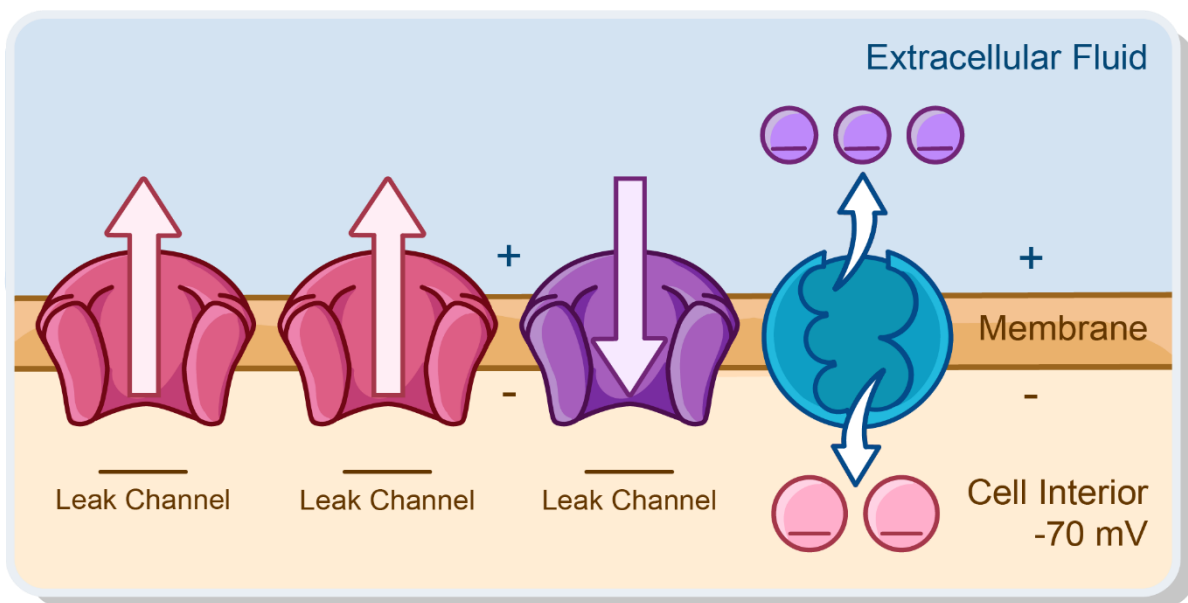


TOPIC: RESTING MEMBRANE POTENTIAL

- **Recall:** Membrane Potential: Voltage from charge separation between interior and exterior of a cell.
- **Resting Potential:** Membrane potential of a cell when not stimulated. Approx. _____ mV.
 - At resting potential, _____ of the cell is more negative than exterior of the cell.
 - Created by:
 - Differences in ionic composition of intracellular and extracellular fluids.
 - Differences in plasma membrane _____ to ions.
 - Stabilized by **Na⁺/K⁺ATPase** – _____ concentration gradients for **Na⁺** and **K⁺**.



EXAMPLE: Which of the following is the MOST accurate regarding the sodium potassium pump?

- The sodium potassium pump creates resting potential by ejecting 3 K⁺ ions and transporting 2 Na⁺ ions into the cell.
- The sodium potassium pump is the main factor in creating resting potential.
- The sodium potassium pump directly impacts resting potential by allowing more negatively charged ions into the cell.
- The sodium potassium pump stabilizes resting potential in a neuron.

PRACTICE: Which of the following is the MOST important factor in generating resting membrane potential?

- Na⁺ concentration gradient.
- K⁺ concentration gradient.
- K⁺ electrical gradient.
- Na⁺/K⁺ ATPase.