

3 Active transport and plant cells – Part 2 —Answers

Answers

Work through these after trying the questions yourself.

3.6 Active transport moves particles against the gradient (low → high) and needs energy; diffusion moves down the gradient (high → low) and needs no energy.

3.7 From respiration.

3.8 Root hairs taking up mineral ions from the soil.

3.9 Turgid.

3.10 Osmosis.

3.11 They use **active transport**. The ions move *against* the concentration gradient (from low outside to high inside), which is "uphill", so it needs energy from respiration (and a carrier protein).