

# **1. Characteristics and classification of living organisms**

**1.3 Features of organisms**

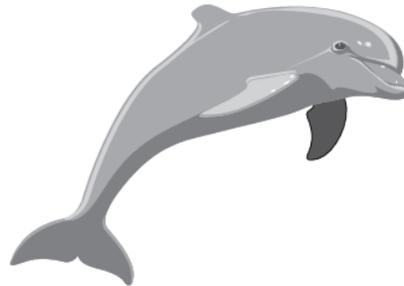
**Paper 1 and 2**

Question Paper

## Paper 1

Questions are applicable for both core and extended candidates

- 1 The diagram shows a dolphin.

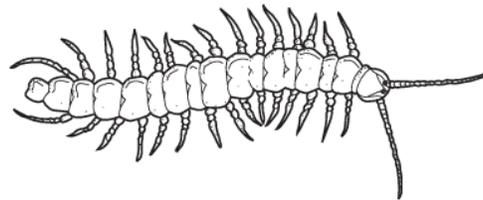


Dolphins are mammals that live in the sea.

Which row correctly identifies some of the features of dolphins?

	organ of gas exchange	produces milk
<b>A</b>	gills	no
<b>B</b>	gills	yes
<b>C</b>	lungs	no
<b>D</b>	lungs	yes

- 2 The diagram shows an arthropod.



Which group does this arthropod belong to?

- A** arachnid
- B** crustacean
- C** insect
- D** myriapod

- 3 The photograph shows an elephant hawk-moth.



Using the features visible in the photograph, to which group of arthropods does the elephant hawk-moth belong?

- A arachnids
  - B crustaceans
  - C insects
  - D myriapods
- 4 Crabs are arthropods with 10 jointed legs and two pairs of antennae.

To which arthropod class do they belong?

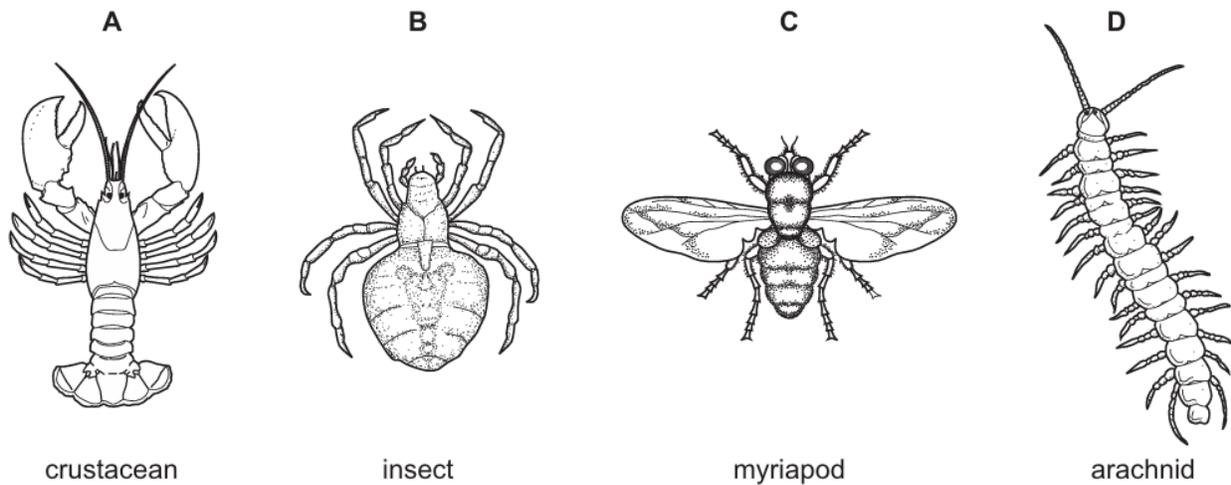
- A arachnids
- B crustaceans
- C insects
- D myriapods

5 Which row is correct for arthropod classification?

	arthropod group	antennae present	number of body parts	number of legs
<b>A</b>	arachnids	no	2	6
<b>B</b>	crustaceans	yes	3	8
<b>C</b>	insects	yes	3	6
<b>D</b>	myriapods	no	2	4

6 The diagrams show four different types of arthropod.

Which organism is labelled with its correct arthropod group?



7 The table shows some features of different animals.

Which animal is a reptile?

