Characteristics and classification of living organisms – 2020 IGCSE 0610

1. Nov/2020/Paper_11/No.1

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

2. Nov/2020/Paper_11/No.2

According to the binomial system, how should a human be named?

A *Homo Sapiens*

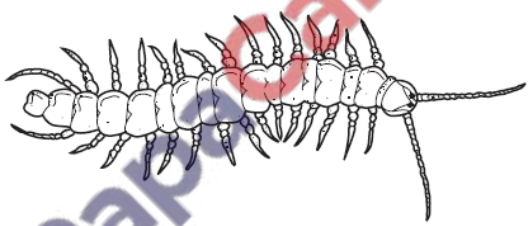
B *Homo sapiens*

C *homo Sapiens*

D *homo sapiens*

3. Nov/2020/Paper_11/No.3

The diagram shows an arthropod.



Which group does this arthropod belong to?

A arachnid

B crustacean

C insect

D myriapod

4. Nov/2020/Paper_12/No.1

Which process is carried out by all organisms?

A growth

B photosynthesis

C sexual reproduction

D transpiration

5. Nov/2020/Paper_12/No.2

According to the binomial system, how should a human be named?

A *Homo Sapiens*

B *Homo sapiens*

C *homo Sapiens*

D *homo sapiens*

6. Nov/2020/Paper_13/No.2

According to the binomial system, how should a human be named?

A *Homo Sapiens*

B *Homo sapiens*

C *homo Sapiens*

D *homo sapiens*

7. Nov/2020/Paper_21/No.1

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

8. Nov/2020/Paper_21/No.2

What are features of the leaves of a plant that is a dicotyledon?

	broad leaves	parallel veins
A	✓	✓
B	✓	✗
C	✗	✓
D	✗	✗

key

✓ = yes

✗ = no

9. Nov/2020/Paper_22/No.1

Which process is carried out by all organisms?

A growth

B photosynthesis

C sexual reproduction

D transpiration

10. Nov/2020/Paper_22/No.2

What are features of the leaves of a plant that is a dicotyledon?

	broad leaves	parallel veins
A	✓	✓
B	✓	✗
C	✗	✓
D	✗	✗

key

✓ = yes

✗ = no

11. Nov/2020/Paper_22/No.26

Which characteristic of viruses prevents them from being affected by antibiotics?

A They cannot reproduce on their own.

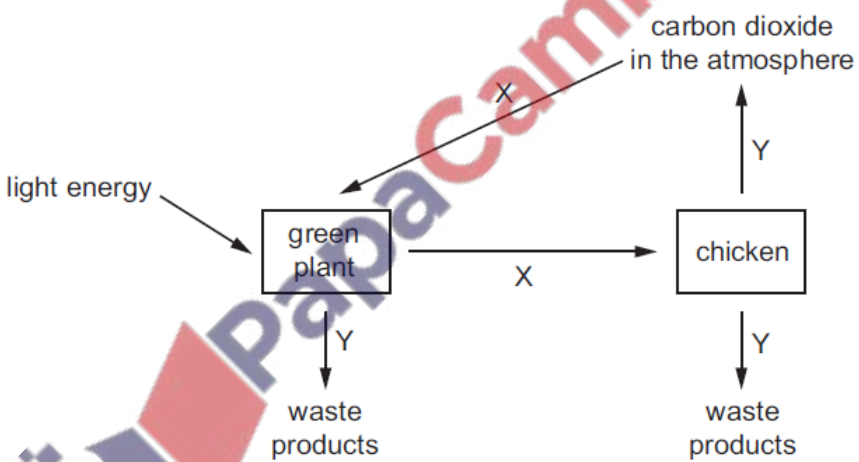
B They contain DNA or RNA.

C They have no cell structure.

D They are much smaller than bacteria.

12. Nov/2020/Paper_23/No.1

The diagram shows some of the processes carried out by living organisms.



Which two characteristics of living organisms are represented by arrows X and Y?

