

★ **HIGHER TIER ONLY** content is highlighted in blue. Foundation students — focus on the un-highlighted sections.

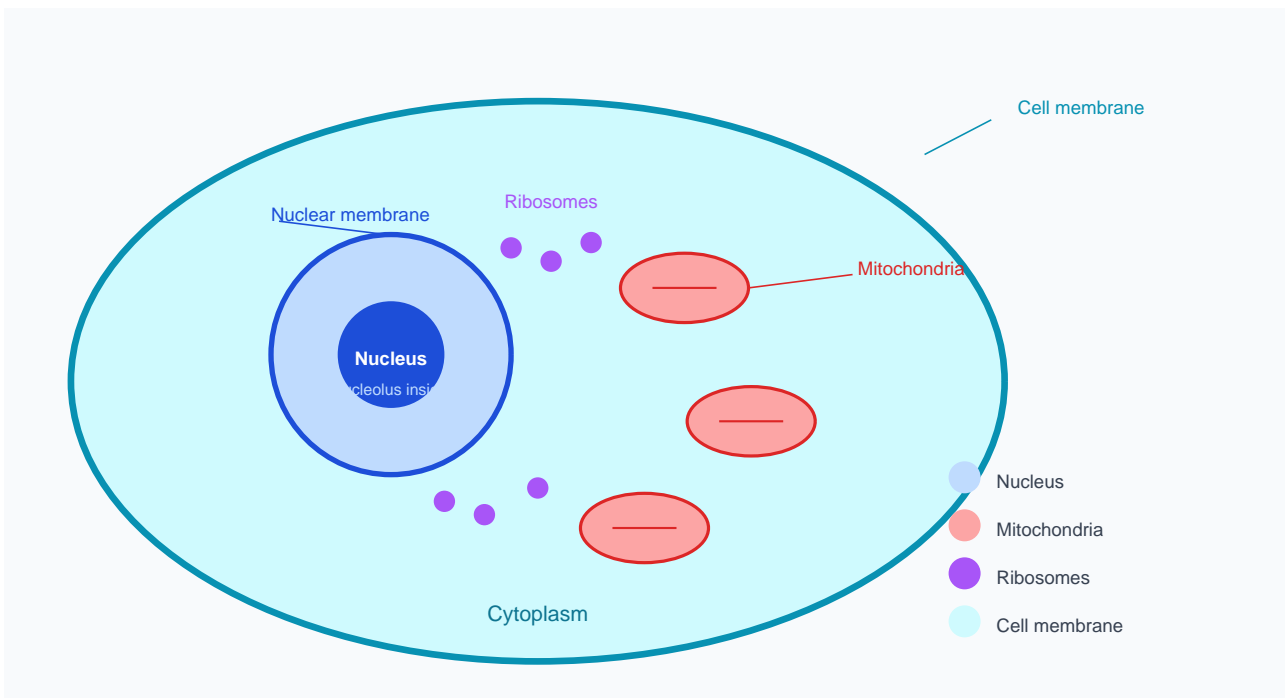


Fig 1: Structure of a typical animal cell

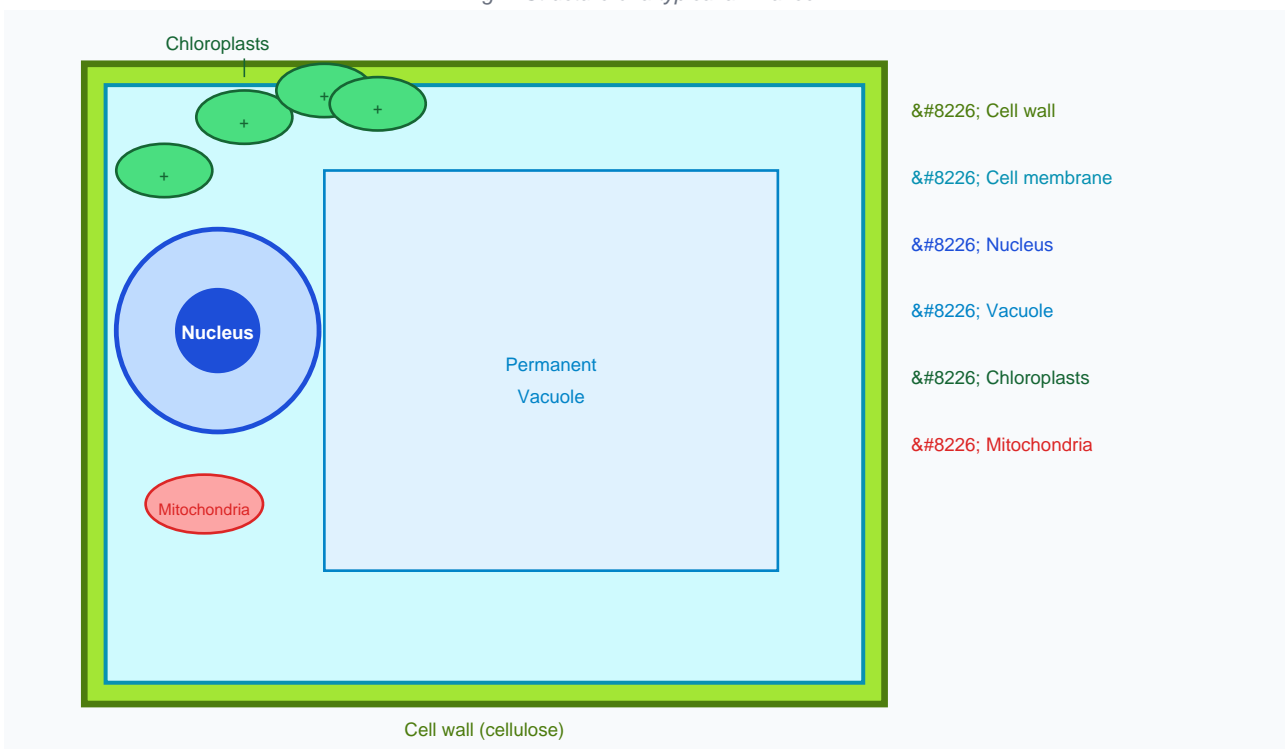


Fig 2: Structure of a typical plant cell