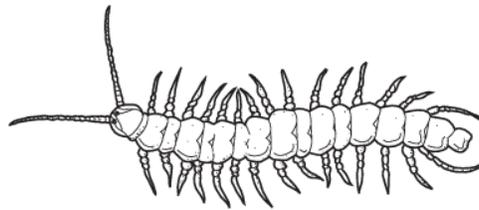
	wings	hair	scales
<b>A</b>	x	x	✓
<b>B</b>	x	x	x
<b>C</b>	✓	x	✓
<b>D</b>	x	✓	x

8 An animal has four legs, hair and a tail.

To which group of vertebrates does it belong?

- A amphibians
- B birds
- C mammals
- D reptiles

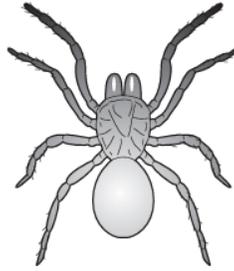
9 The diagram shows an organism.



Which type of arthropod is this organism?

- A myriapod
- B insect
- C crustacean
- D arachnid

- 10 The diagram shows an arthropod that lives on land.



To which group of arthropods does this animal belong?

- A arachnids
  - B crustaceans
  - C insects
  - D myriapods
- 11 The table shows features of some animals.

Which animal is a mammal?

	gills	hair	scales	wings	
<b>A</b>	✓	x	x	x	key
<b>B</b>	✓	x	✓	x	✓ = present
<b>C</b>	x	✓	x	✓	x = absent
<b>D</b>	x	x	✓	✓	

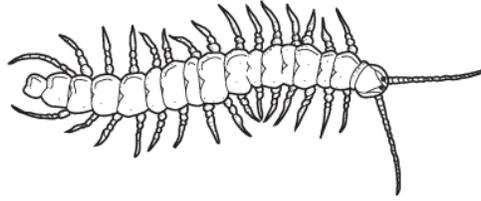
- 12 Scientists discover a new species of animal.

It has a segmented body with two pairs of legs on each segment.

To which group of animals does this new species belong?

- A arachnids
- B crustaceans
- C insects
- D myriapods

- 13 The diagram shows an arthropod.



Which group does this arthropod belong to?

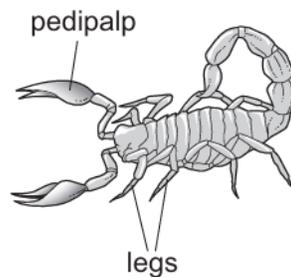
- A arachnid
  - B crustacean
  - C insect
  - D myriapod
- 14 An animal can swim, has a backbone and produces milk.  
To which group does it belong?
- A amphibians
  - B fish
  - C mammals
  - D reptiles
- 15 Which list contains **only** arthropods?
- A amphibians, insects, myriapods
  - B arachnids, crustaceans, myriapods
  - C crustaceans, insects, fish
  - D insects, myriapods, reptiles

- 16 The table shows the number of animals collected in a sample from a woodland and the groups to which they belong.

animal group	number in sample
arachnids	10
crustaceans	8
insects	80
myriapods	7

How many arthropods in total, in this sample, have six or eight legs?

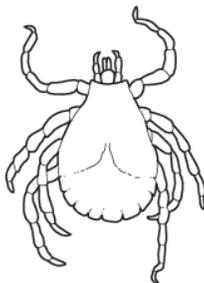
- A** 15                      **B** 88                      **C** 90                      **D** 98
- 17 The diagram shows an arthropod.



To which group does it belong?

- A** arachnids  
**B** crustaceans  
**C** insects  
**D** myriapods

18 The diagram shows an arthropod.



Which group of arthropods does it belong to?

- A** arachnids
- B** crustaceans
- C** insects
- D** myriapods

## Paper 2

Questions are applicable for both core and extended candidates unless indicated in the question

19 Which group of living organisms includes the myriapods? **(extended only)**

- A arthropods
- B prokaryotes
- C protocists
- D vertebrates

20 Scientists discover a new species of animal.

It has a segmented body with two pairs of legs on each segment.

To which group of animals does this new species belong?

- A arachnids
- B crustaceans
- C insects
- D myriapods

21 What are features of the leaves of a plant that is a dicotyledon? **(extended only)**

	broad leaves	parallel veins
<b>A</b>	✓	✓
<b>B</b>	✓	x
<b>C</b>	x	✓
<b>D</b>	x	x

key

✓ = yes

x = no

22 What kind of skin do amphibians have?

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