A excretion and sensitivity

B nutrition and excretion

C respiration and growth

D sensitivity and reproduction

13. Nov/2020/Paper_31/No.1

(a) Fig. 1.1 is a diagram of an animal cell.

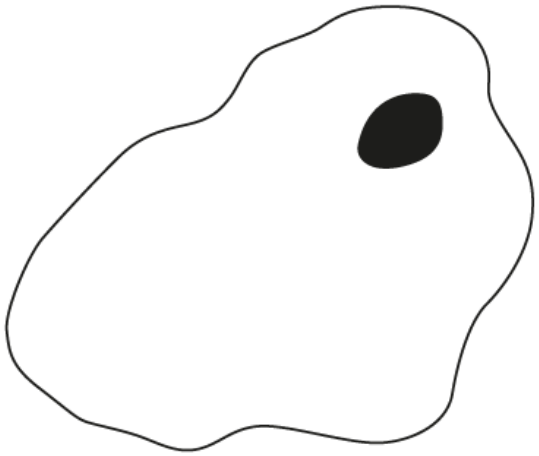


Fig. 1.1

Label **three** structures **on the cell** shown in Fig. 1.1, using label lines and the names of the structures. [3]

(b) State **two** structures that are found in plant cells but **not** in animal cells.

1 .....

2 .....

[2]

[Total: 5]

14. Nov/2020/Paper_31/No.2

(a) Fig. 2.1 is a photograph of a lobster, which is an arthropod.

Fig. 2.1

Describe **two** pieces of evidence visible in Fig. 2.1 that identify this organism as an arthropod.

1 .....

2 .....

[2]

(b) The scientific name of the arthropod in Fig. 2.1 is *Homarus americanus*.

State the genus name.

..... [1]

(c) The arthropod shown in Fig. 2.1 is a crustacean.

State the names of **two other** groups of arthropods.

1 .....

2 .....

[2]

(d) Many species of crustaceans live in seas and oceans.

Some of these species have become endangered.

Describe reasons why some marine crustacean species have become endangered.

.....

.....

.....

.....

.....

.....

..... [3]

[Total: 8]

15. Nov/2020/Paper_32/No.1

All living organisms have the same characteristics.

Two of these characteristics are movement and nutrition.

(a) State **three other** characteristics of living organisms.

1 .....

2 .....

3 .....

[3]

(b) Fig. 1.1 shows animals that belong to one vertebrate group.

State the name of this vertebrate group and give **one visible** characteristic feature of this group.

Fig. 1.1

name of group .....

feature of group .....

[2]

(c) State the names of **two other** groups of vertebrates.

1 .....

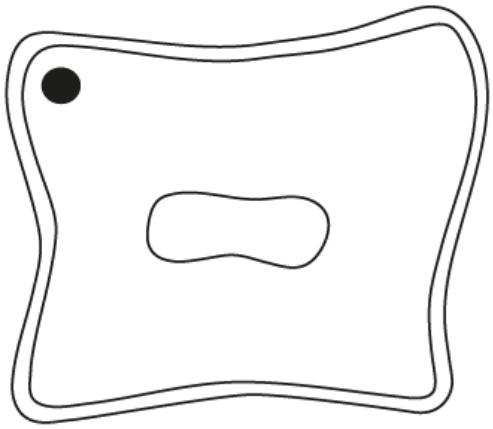
2 .....

[2]

[Total: 7]

16. Nov/2020/Paper_32/No.2

Fig. 2.1 shows a plant cell after it has been in a solution of glucose for fifteen minutes.



cell membrane

cytoplasm

vacuole

Fig. 2.1

(a) Draw label lines **on Fig. 2.1** to link each label to the correct structure. [3]

(b) The plant cell in Fig. 2.1 was then placed in distilled water.

Fig. 2.2 shows the appearance of the cell after fifteen minutes in distilled water.

Fig. 2.2

(i) State **two** ways in which the plant cell has changed.

1 .....

.....

2 .....

.....

[2]

(ii) Explain why the plant cell changed when it was placed in distilled water.

.....

.....

.....

.....

.....

..... [3]

[Total: 8]