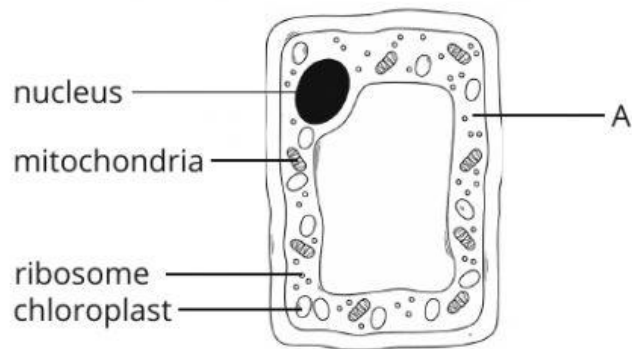


0 1

Figure 1 shows a plant cell.

Some parts of the cell have been labelled.

Figure 1

0 1 . 1

What is the name of part A?

Tick **one** box.

[1 mark]

- | | |
|---------------|--------------------------|
| cell membrane | ☐ |
| cell wall | ☐ |
| cytoplasm | ☐ |
| vacuole | ☐ |

0 1 . 2

In which part of the plant would you find the cell in **Figure 1**?Tick **one** box.

[1 mark]

- | | |
|-------|--------------------------|
| leaf | ☐ |
| petal | ☐ |
| root | ☐ |
| seeds | ☐ |

0 1 . 3 Which three parts found in a plant cell are **not** present in animal cells?

Tick **one** box.

[1 mark]

cell membrane, chloroplasts, cytoplasm ☐

cell membrane, chloroplasts, vacuole ☐

cell wall, chloroplasts, cytoplasm ☐

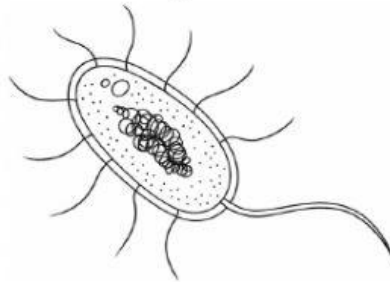
cell wall, chloroplasts, vacuole ☐

0 1 . 4 Give one function of the nucleus.

[1 mark]

0 1 . 5 **Figure 2** shows a different type of cell.

Figure 2



Give **two** pieces of evidence that suggest the cell in **Figure 2** is a bacterial cell.

[2 marks]

0 2

Cardiac muscle is one type of muscle found in the body.

0 2 . 1

What is the correct order of these structures from the simplest level of organisation to the most complex?

Tick **one** box.

[1 mark]

cardiac muscle → muscle cell → heart → circulatory system

☐

cardiac muscle → muscle cell → circulatory system → heart

☐

muscle cell → cardiac muscle → heart → circulatory system

☐

muscle cell → cardiac muscle → circulatory system → heart

☐

0 2 . 2

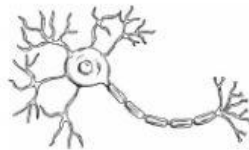
Which diagram shows a muscle cell?

Tick **one** box.

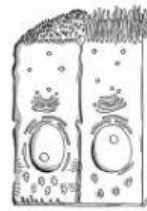
[1 mark]



A ☐



B ☐



C ☐



D ☐

0 2 . 3

Explain why muscles cells contain many mitochondria.

[2 marks]

0 2 . 4

Muscles require a lot of oxygen when they are in use.

Name the type of cell that carries oxygen to the muscles.

[1 mark]

- 02.5 Skeletal muscles can work in pairs to move parts of the body.
These pairs of muscles are called antagonistic muscles.
Explain how antagonistic muscles work together.

[2 marks]

7

03

The long bones of the skeleton contain a soft tissue called bone marrow.
Bone marrow produces blood cells.

03.1

Explain how a pathologist could use a light microscope to observe blood cells.
[6 marks]

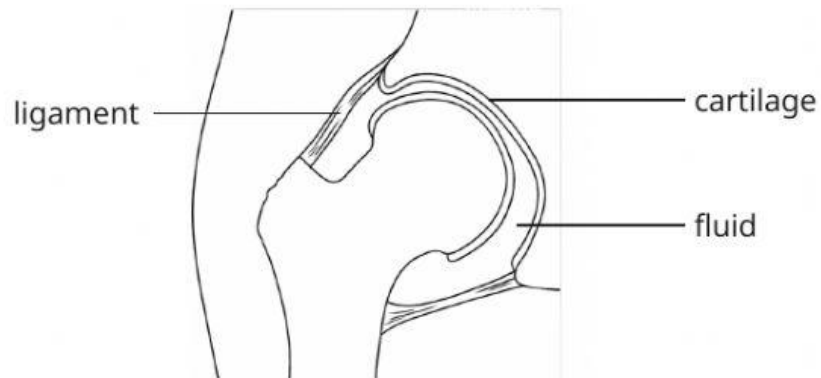
03.2

Give **two** other functions of the skeleton.

[2 marks]

0 3 . 3 **Figure 3** shows a hip joint.

Figure 3



What type of joint is a hip joint?

[1 mark]

0 3 . 4 The ligament, fluid and cartilage of the joint are labelled in **Figure 3**.

Explain the role of these structures in the joint.

[4 marks]