

1. Characteristics and classification of living organisms

1.1 Characteristics of living organism

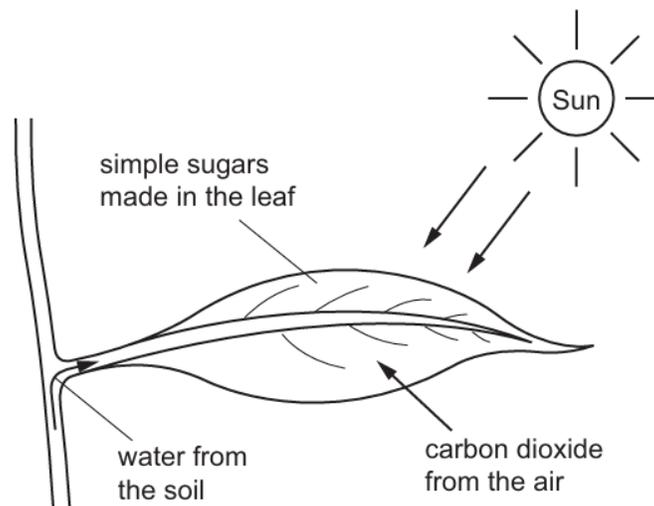
Paper 1 and 2

Question Paper

Paper 1

Questions are applicable for both core and extended candidates

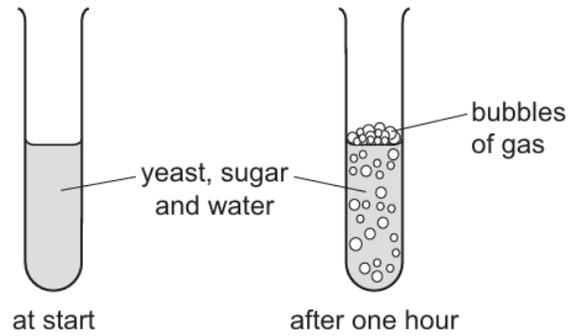
- 1 The diagram shows a leaf on a plant.



Which characteristic of life is represented by this diagram?

- A excretion
 - B nutrition
 - C respiration
 - D sensitivity
- 2 Which process do living organisms use to remove excess carbon dioxide from their bodies?
- A excretion
 - B movement
 - C nutrition
 - D respiration

- 3 Some yeast, sugar and water are mixed in a test-tube. The diagrams show the test-tube at the start and after one hour.



Which process causes this change?

- A growth
 - B reproduction
 - C respiration
 - D sensitivity
- 4 Some processes carried out by living organisms are listed.

- 1 egestion
- 2 excretion
- 3 reproduction
- 4 respiration

Which processes are carried out by **all** living organisms?

- A 1, 2, 3 and 4
- B 1, 2 and 3 only
- C 2, 3 and 4 only
- D 3 and 4 only

- 5 Which processes are characteristics of **all** living organisms?
- 1 digestion
 - 2 respiration
 - 3 excretion
- A** 1, 2 and 3 **B** 1 only **C** 2 and 3 only **D** 2 only
- 6 What are characteristics of all organisms?
- A** egestion and excretion
 - B** egestion and nutrition
 - C** excretion and nutrition
 - D** excretion and photosynthesis
- 7 Living animals release carbon dioxide.
- This is an example of which life process?
- A** excretion
 - B** movement
 - C** nutrition
 - D** sensitivity
- 8 Which process provides an organism with the raw materials needed for tissue repair?
- A** excretion
 - B** growth
 - C** nutrition
 - D** respiration

9 Which process provides an organism with the raw materials needed for tissue repair?

- A excretion
- B growth
- C nutrition
- D respiration

10 All living organisms release energy from nutrient molecules within their cells.

What is the name of this characteristic?

