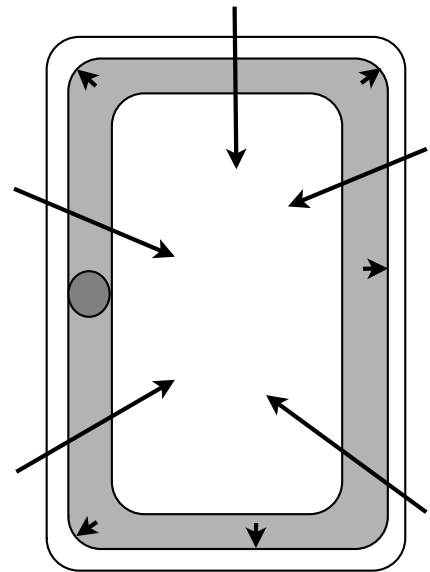


Worksheet §2.5 – Osmosis in plant cells

1. Figure 2.12 (shown again to the right) shows what usually happens in plant cells.
 - a. Compare the concentrations of water and minerals in the vacuole and outside the cell and fill in higher or lower in the table below (fill in the table).
 - b. The long arrows pointing into the vacuole stand for:
 - c. The short arrows pointing outside stand for:
 - d. What does the cell wall do in this case?
 - e. The result of this dynamic process is a or cell.



concentration of:	in the vacuole	outside the cell
water		
minerals		

Table 2.2: concentrations when the cell is turgid (figure 2.11)

2. Suppose the long arrows point outwards (see figure 2.14). Compare with figure 2.13.
 - a. Compare the concentrations of water and minerals in the vacuole and outside the cell in this new situation and fill in *higher* or *lower* in table 2.3
 - b. Draw in figure 2.14 what happens with this cell in these new circumstances.
 - c. The leaves will look and the plant will look

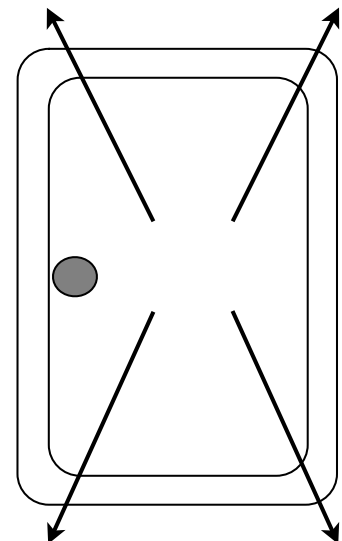


Figure 2.14: Cell losing

Table 2.3: concentrations when the cell goes in plasmolysis (figure 2.12)

concentration of:	in the vacuole	outside the cell
water		
minerals		