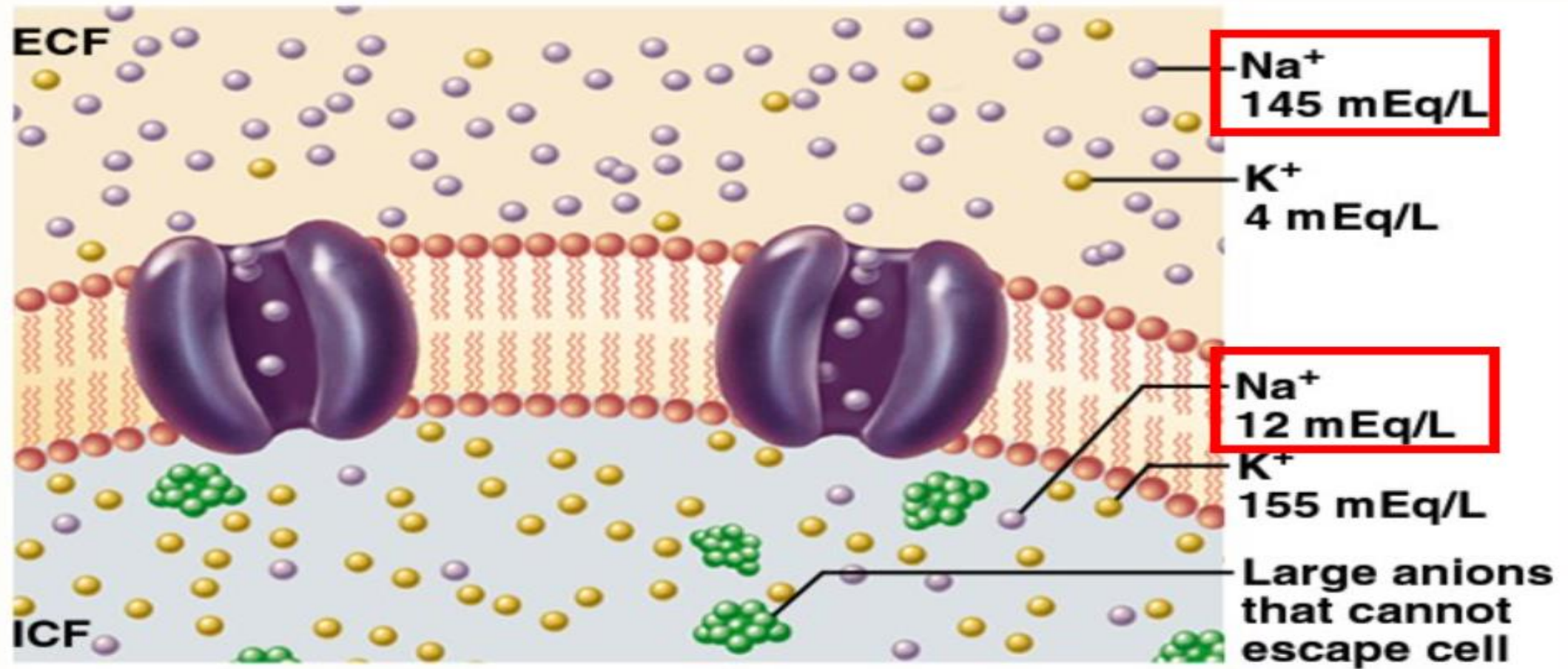


UNIT-I
Nervous system
Part-II

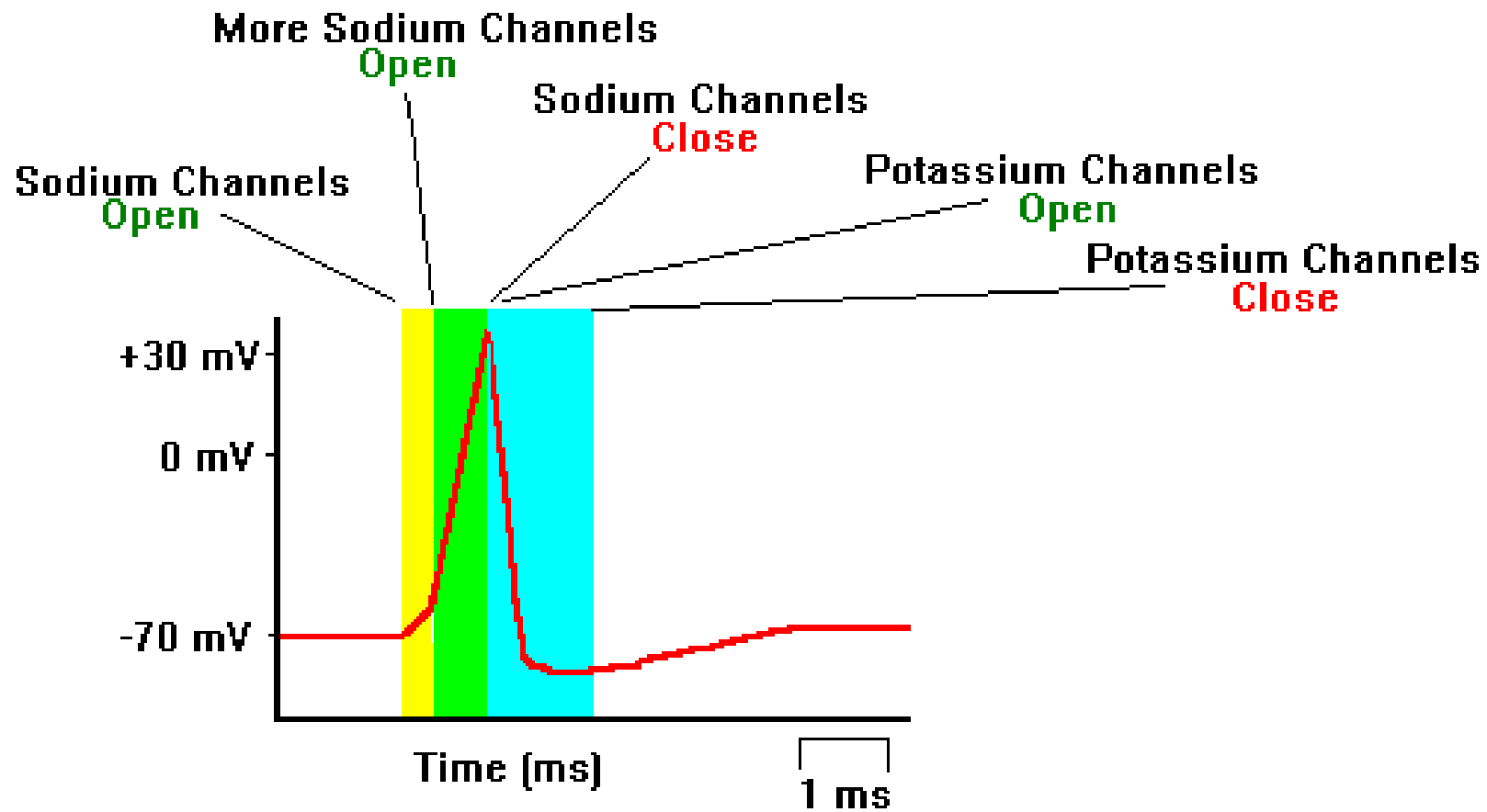
ELECTROPHYSIOLOGY

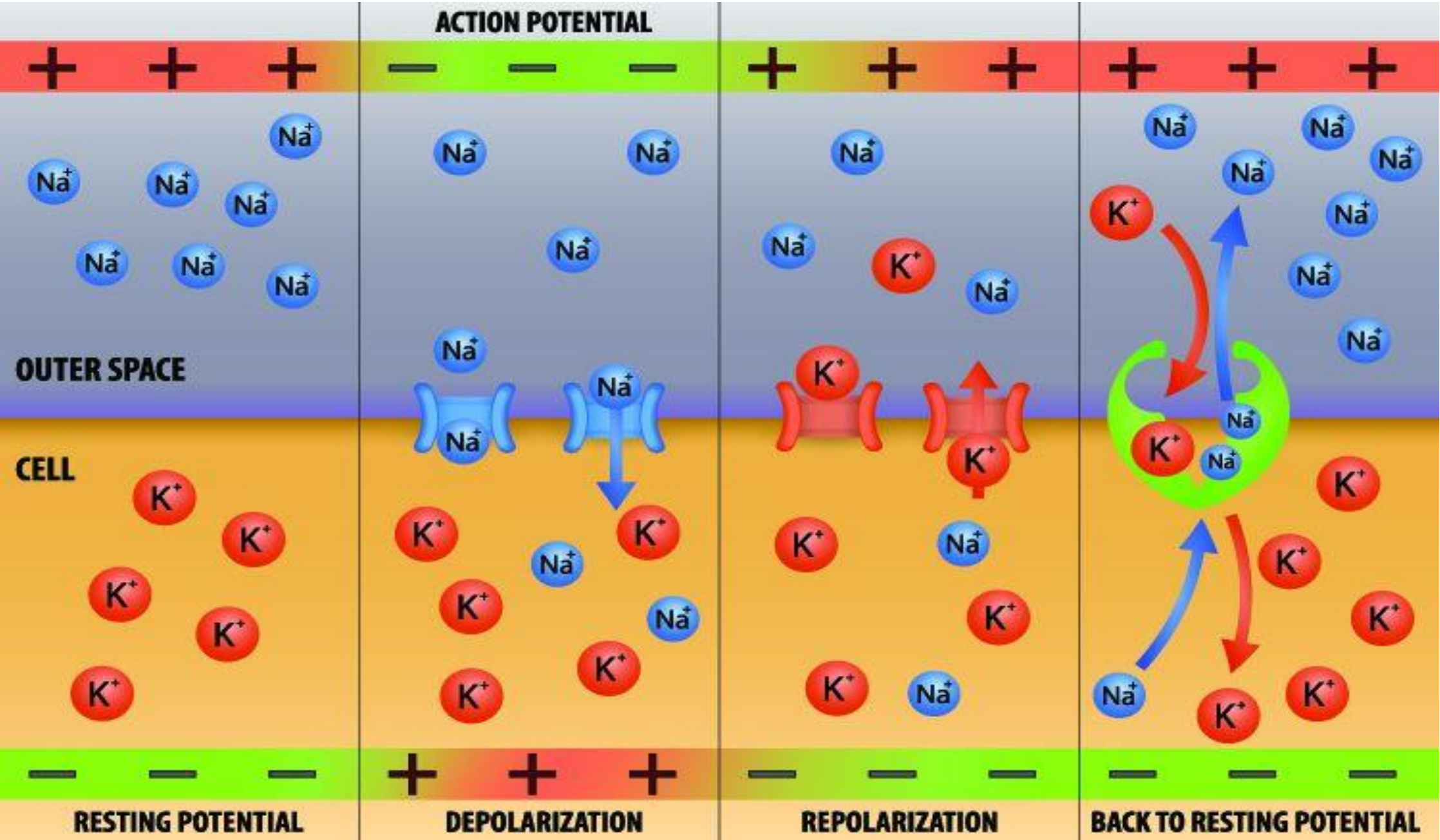
- Neuron is a modified cell and it contains cell body which contains all cell organelles and nucleus in which flow of ions takes place
- It includes measurement of the electrical activity of neurons. It includes the flow of ions in biological tissue
- Every cell contains plasma membrane and these ions are present inside and outside the plasma membrane.
- Na^+ ion is present outside the cell at high concentration, so it is called as extracellular ion.
- K^+ ion is present inside the cell, and it is termed as intracellular ion.
- Also some ions and proteins are present inside the cell

