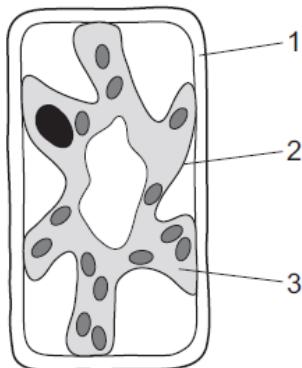


## Movement into and out of cells – 2022 November O Level 5090

### 1. Nov/2022/Paper\_11, 12/No.3

The diagram shows a typical plant cell which has been in a concentrated salt solution for 10 minutes.



Which numbered structures are partially permeable?

A 1 and 2      B 1 and 3      C 1 only      D 2 only

### 2. Nov/2022/Paper\_11/No.4

Which row applies to active transport?

	movement occurs from region of higher concentration to region of lower concentration	movement occurs from region of lower concentration to region of higher concentration	an example is ion uptake by root hairs	an example is water uptake by root hairs
A	✓	✗	✓	✗
B	✗	✗	✗	✓
C	✗	✓	✓	✗
D	✗	✓	✗	✓

key

✓ = yes

✗ = no

3. Nov/2022/Paper\_22/No.2(b)

(b) The cell wall of a plant cell can be removed by treating the cell with a digestive enzyme.

(i) Name the substrate for this enzyme.

.....

[1]

(ii) Some plant cells from part **B** of the leaf cross-section were treated with this enzyme and then placed in distilled water on a microscope slide for one hour.

The cells were clearly visible using a light microscope at the start of the hour.

The cells were **not** clearly visible using the same light microscope at the end of the hour.

Explain changes to the structure of the cells that took place between these two observations.

.....  
.....  
.....  
.....  
.....  
.....  
.....

[4]