- A growth
- B nutrition
- C respiration
- D sensitivity

11 Which characteristics of all living organisms are needed to release energy for growth?

- A breathing and respiration
- B excretion and nutrition
- C excretion and respiration
- D nutrition and respiration

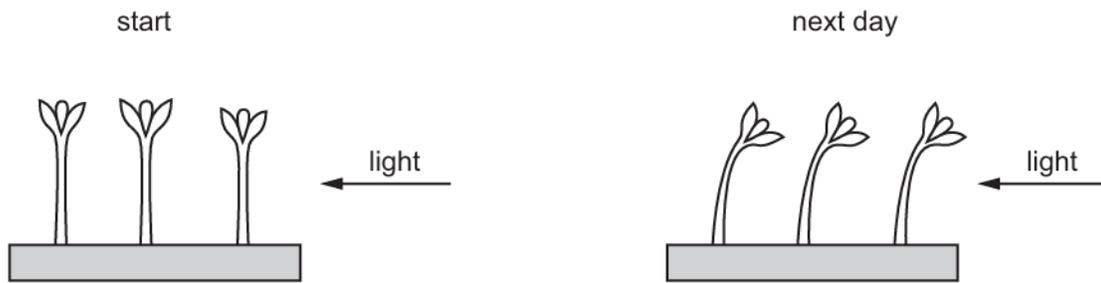
12 All living things can remove toxic materials and other substances that are in excess of requirements.

What is this process called?

- A egestion
- B excretion
- C nutrition
- D respiration

- 13 What is a characteristic of all living organisms?
- A breathing
 - B circulation
 - C egestion
 - D sensitivity
- 14 Hedgehogs are mammals. Touching a hedgehog causes it to roll into a ball to protect itself.
- Which characteristics is it displaying?
- A excretion and movement
 - B growth and sensitivity
 - C movement and growth
 - D movement and sensitivity
- 15 Which process is carried out by all organisms?
- A growth
 - B photosynthesis
 - C sexual reproduction
 - D transpiration

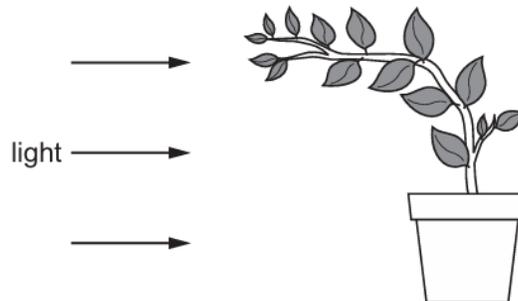
16 The diagram shows what happened in an experiment with plant seedlings.



Which characteristic of living things made the seedlings grow towards the light?

- A excretion
- B nutrition
- C respiration
- D sensitivity

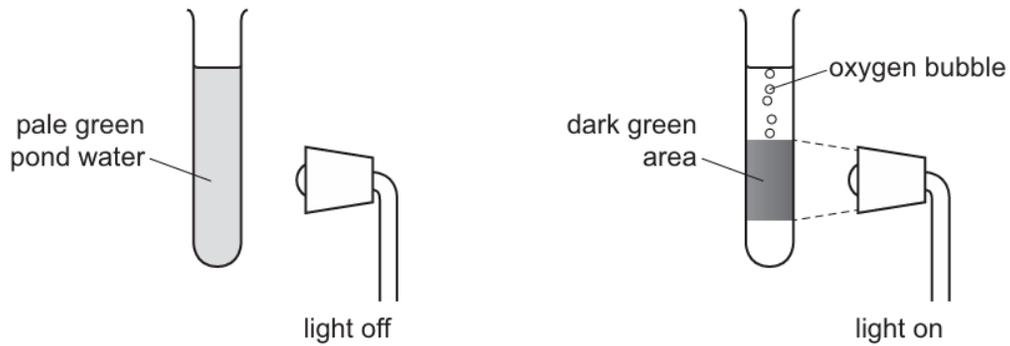
17 The diagram shows a plant.



