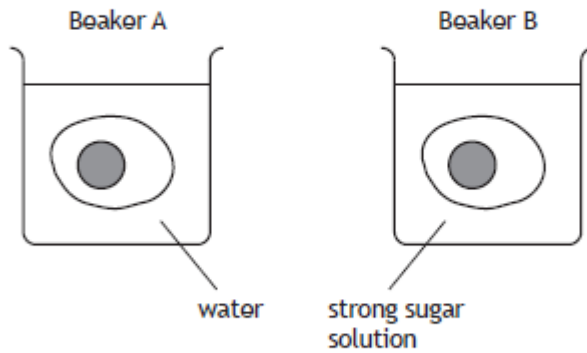


Homework 3: Transport Across The Cell Membrane

1.

- (a) Shells can be removed from eggs by dissolving them in vinegar for 2-3 days. The egg contents remain inside a thin membrane.

In an investigation the shells from two eggs were removed. The eggs were then weighed and placed in beakers as shown below.



After 2 hours the eggs were removed from the beakers, blotted dry and reweighed. The results are shown in the following table.

Beaker	Mass at start (g)	Mass after 2 hours (g)	Percentage change in mass
A	54.0	67.5	
B	52.1	47.8	-8.2

- (i) Complete the table by calculating the percentage change in mass for beaker A.

1

Space for calculation

- (ii) Suggest why the eggs were blotted dry before being reweighed.

1

(a) (continued)

(iii) Choose either beaker A or B and explain how osmosis caused the change in mass of the eggs in that beaker. 2

Beaker _____

Explanation _____

(b) The movement of molecules in or out of cells can be by passive or active transport.

Describe one difference between passive and active transport. 1

2. Give two differences between active Transport and Osmosis.
