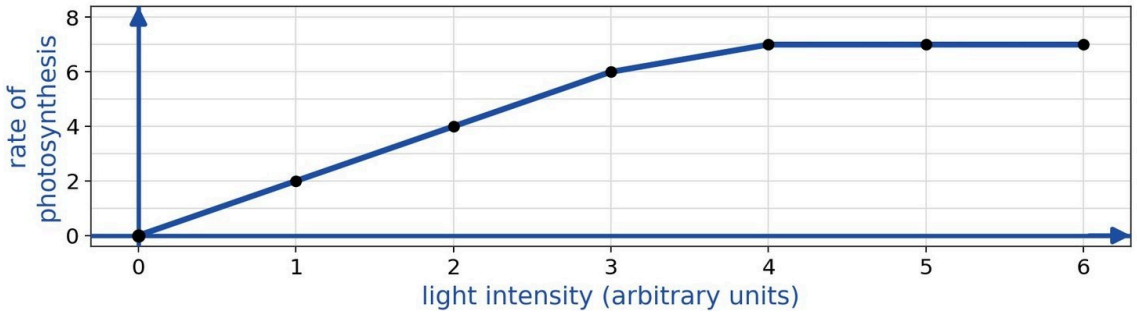
15 **The graph shows the rate of photosynthesis at different light intensities. At which light intensity does the rate first reach its maximum?**



A 3

B 6

C 4

D 2

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16 **Why does oxygen diffuse from the lungs into the blood?**

A oxygen is less concentrated in the lungs

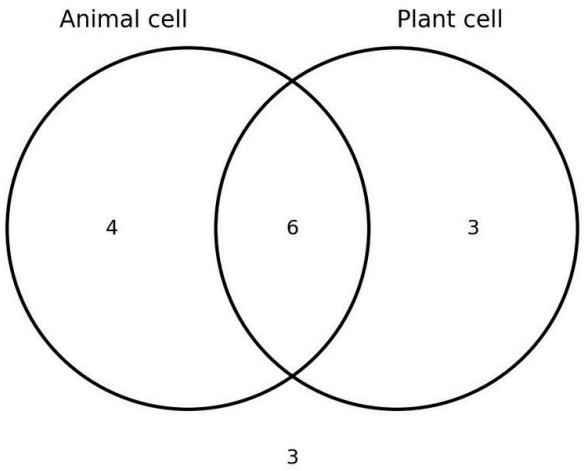
B the lungs are warmer

C the blood pumps it in

D oxygen is more concentrated in the lungs

Understand It with Pulse | Flag a mistake

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



A 7

B 6

C 8

D 5

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

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

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19 **What happens to light intensity when the distance from a lamp doubles?**

- A it falls to a quarter
- B it doubles
- C it halves
- D it stays exactly the same

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20 **A person breathes 20 times per minute. How many breaths is that in one hour?**

- A 1200
- B 1140
- C 2400
- D 1260

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21 **Why can plant cells keep differentiating throughout life, but most animal cells cannot?**

- A plant cells divide more slowly
- B plants have no DNA in their cells
- C plants keep meristem tissue
- D animal cells have no nucleus

Understand It with Pulse | Flag a mistake

22 **Why does breathing rate increase during exercise?**

A to cool the blood

B to slow the heart

C to take in more oxygen

D to take in more carbon dioxide

Understand It with Pulse | Flag a mistake

23 **A cell is 18 mm long in a photograph. Its real length is 0.1 mm. What is the magnification?**

A × 280

B × 180

C × 360

D × 90

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24 **A pondweed plant releases 36 bubbles of oxygen in 6 minutes. How many bubbles does it release per minute?**

- A 7
- B 6
- C 5
- D 12

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25 **Why is the lid of a Petri dish taped on, but not sealed all the way round?**

- A to let the bacteria escape when they grow
- B to keep the dish warm
- C to let oxygen in and keep microbes out
- D to stop the agar from drying out completely

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ANSWER KEY

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

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