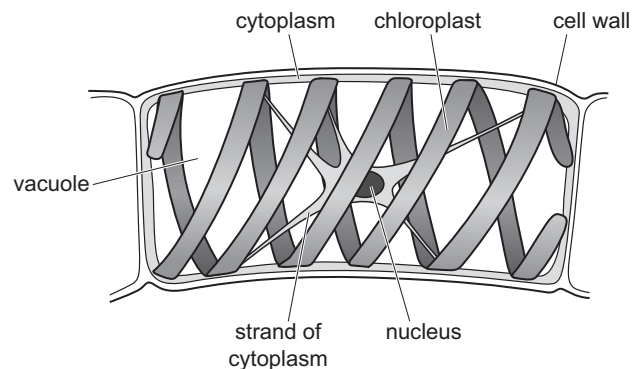


3 The diagram shows a single cell from an organism called *Spirogyra*.



Which features does *Spirogyra* share with plant cells?

	cell wall	chloroplast	cytoplasm	nucleus	vacuole
A	yes	yes	yes	yes	yes
B	yes	yes	no	no	yes
C	yes	no	yes	yes	no
D	no	yes	yes	no	yes

4 The diagram shows an image of a chloroplast. The image is 5 cm long.



The actual length of the chloroplast is 5 μm .

What is the magnification of the image?

- A $\times 10$ B $\times 1000$ C $\times 10\,000$ D $\times 100\,000$

4 Which term describes each structure?

	structure		
	brain	liver	neurone
A	organ	organ	cell
B	organ	tissue	cell
C	tissue	organ	tissue
D	tissue	cell	organ

3 A palisade cell and a neurone are observed under a light microscope.

Which cell component is found only in the palisade cell?

- A cell membrane
B cell wall
C cytoplasm
D nucleus

4 In a human, the diameter of the aorta as it leaves the heart is 36 mm.

The thickness of the wall of the aorta at this point is 9 mm.

What is the diameter of the lumen of the aorta at this point?

- A 1800 m B 2700 μm C 18 000 μm D 27 000 μm

3 Which structures are found in both plant and animal cells?

- A cell walls and cell membranes
B nuclei and cell walls
C cytoplasm and chloroplasts
D cell membranes and nuclei

5 A student measured the length of a structure using a microscope.

The magnification used was $\times 250$.

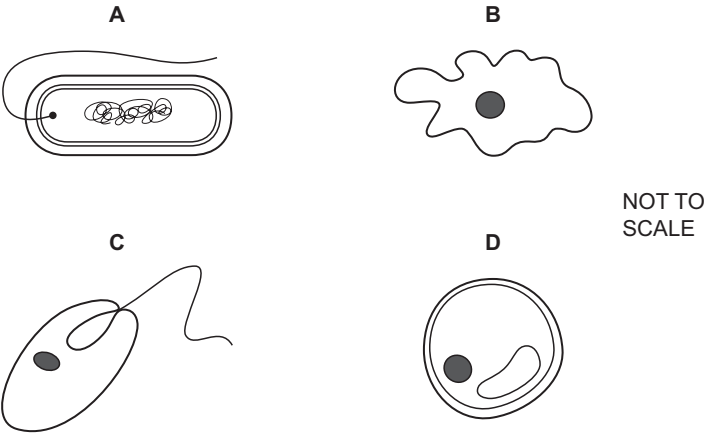
The image size of the structure was 5.00 mm.

What was the actual length of the structure?

- A $1.25 \times 10^3 \text{ mm}$
- B $1.25 \times 10^3 \text{ }\mu\text{m}$
- C $2.00 \times 10^1 \text{ }\mu\text{m}$
- D $2.00 \times 10^{-5} \text{ }\mu\text{m}$

2 The diagrams show four organisms.

Which organism is a prokaryote?



3 Which structures are found in both plant cells and bacterial cells?

	cell membrane	cell wall	plasmid	ribosomes
A	yes	yes	yes	no
B	no	yes	yes	yes
C	yes	no	yes	yes
D	yes	yes	no	yes

4 A cell is 65 μm across.

What is this measurement in mm?

- A 0.00065 mm
- B 0.0065 mm
- C 0.065 mm
- D 0.65 mm