IGCSE Cambridge Topical Past Papers

COMBINED SCIENCE

0653 | Paper 2 2017 — 2023

Chapter 1- BIOLOGY

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CH 4 - B4. Enzymes CH 10 - B10. Reproduction

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CH 12 - B12. Human Influences On Ecosystems

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CH 15 - C3. Atoms, Elements And Compounds CH 21 - C9. The Periodic Table

CH 16 - C4. Stoichiometry CH 22 - C10. Metals

CH 17 - C5. Electricity And Chemistry CH 23 - C11. Air And Water

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CH 27 - P3. Thermal Physics

CH 28 - P4. Properties Of Waves, Including Light And Sound

CH 29 - P5. Electrical Quantities

CH 30 - P6. Electric Circuits



TOPICS	P2	P4	P6
BIOLOGY	533	122	61
CHEMISTRY	575	125	63
PHYSICS	532	122	62

COMBINED SCIENCE 0653

TOPICAL PAST PAPER WORKSHEETS

2017 - 2023 | Questions + Mark scheme



P2

Р4

P6

1640 Questions

369 Questions

192 Questions

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1 - (0653/21_Summer_2017_Q1) - B1. Characteristics Of Living Organisms

Process Q happens in cells.

carbohydrates → process Q → energy released

What is process Q?

- A growth
- **B** nutrition
- C respiration
- D sensitivity
- **2** (0653/22_Summer_2017_Q1) B1. Characteristics Of Living Organisms

A person moves their hand away from a hot object.

Which characteristic of living organisms is this?

- A growth
- B nutrition
- C reproduction
- **D** sensitivity
- $\textbf{3} \quad \textbf{-} \; (0653/23_Summer_2017_Q1) \; \textbf{-} \; \textit{B1. Characteristics Of Living Organisms}$

Which are characteristics of all living organisms?

- A excretion, breathing and sensitivity
- B excretion, movement and respiration
- C gas exchange and muscle contraction
- D muscle contraction and sensitivity
- 4 (0653/21_Winter_2017_Q1) B1. Characteristics Of Living Organisms

Which characteristics help to define a living organism?

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

5 - (0653/21_Summer_2018_Q1) **-** *B1. Characteristics Of Living Organisms*

Most cars burn fossil fuels to release energy for their movement.

Which characteristic of living organisms is similar to this?

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

6 - (0653/21_Winter_2019_Q1) - B1. Characteristics Of Living Organisms

A biologist keeps a potted plant in a laboratory.

Which feature of the potted plant shows that it is a living organism?

- A It grows larger over time.
- B It has green leaves.
- C The compost in the pot dries after he waters it.
- D The stems contain xylem.
- 7 (0653/21_Winter_2021_Q1) B1. Characteristics Of Living Organisms

Movement is a characteristic of all living organisms.

Which two other characteristics of living organisms provide the energy for movement?

- A excretion and nutrition
- B growth and sensitivity
- C nutrition and respiration
- D respiration and growth
- **8** (0653/21_Winter_2022_Q1) B1. Characteristics Of Living Organisms

What are characteristics of all living organisms?

- A breathing, excretion, nutrition
- B excretion, growth, nutrition
- C reproduction, respiration, germination
- D secretion, growth, sensitivity

9 - (0653/21_Summer_2023_Q1) - B1. Characteristics Of Living Organisms

Which characteristic of living organisms involves chemical reactions in cells that break down nutrient molecules and release energy?

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

10 - (0653/22_Summer_2023_Q1) - B1. Characteristics Of Living Organisms

Which process removes toxic materials from an organism?

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

11 - (0653/23_Summer_2023_Q1) - B1. Characteristics Of Living Organisms

What is a characteristic of all living things?

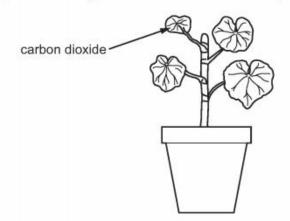
- A egestion
- B ingestion
- C nutrition
- D photosynthesis

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organisms

12 - (0653/21_Winter_2023_Q1) - B1. Characteristics Of Living Organisms

The diagram shows a plant absorbing carbon dioxide in order to carry out photosynthesis.



Which characteristic of all living organisms is this?

- A movement
- **B** nutrition
- C excretion
- D reproduction

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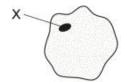
1 - (0653/21_Summer_2017_Q2) **-** *B2. Cells*

Which row shows the site of chemical reactions in a cell and identifies the selectively permeable structure in a cell?

	site of chemical reactions	selectively permeable structure	
Α	cytoplasm	cell membrane	
В	cytoplasm	cell wall	
С	vacuole	cell membrane	
D	vacuole	cell wall	

2 - (0653/22_Summer_2017_Q2) - *B2. Cells*

The diagram shows an animal cell under a light microscope.



What is the function of part X?

- A to carry out photosynthesis
- B to let molecules in and out of the cell
- C to store and pass on cell information
- D to support and protect the cell

ANSWERS

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1 - (0653/21_Summer_2017_Q1) - B1. Characteristics Of Living Organisms

 \mathbf{C}

2 - (0653/22_Summer_2017_Q1) - B1. Characteristics Of Living Organisms

D

3 - (0653/23_Summer_2017_Q1) - B1. Characteristics Of Living Organisms

В

4 - (0653/21_Winter_2017_Q1) - B1. Characteristics Of Living Organisms

В

5 - (0653/21_Summer_2018_Q1) - *B1. Characteristics Of Living Organisms*

D

6 - (0653/21_Winter_2019_Q1) - B1. Characteristics Of Living Organisms

A

7 - (0653/21_Winter_2021_Q1) - B1. Characteristics Of Living Organisms

 \mathbf{C}

8 - (0653/21_Winter_2022_Q1) - B1. Characteristics Of Living Organisms

В

9 - (0653/21_Summer_2023_Q1) - B1. Characteristics Of Living Organisms

 \mathbf{C}

10 - (0653/22_Summer_2023_Q1) - B1. Characteristics Of Living Organisms

 \mathbf{C}

11 - (0653/23_Summer_2023_Q1) - B1. Characteristics Of Living Organisms

 \mathbf{C}

12 - (0653/21_Winter_2023_Q1) - B1. Characteristics Of Living Organisms

В

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