## IGCSE Cambridge Topical Past Papers

# **BIOLOGY**

# 0610 | Paper 2

### 2017 - 2023

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# BIOLOGY 0610

### TOPICAL PAST PAPER WORKSHEETS

2017 - 2023 | Questions + Mark scheme



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TOPICS	P1	P2	P3	P4	P6
Charactristics & Classification of living organisms	95	68	34	30	9
Organization & Maintenance of the Organism	66	63	15	12	25
Movement in and out of Cells	63	56	10	9	12
Biological Molecules	31	43	9	11	41
Enzymes	40	51	10	13	16
Plant Nutrition	65	62	33	19	13
Human Nutrition	106	83	35	34	3
Transport in Plants	67	77	22	20	11
Transport in Animals	61	55	19	24	3
Diseases & Immunity	34	35	13	17	0
Gas Exchange in Humans	41	35	13	10	4
Respiration	57	62	20	14	8
Excrection in Humans	39	37	12	7	1
Co-Ordination & Response	104	113	31	31	3
Drugs	43	32	15	7	0
Reproduction	127	114	51	32	6
Inheritance	86	119	26	26	0
Variation & Selection	54	46	19	20	0
Organisms & Their Environment	104	88	35	39	5
Biotechnology & Genetic Engineering	43	75	17	26	3
Human Influences on Ecosystem	57	60	33	29	0

1 - (0610/21\_Summer\_2017\_Q1) - Characteristics And Classification Of Living Organisms

Which characteristic do all living organisms show?

- A breathing
- B excretion
- C photosynthesis
- D tropism
- **2** (0610/21\_Summer\_2017\_Q3) Characteristics And Classification Of Living Organisms

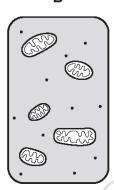
Each of the diagrams shows an area of cytoplasm.

Which is from a prokaryote?

Α



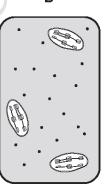
В



C



D



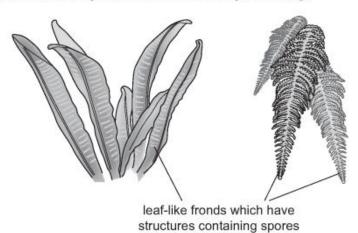
3 - (0610/21\_Winter\_2017\_Q1) - Characteristics And Classification Of Living Organisms

Which term is defined as all the chemical reactions that occur in cells?

- A photosynthesis
- B protein synthesis
- C respiration
- D metabolism

4 - (0610/22\_Winter\_2017\_Q1) - Characteristics And Classification Of Living Organisms

To which group do both the organisms shown in the diagram belong?



on their lower surface

- A dicotyledons
- B ferns
- C fungi
- D monocotyledons

5 - (0610/23\_Winter\_2017\_Q1) - Characteristics And Classification Of Living Organisms

The plant Mimosa pudica has leaves that fold in when touched.

This demonstrates movement and which other characteristic?

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

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**6** - (0610/22\_Winter\_2017\_Q2) - Characteristics And Classification Of Living Organisms

The diagram shows a section of DNA from a chimpanzee.

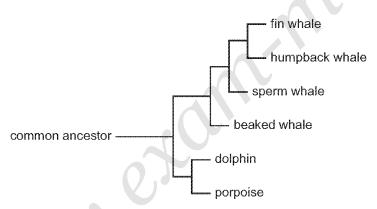
Α	G C	Т	Α	С	Α	G	Α	G
---	-----	---	---	---	---	---	---	---

Which diagram shows a section of DNA from the organism that is most closely related to the chimpanzee?

- A A G C T A C A G A T
- **B** A G C T A C A G T T
- **c** A T C A A C A G T T
- D A T C T A C A G T T

7 - (0610/23\_Winter\_2017\_Q7) - Characteristics And Classification Of Living Organisms

The diagram shows an evolutionary tree based on a computer-generated study of different sea mammals.