PROKARYOTIC CELL (e.g. bacterium) — NO nucleus, NO membrane-bound organelles

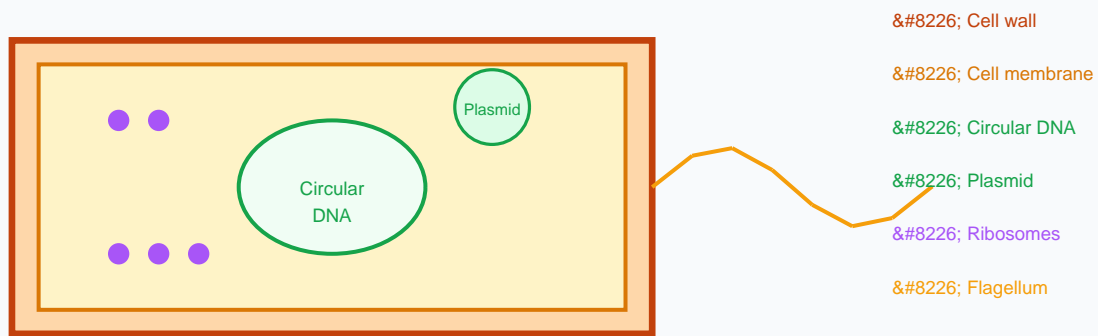


Fig 3: Structure of a bacterial (prokaryotic) cell

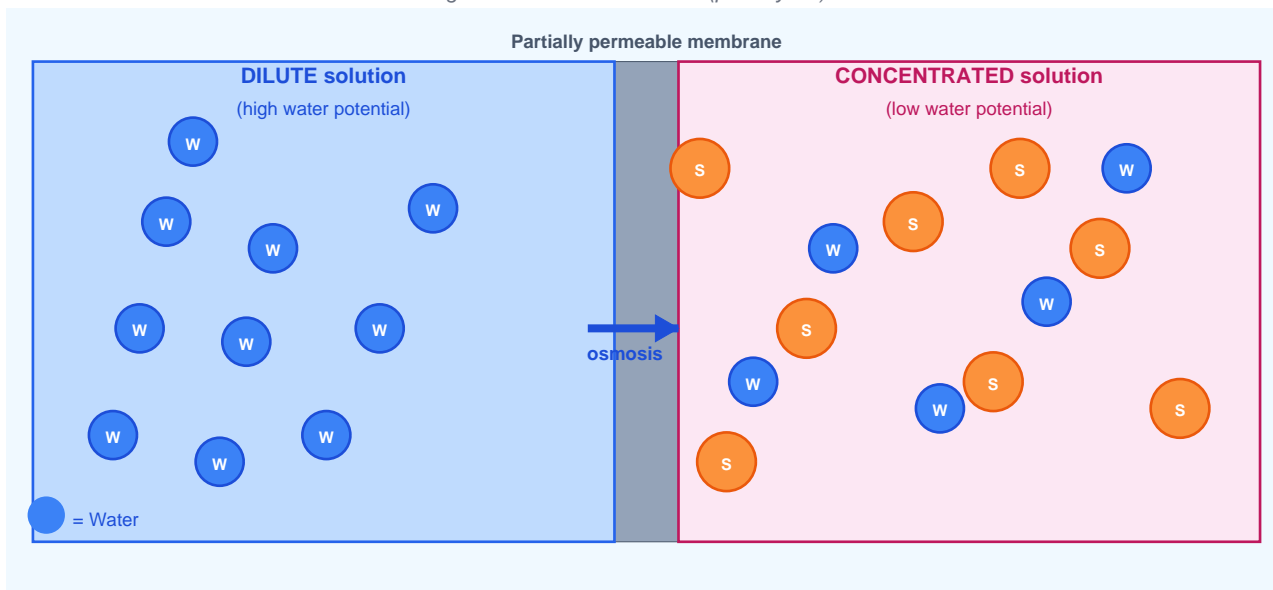


Fig: Osmosis — water moves from high to low water potential

