

Magnification

Q1. This question is about cell structures.

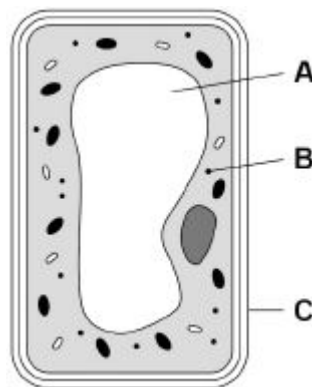
(a) Draw **one** line from each cell structure to the type of cell where the structure is found.

Cell Structure	Type of cell where the structure is found
Nucleus	Prokaryotic cells
Permanent vacuole	Plant cells only
Plasmid	Eukaryotic cells

(2)

(b) **Figure 1** shows a plant cell.

Figure 1



What are the names of structures **A**, **B** and **C**?

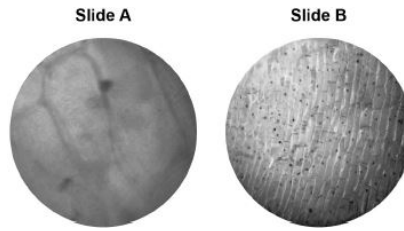
Tick **one** box.

Structure A	Structure B	Structure C	
Chloroplast	Vacuole	Cell wall	<input type="checkbox"/>
Nucleus	Chloroplast	Cell membrane	<input type="checkbox"/>
Vacuole	Mitochondrion	Cell membrane	<input type="checkbox"/>
Vacuole	Ribosome	Cell wall	<input type="checkbox"/>

(1)

A student observed slides of onion cells using a microscope. **Figure 2** shows two of the slides the student observed.

Figure 2



The cells on the slides are **not** clear to see.

- (c) Describe how the student should adjust the microscope to see the cells on Slide A more clearly.

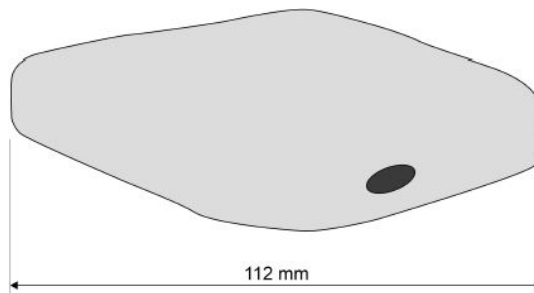
_____ (1)

- (d) Describe how the student should adjust the microscope to see the cells on Slide B more clearly.

_____ (2)

- (e) The student made the necessary adjustments to get a clear image. **Figure 3** shows the student's drawing of one of the cells.

Figure 3



The real length of the cell was 280 micrometres (μm). Calculate the magnification of the drawing.

Magnification = \times _____ (3)+