Which characteristic of living organisms is shown by the plant in the diagram?

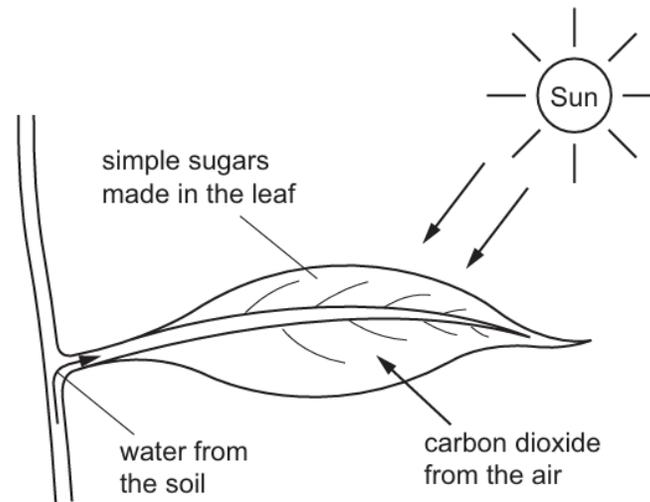
- A excretion
- B reproduction
- C respiration
- D sensitivity

- 18 The diagrams show a test-tube containing pond water. The green colour is caused by microorganisms that have chloroplasts.



Which characteristics of living organisms are shown?

- A excretion, growth and movement
 - B movement, nutrition and sensitivity
 - C nutrition, reproduction and respiration
 - D reproduction, sensitivity and growth
- 19 The diagram shows a leaf on a plant.



Which characteristic of life is represented by this diagram?

- A excretion
- B nutrition
- C respiration
- D sensitivity

20 Carbon dioxide diffuses into a leaf.

Which characteristic of living things requires this?

- A excretion
- B movement
- C nutrition
- D respiration

21 Which characteristic of living organisms is represented by gas exchange in the alveoli?

- A excretion
- B growth
- C nutrition
- D reproduction

22 All living organisms release energy from nutrient molecules within their cells.

What is the name of this characteristic?

- A growth
- B nutrition
- C respiration
- D sensitivity

23 Which organisms carry out respiration, growth, movement and excretion?

- A all animals and all plants
- B animals only
- C arthropods and flowering plants only
- D plants only

Paper 2

Questions are applicable for both core and extended candidates

24 A person touches a hot object and rapidly moves their hand away from the hot object.

Which characteristic of living organisms is this an example of?

- A excretion
- B growth
- C reproduction
- D sensitivity

25 Which process is carried out by all organisms?

- A growth
- B photosynthesis
- C sexual reproduction
- D transpiration

26 Which organisms carry out respiration, growth, movement and excretion?

- A all animals and all plants
- B animals only
- C arthropods and flowering plants only
- D plants only

- 27 A living organism, X, can make its own food, get rid of toxic materials and detect and respond to stimuli.

What **other** four processes must organism X carry out to stay alive?

- A excretion, growth, movement, sensitivity
- B excretion, growth, nutrition, respiration
- C growth, movement, reproduction, respiration
- D movement, reproduction, respiration, sensitivity

- 28 Some processes carried out by living organisms are listed.

- 1 egestion
- 2 excretion
- 3 reproduction
- 4 respiration

Which processes are carried out by **all** living organisms?

- A 1, 2, 3 and 4
- B 1, 2 and 3 only
- C 2, 3 and 4 only
- D 3 and 4 only

- 29 Which processes are characteristics of **all** living organisms?