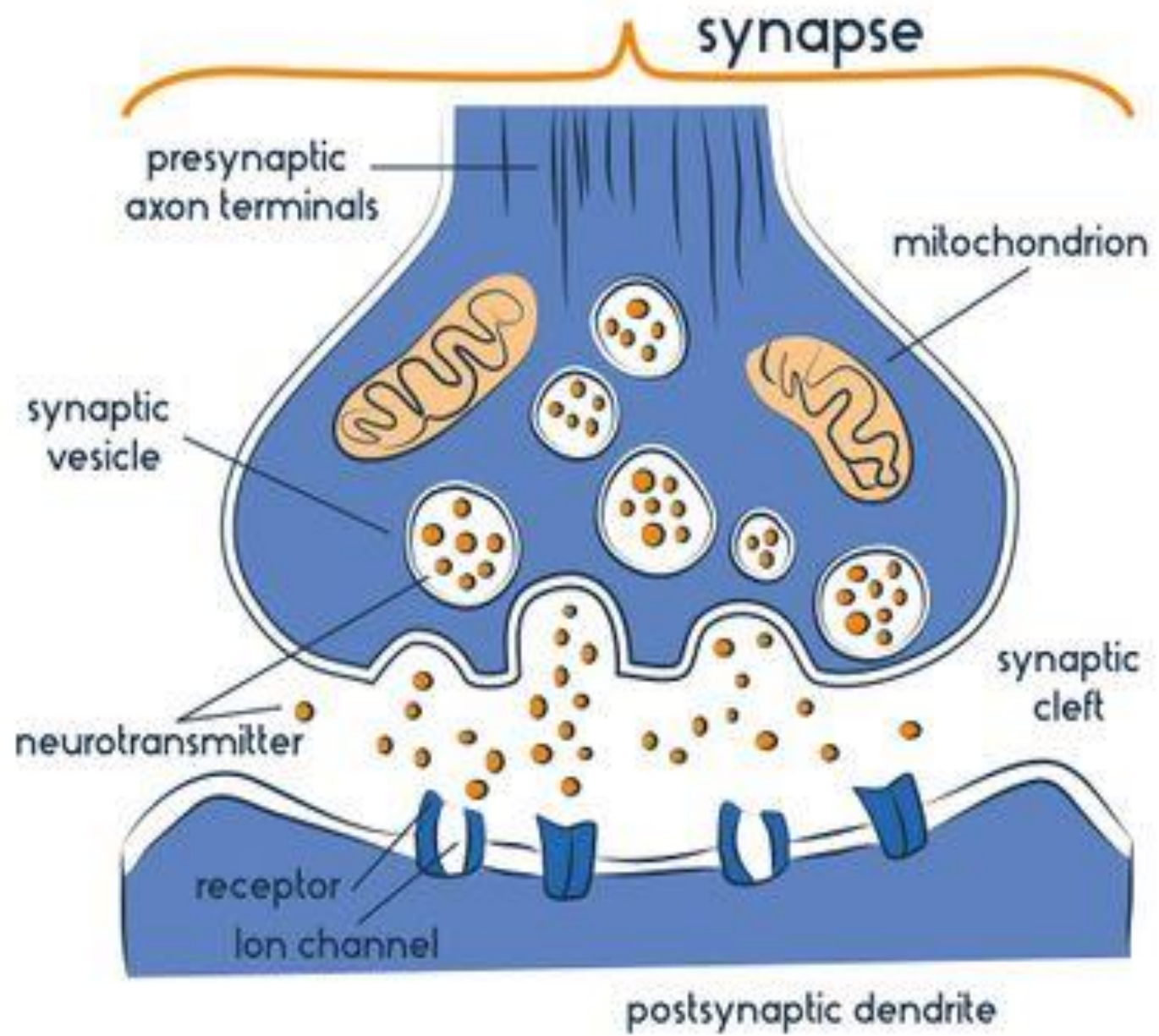
Ionic Basis of Resting Membrane Potential



