



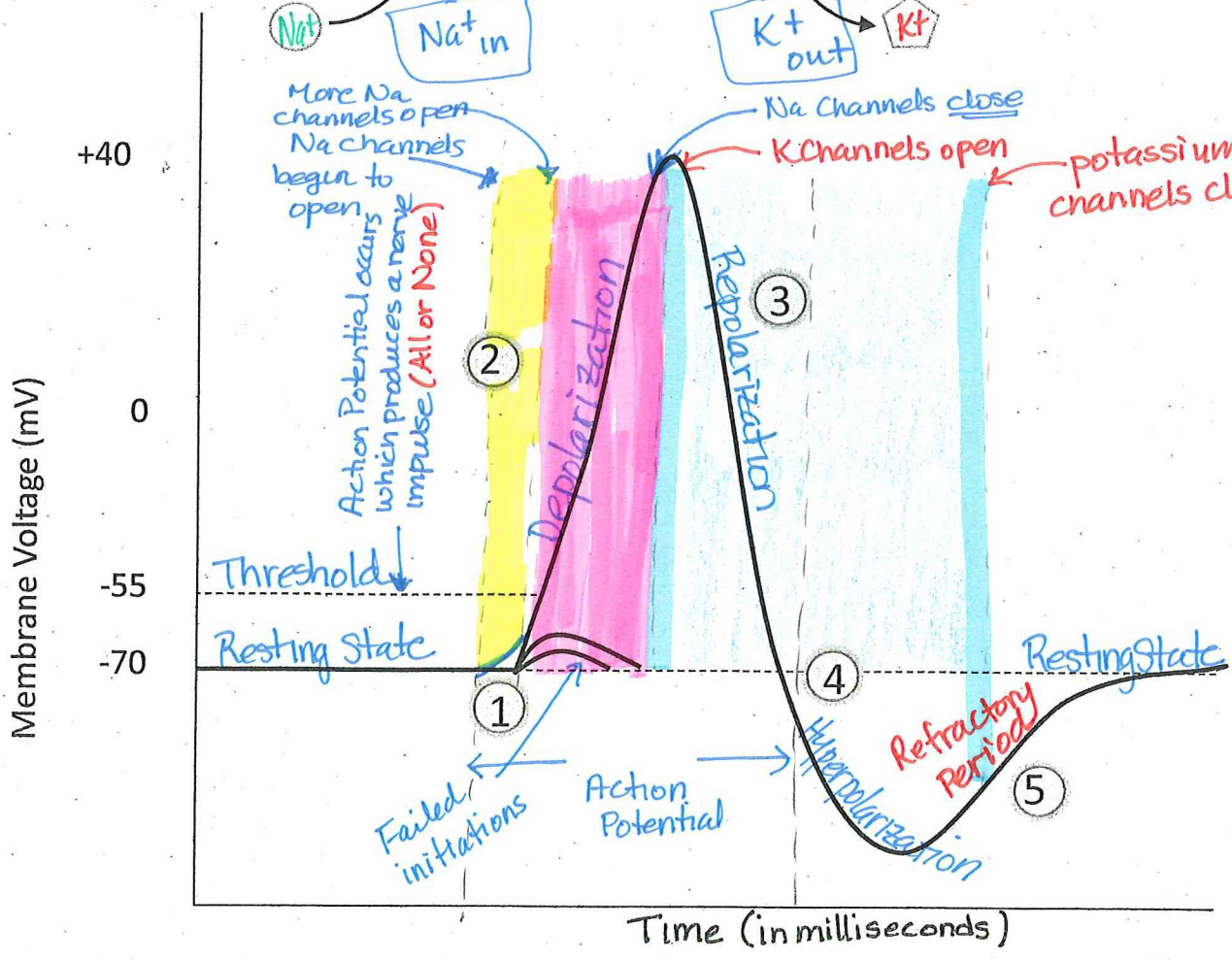
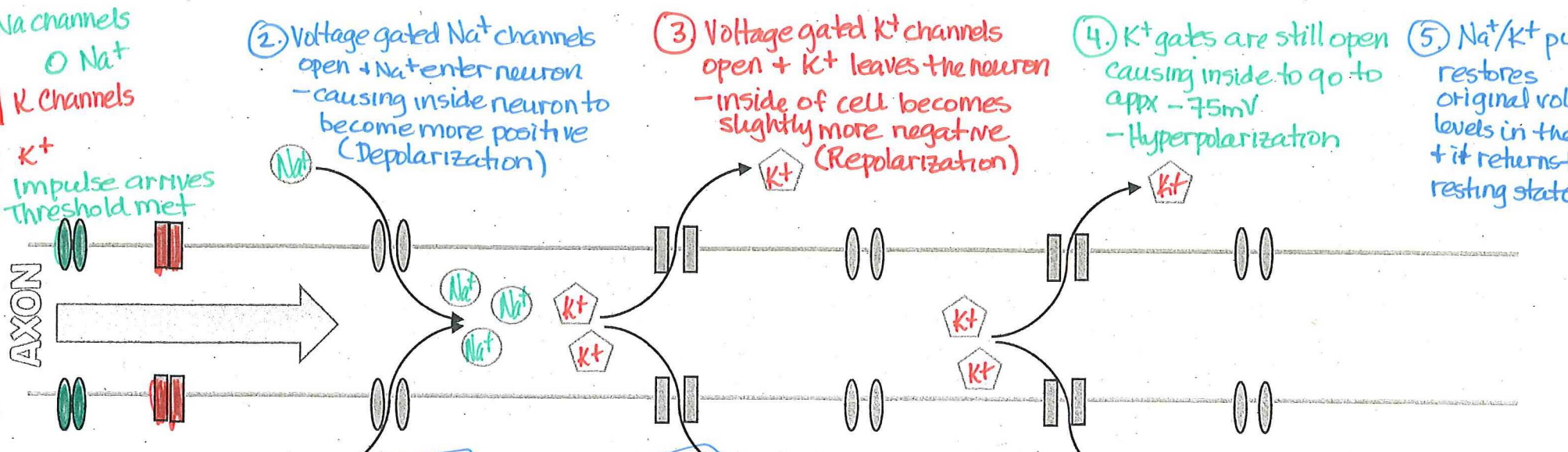


Action Potential

-  Na channels
-  K Channels
-  K⁺
-  Impulse arrives threshold met



(2) Voltage gated Na⁺ channels open + Na⁺ enter neuron - causing inside neuron to become more positive (Depolarization)

(3) Voltage gated K⁺ channels open + K⁺ leaves the neuron - inside of cell becomes slightly more negative (Repolarization)

(4) K⁺ gates are still open causing inside to go to appx -75mV - Hyperpolarization

(5) Na⁺/K⁺ pump restores original vol levels in the + it returns resting state

A resting neuron - more Na⁺ outside ∴ outside of neuron more positive + inside neuron slightly negative due to presence of PO₄³⁻ ions + negatively charged proteins, K⁺ also inside the cell

Refractory Period - prevents axon from responding to another stimulus - prevents signals from traveling in both directions at once along a neuron