Annotated Action Potential

Depolarized

(relative to resting potential)

Via positive feedback, more and more Na+ voltage-gated channels open

Na+ Na+ Na+

K+ voltage-gated channels are slower to respond to the initial depolarization event

Na+

K+ K+ K+

Na+ and K+ voltage-gated ion channels are closed

Voltage-gated Na+ channels open

K+ gated ion channels close. Resting potential is re-established via the action of the K+/Na+ pump and the non-gated K+ and Na+ channels

Hyperpolarized

K+

(relative to resting potential)