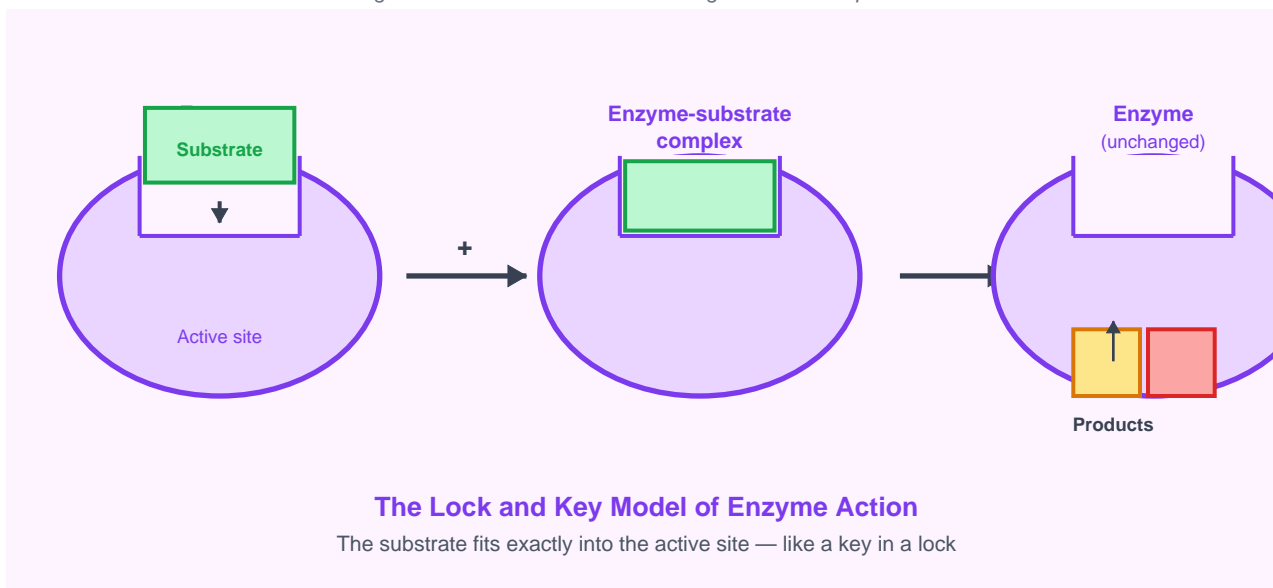


Fig: Each enzyme has a specific active site that only fits one substrate

■ **Exam Tip:** Surface area to volume ratio: **SMALLER** cells have a **BIGGER SA:V** ratio — diffusion is faster. As organisms grow, they need specialised exchange surfaces.