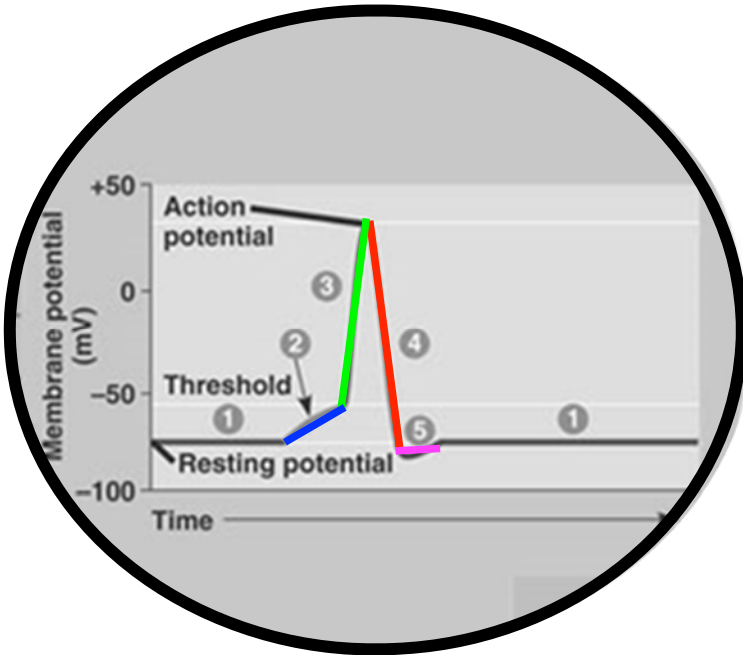


Action Potential Generation



1. Resting membrane potential

2. Excitation

3. Depolarization

4. Repolarization

5. Hyperpolarization

absolute
refractory
period

relative
refractory
period

Stage	Membrane potential	Pump / Channel Activity	Ion Movement	Ability to Send AP
1	-70 mV	Na-K Pump	Na ⁺ OUT K ⁺ IN	yes
2	↑ (more +ve)	Voltage gated Na ⁺ open	Na ⁺ IN	yes
3	↑ ↑ (more +ve)	More Voltage gated Na ⁺ open	Na ⁺ IN	no
4	↓ (more -ve)	Na ⁺ inactive K ⁺ open	K ⁺ OUT	no
5	↓ (more -ve)	Na ⁺ resting state K ⁺ closing slowly	K ⁺ OUT	yes