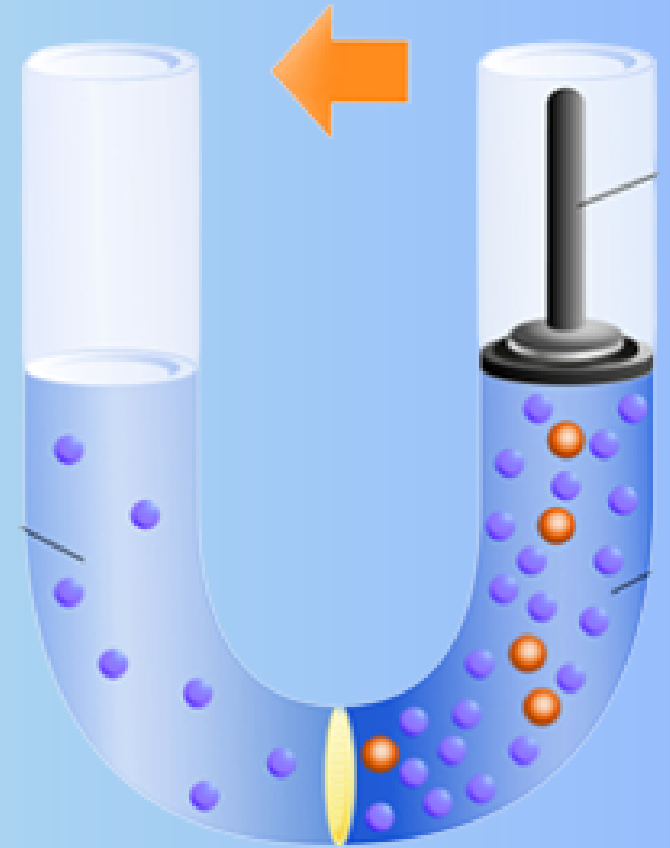


Reverse Osmosis

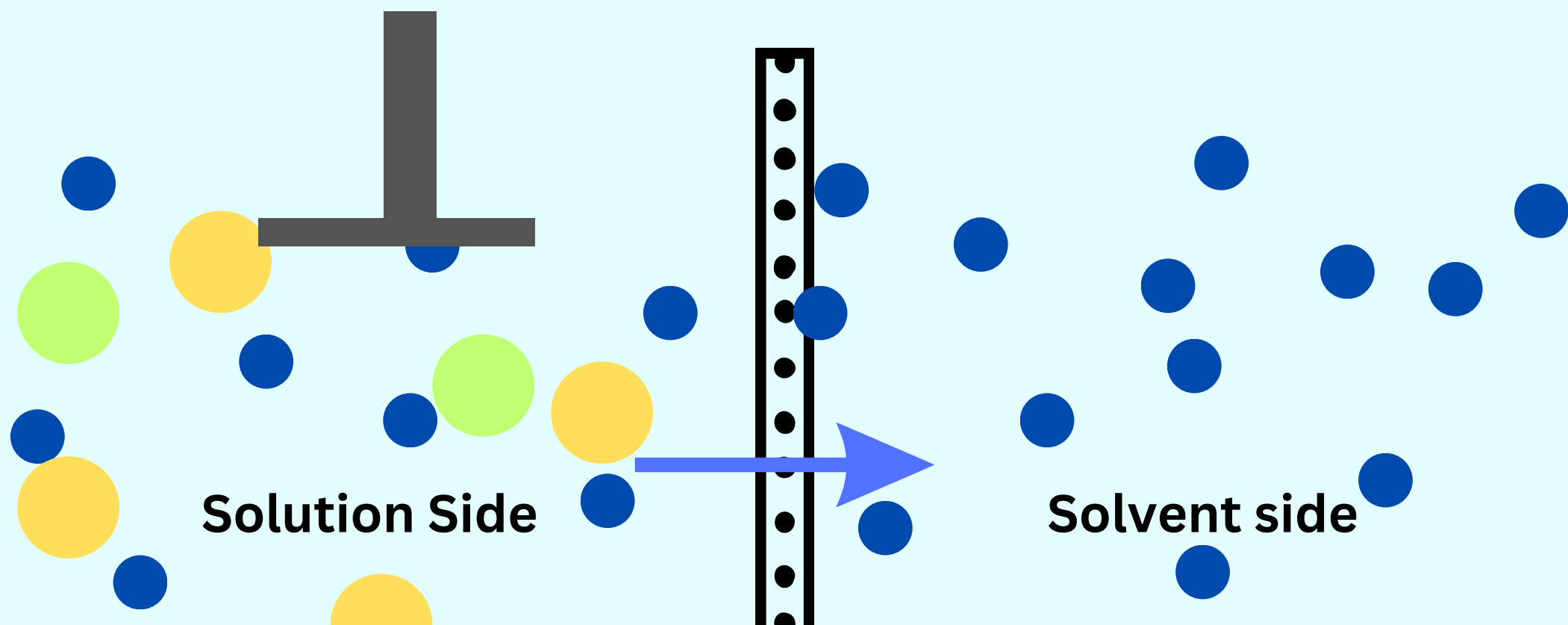
with Different Stages



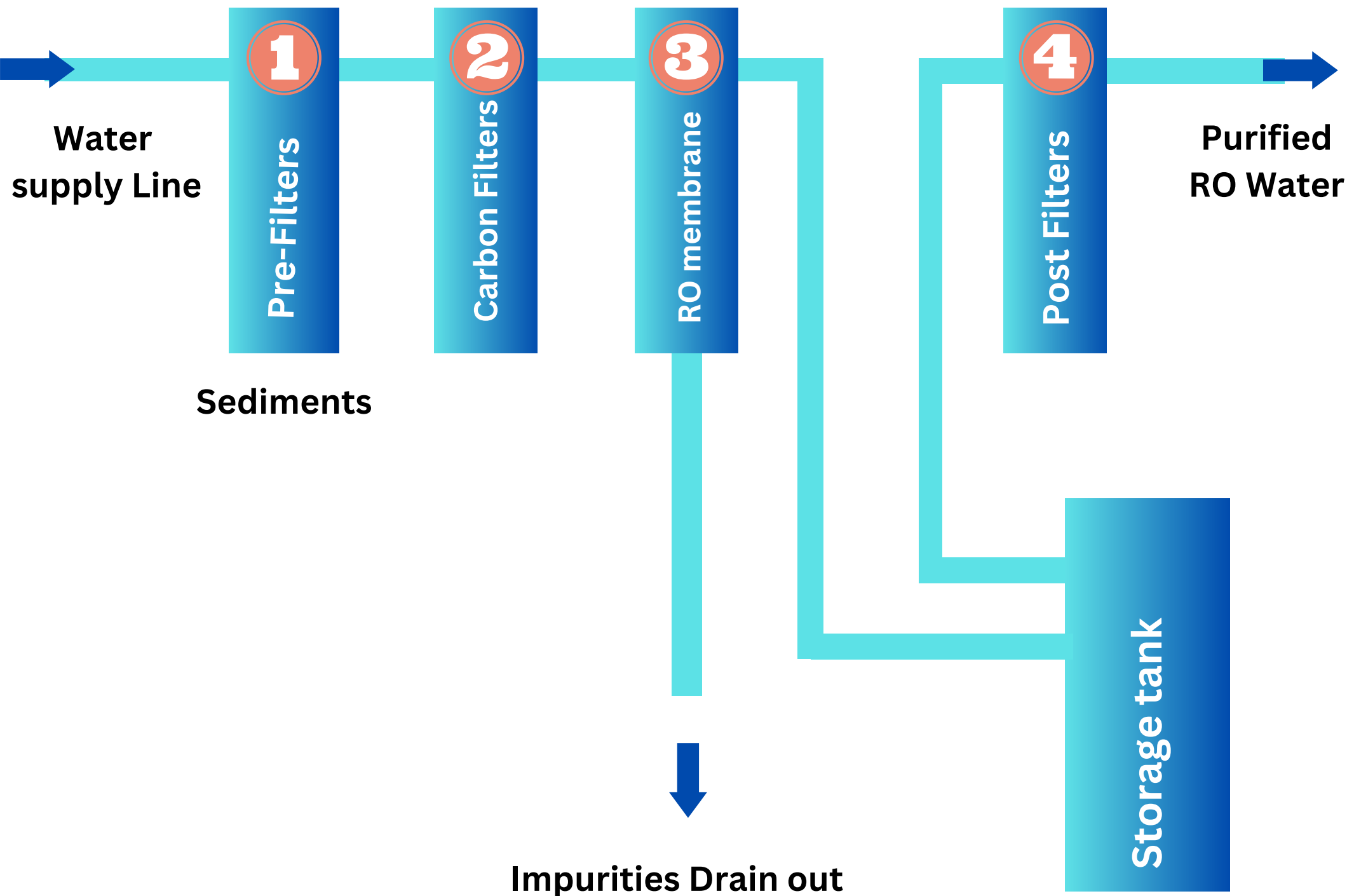
This method used for the removal of molecules and ions from a certain solution

When the solution side (the side where the solute concentration is high) is subjected to a pressure greater than the osmotic pressure, the solvent particles on the solution side move through the semipermeable membrane to the region where the solute concentration is low.

External Pressure



Reverse Osmosis Process Diagram



Stages of Reverse osmosis

Stage 1

Sediment pre-filter for mechanical filtration.
A superfine polypropylene cartridge protects and extends the life of the membrane by removing sediment particles that are as fine as 5 microns (1 micron = 1/1000 of a mm) such as grit, dust, rust, mud and algae.



Stages of Reverse osmosis

Stage 2

Granular activated carbon pre-filter for membrane protection. A special high-grade class 1 filtration media carbon cartridge is added as a pre-filter to protect the TFC (thin filter composite) membrane from chlorine degradation. Service life of this pre-filter is 2500 US gallons/9,463 litres.



Stages of Reverse osmosis

Stage 3

Ultrafine RO membrane with pore size less than 0.0005 micron the membrane effectively screens out micro-particles. It repels heavy metal complexes including lead, mercury. This membrane has remarkable affinity for oxygen producing sparkling oxygenated water.



Stages of Reverse osmosis

Stage 4

Carbon polishing post filter. This provides the final polish to your drinking water. It ensures removal of unwanted odours and the creation of superb tasting water. This final filter acts as a final check against any organic impurities

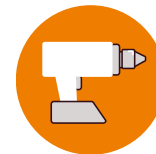


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