

Type of Movement	Energy Required? Passive or Active Transport?	What type of particle is moved?	What part of the membrane is the particle moving through?	How does it work? Explain
Diffusion	No energy needed. Passive Transport	O ₂ CO ₂	Lipid bi-layer	Particles diffuse through the membrane until the concentrations in/out of the cell are balanced (equilibrium).
Osmosis	No energy needed. Passive Transport	H ₂ O	Lipid bi-layer	Water moves through the membrane until concentrations in/out of the cell are at equilibrium.
Facilitated Diffusion	No energy needed. Passive transport	Glucose, sodium, potassium, calcium	Protein channel	Particles move from high to low concentrations through the protein channel.
Molecular Transport	Energy needed. Active transport	Sodium, calcium, potassium	Protein pump	The cell uses energy to pump the particles against the concentration (from low to high!).
Endocytosis	Energy needed. Active transport	Large molecules or clumps of material such as glucose.	The whole membrane.	The particle(s) are too big to fit through the proteins or lipids so the cell membrane folds over the particles and then pinches off.
Exocytosis	Energy needed. Active transport	Large molecules, clumps of material such as waste or proteins.	The whole membrane	The membrane folds and pinches together to allow the particles to escape.