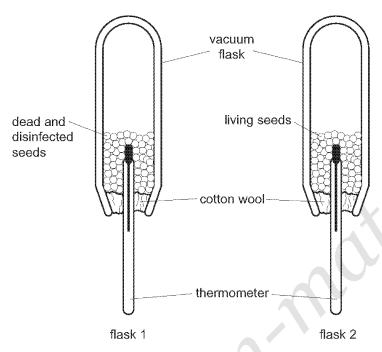
According to this evolutionary tree, which whale has DNA base sequences that are **least** shared with the other whales?

- A beaked whale
- B fin whale
- C humpback whale
- D sperm whale

**8 -** (0610/23\_Winter\_2017\_Q11) **-** Characteristics And Classification Of Living Organisms

The diagram shows the apparatus at the beginning of an investigation into temperature change during the germination of seeds. The temperature at the start of the investigation was  $25\,^{\circ}$ C in both flasks.

After two days the temperature in flask 1 is 25°C. The temperature in flask 2 is 28°C.



Which characteristic of living organisms is shown in this experiment?

- A excretion
- B growth
- C reproduction
- **D** respiration
- 9 (0610/21\_Summer\_2018\_Q1) Characteristics And Classification Of Living Organisms

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

10 - (0610/21\_Summer\_2018\_Q2) - Characteristics And Classification Of Living Organisms

The diagram shows an animal whose scientific name is Falco peregrinus.



To which species does it belong?

- A bird
- B F. peregrinus
- C Falco
- D vertebrate

11 - (0610/21\_Summer\_2018\_Q3) - Characteristics And Classification Of Living Organisms

What kind of skin do amphibians have?

- A dry without scales
- B dry with scales
- C moist without scales
- D moist with scales

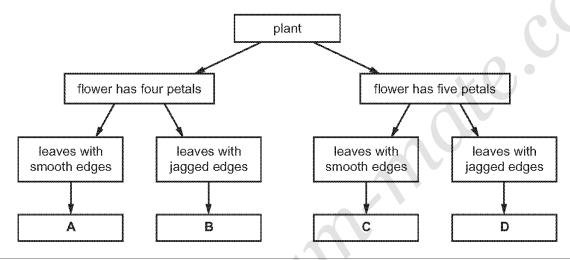
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12 - (0610/21\_Summer\_2018\_Q4) - Characteristics And Classification Of Living Organisms

The diagram shows a flowering plant.



Use the key to identify the plant.



13 - (0610/21\_Winter\_2018\_Q1) - Characteristics And Classification Of Living Organisms

The sundew is a carnivorous plant that can trap small insects with sticky hairs and then digest them. When an insect gets stuck, other nearby sticky hairs bend over to trap the insect.

Which characteristics of living organisms are demonstrated when the sundew traps insects?

- A growth and excretion
- B growth and sensitivity
- C movement and excretion
- D movement and sensitivity
- 14 (0610/22\_Winter\_2018\_Q1) Characteristics And Classification Of Living Organisms

A person drinks a glass of iced water and the volume of sweat they secrete decreases.

This is an example of which characteristic of living organisms?

- A growth
- **B** movement
- C respiration
- **D** sensitivity

# ANSWERS

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1 - (0610/21\_Summer\_2017\_Q1) - Characteristics And Classification Of Living Organisms

В

**2** - (0610/21\_Summer\_2017\_Q3) - Characteristics And Classification Of Living Organisms

 $\mathbf{C}$ 

**3** - (0610/21\_Winter\_2017\_Q1) - Characteristics And Classification Of Living Organisms

D

**4** - (0610/22\_Winter\_2017\_Q1) - Characteristics And Classification Of Living Organisms

В

**5 -** (0610/23\_Winter\_2017\_Q1) **-** Characteristics And Classification Of Living Organisms

D

6 - (0610/22\_Winter\_2017\_Q2) - Characteristics And Classification Of Living Organisms

A

7 - (0610/23\_Winter\_2017\_Q7) - Characteristics And Classification Of Living Organisms

A

**8** - (0610/23\_Winter\_2017\_Q11) - Characteristics And Classification Of Living Organisms

D

9 - (0610/21\_Summer\_2018\_Q1) - Characteristics And Classification Of Living Organisms

A

 $\textbf{10} \quad \textbf{-} \quad (0610/21\_Summer\_2018\_Q2) \quad \textbf{-} \quad \textit{Characteristics And Classification Of Living Organisms}$ 

В

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