Station 1: Simple Diffusion

Small, nonpolar molecules like O₂ and CO₂ move from high to low concentrations across the lipid bilayer. Simple diffusion is a form of passive transport that does not require channel proteins or energy.



Station 2: Facilitated Diffusion

Large and/or polar molecules like glucose and amino acids move from high to low concentrations through channel or carrier proteins because they cannot cross the lipid bilayer. Facilitated diffusion is a form of passive transport that does not require energy.



Station 3: Osmosis

Water moves from high to low concentrations across the lipid bilayer and through channel proteins called aquaporins. Osmosis is the diffusion of water – a form of passive transport that does not require energy.



Station 4: Active Transport

Molecules through channel proteins from low to high concentrations, against their concentration gradient. Active transport requires energy in the form of ATP.

