

# Chapter 3

## Movement in and out of cells

### Test yourself questions

- 1 How do oxygen molecules diffuse from a region of high concentration to a region of low concentration?
- 2 Which statement about osmosis is correct?
- 3 Which is an example of diffusion?
- 4 Some plant cells were placed in a concentrated sugar solution. Their cytoplasm and cell membranes shrank and pulled away from the cell walls. What is the term for this condition?
- 5 In the plant cells described in **question 4**, what will be found in the gap between the cell wall and the cell membrane?

6 When animal cells are placed in pure water, they burst. Plant cells do not burst in these conditions.  
Why don't the plant cells burst?

7 A student put some pieces of raw potato into a concentrated sugar solution. The potato pieces got shorter.  
Why did this happen?

**S** 8 A piece of onion epidermis was placed in a sugar solution on a microscope slide. All of the onion cells became plasmolysed.  
Which statement is correct?

9 Which statement describes active transport?

10 Which could take place by active transport?

**B** the movement of carbon dioxide out of a respiring cell