

12. Respiration

Starter Quiz · 课前小测

IGCSE Biology

Name: _____ Score: _____

1. Respiration is the process of:

- ☐ releasing energy from food in cells
- ☐ breathing air in and out
- ☐ making food from light
- ☐ removing waste

2. The products of aerobic respiration are:

- ☐ carbon dioxide and water
- ☐ glucose and oxygen
- ☐ lactic acid
- ☐ alcohol and carbon dioxide

3. Anaerobic respiration in human muscles produces:

- ☐ lactic acid
- ☐ alcohol
- ☐ carbon dioxide and water
- ☐ glucose

4. What does a cell use the energy from respiration for? (Select all that apply.)

- ☐ movement
- ☐ growth
- ☐ active transport
- ☐ making sunlight

Tick every correct option.

5. In aerobic respiration, oxygen is:

- ☐ used up
- ☐ produced
- ☐ not involved
- ☐ turned into glucose

6. Anaerobic respiration in yeast produces:

- ☐ alcohol and carbon dioxide

- ☐ lactic acid
- ☐ water and oxygen
- ☐ protein

7. Respiration and breathing are the same process.

- ☐ True
- ☐ False

8. The aerobic respiration equation is the reverse of photosynthesis.

- ☐ True
- ☐ False

9. After hard exercise, oxygen is needed to break down the lactic acid built up (the oxygen debt).

- ☐ True
- ☐ False

10. Aerobic respiration takes place mainly in the _____ of the cell.

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Answers · 答案

IGCSE Biology

1. releasing energy from food in cells

Respiration releases energy from glucose in cells.

2. carbon dioxide and water

Glucose + oxygen $\rightarrow$ carbon dioxide + water.

3. lactic acid

Glucose $\rightarrow$ lactic acid in muscles.

4. movement; growth; active transport

Energy powers movement, growth and active transport; cells cannot make sunlight.

5. used up

Oxygen is a reactant, used up in the reaction.

6. alcohol and carbon dioxide

Yeast fermentation gives alcohol + CO₂.

7. False

Respiration is a chemical reaction in cells; breathing moves air.

8. True

Glucose + oxygen $\rightarrow$ CO₂ + water reverses CO₂ + water $\rightarrow$ glucose + oxygen.

9. True

This is why you keep breathing hard after stopping.

10. mitochondria

Mitochondria are the site of aerobic respiration.