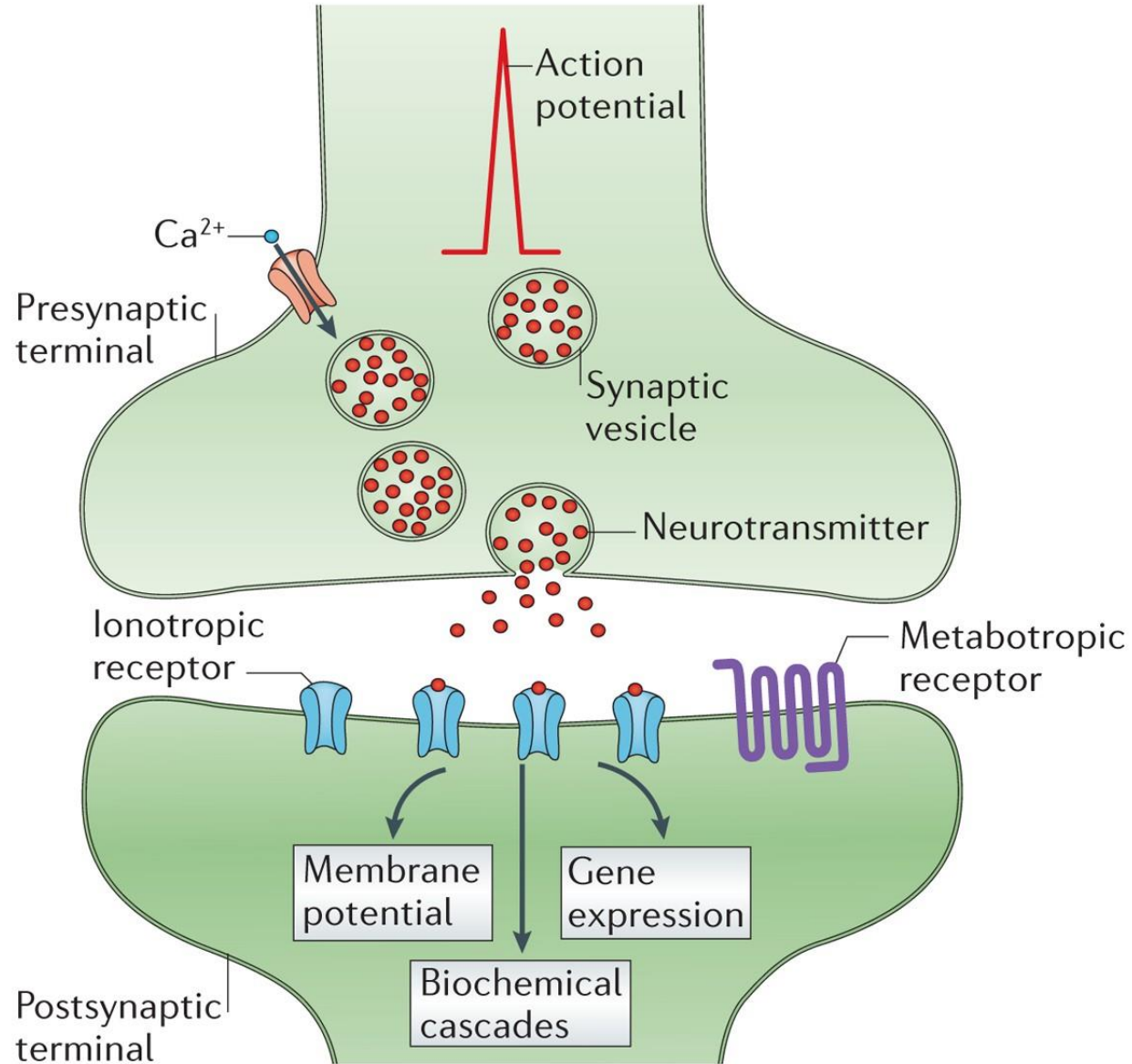
- Na⁺ concentrated outside of cell (ECF)
- K⁺ concentrated inside cell (ICF)



