

GCSE Biology A (Gateway)

J247/01 B1-B3 and B7 Foundation (Foundation Tier)

Question Set 4

1

A student prepares onion cell slides to view under a microscope.

- (a) Put the stages in the correct order by writing the numbers **1** to **5** in the boxes.

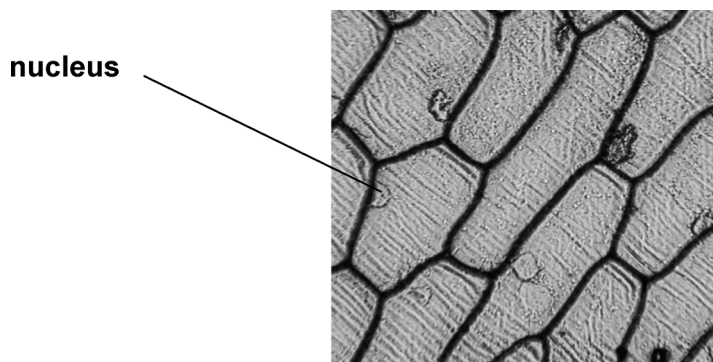
	add a drop of iodine solution
	cut the onion into pieces
	peel off a thin layer of onion tissue
	put on a cover slip
	put the onion tissue on a slide

[2]

- (b) Explain why the iodine solution is used.

[2]

- (c) (i) Look at the image of some onion cells.

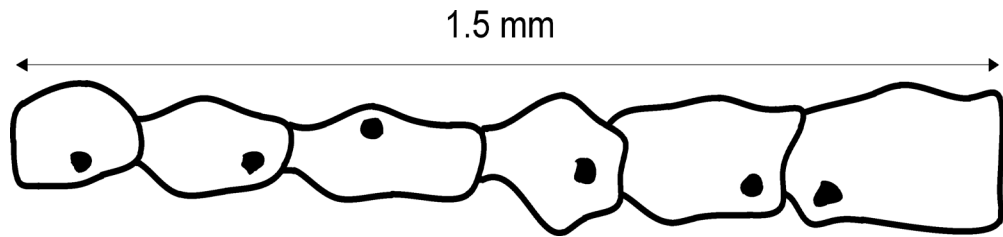


Explain how the contents of the nucleus allow it to carry out its function. [2]

- (ii) Explain why there are **no** chloroplasts in these onion cells. [2]

(d)

The diagram shows a layer of onion cells.



The actual length of the layer is 1.5 mm.

Calculate the average length of one onion cell.

[2]

Answer = mm

(e)

A student thinks that using the highest magnification of a microscope is always best.

Explain why this may **not** be true.

[2]

Total Marks for Question Set 4: 12

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