- 1 digestion
- 2 respiration
- 3 excretion

- A 1, 2 and 3
- B 1 only
- C 2 and 3 only
- D 2 only

- 30 What are characteristics of all organisms?
- A egestion and excretion
 - B egestion and nutrition
 - C excretion and nutrition
 - D excretion and photosynthesis
- 31 Which process occurs both in plants and in animals?
- A excretion
 - B phagocytosis
 - C photosynthesis
 - D transpiration
- 32 Which characteristics of all living organisms are needed to release energy for growth?
- A breathing and respiration
 - B excretion and nutrition
 - C excretion and respiration
 - D nutrition and respiration
- 33 All living things can remove toxic materials and other substances that are in excess of requirements.
- What is this process called?
- A egestion
 - B excretion
 - C nutrition
 - D respiration

34 What is a characteristic of all living organisms?

- A breathing
- B circulation
- C egestion
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35 Hedgehogs are mammals. Touching a hedgehog causes it to roll into a ball to protect itself.

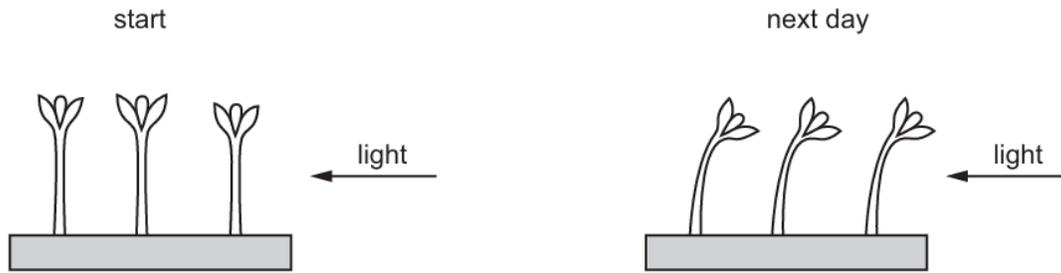
Which characteristics is it displaying?

- A excretion and movement
- B growth and sensitivity
- C movement and growth
- D movement and sensitivity

36 Which process is carried out by all organisms?

- A growth
- B photosynthesis
- C sexual reproduction
- D transpiration

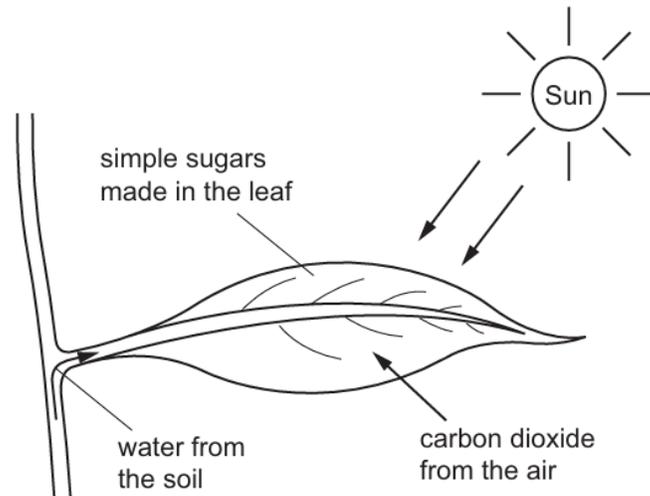
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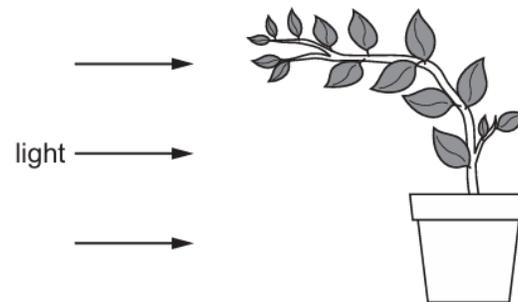
- A excretion
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39 Carbon dioxide diffuses into a leaf.

Which characteristic of living things requires this?

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40 The diagram shows a plant.



Which characteristic of living organisms is shown by the plant in the diagram?

- A excretion
- B reproduction
- C respiration
- D sensitivity

41 Which organisms carry out respiration, growth, movement and excretion?

- A all animals and all plants
- B animals only
- C arthropods and flowering plants only
- D plants only