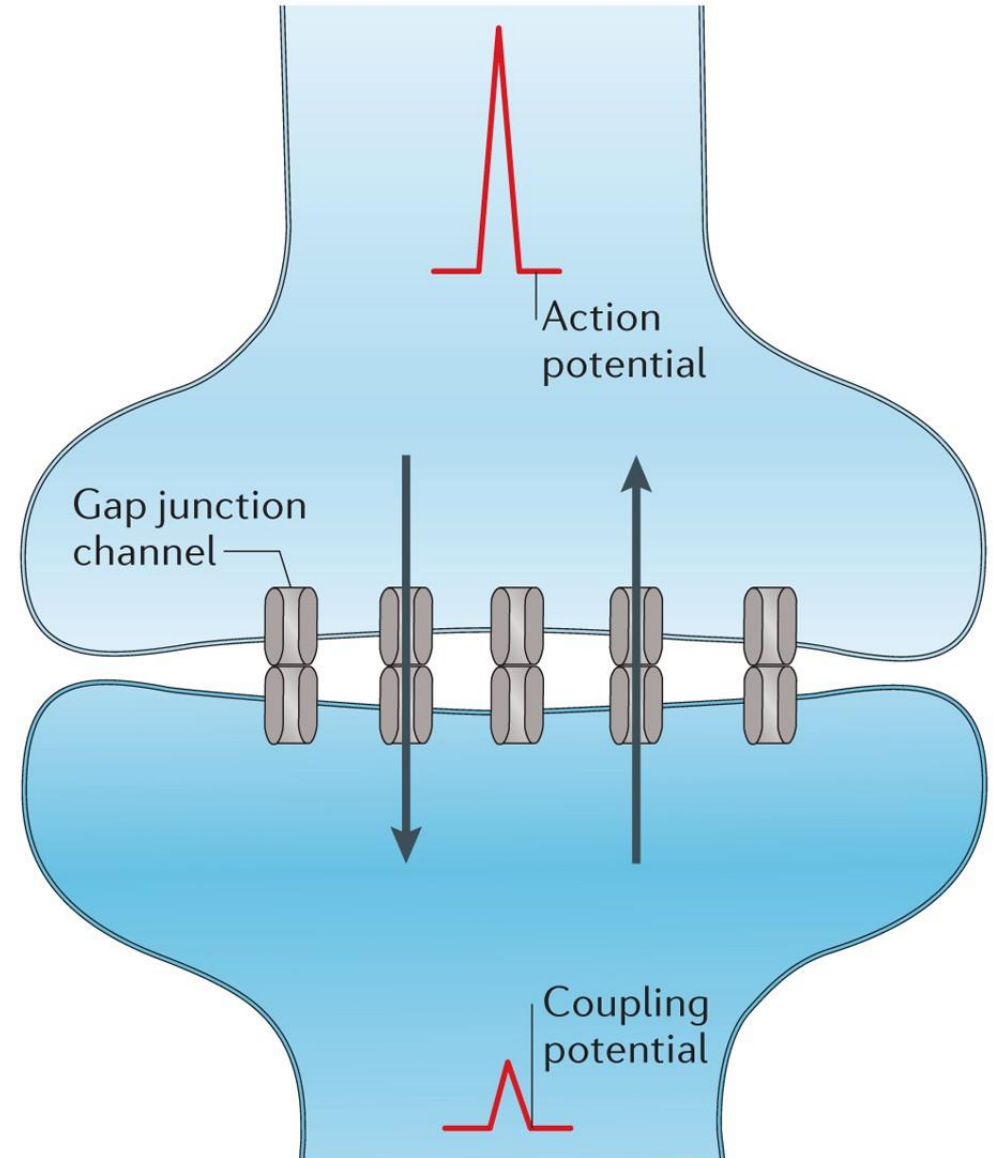




a Chemical synapse

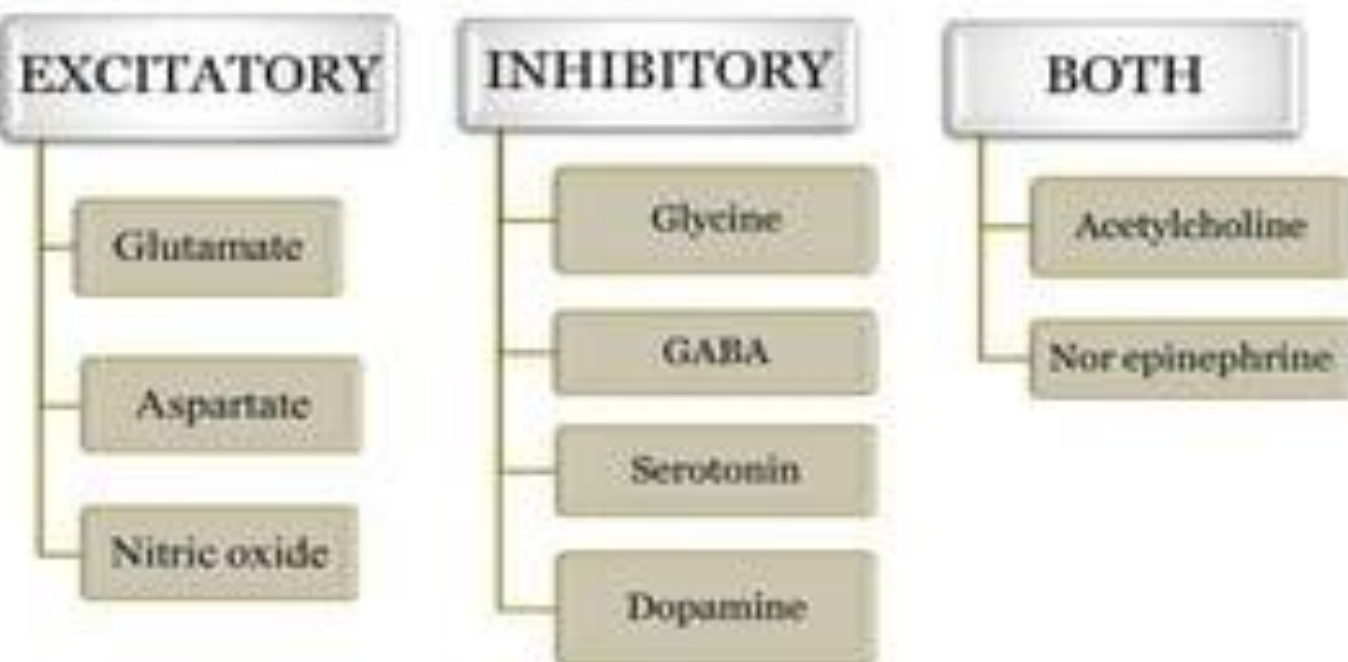


b Electrical synapse

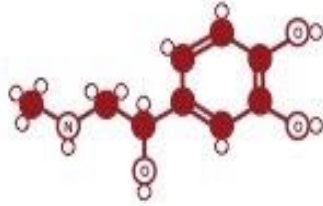


TYPES OF NEUROTRANSMITTERS

Classification based on Action

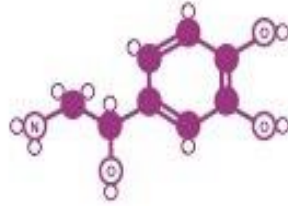


ADRENALINE



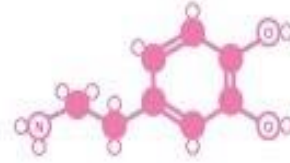
Fight or flight neurotransmitter

NORADRENALINE



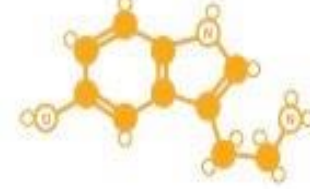
Concentration neurotransmitter

DOPAMINE



Pleasure neurotransmitter

SEROTONIN



Mood neurotransmitter

GABA



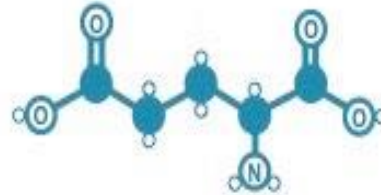
Calming neurotransmitter

ACETYLCHOLINE



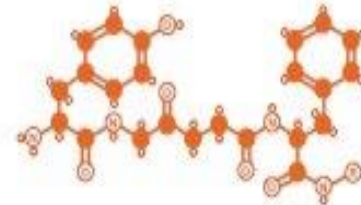
Learning neurotransmitter

GLUTAMATE



Memory neurotransmitter

ENDORPHINS



Euphoria neurotransmitter