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| --- |
| START HERE - RESTING POTENTIAL (Includes multiple other steps)  |
| Na+ is high outside the cell |
| K+ is high inside the cell  |
| The cell is polarized (negative on the inside and positive on the outside) |
| A signal is received |
| Na+ channels open  |
| Na+ diffuses into the cell |
| K+ channels open |
| K+ diffuses outside the cell |
| Depolarization (May include multiple steps) |
| ACTION POTENTIAL (Includes multiple other steps)  |
| Na/K pump - pumps Na+ OUT and K+ into the cell |
| Repolarization (Reset) (May include multiple steps) |
| Action potential moves to the axon terminus  |
| Ca++ channels open |
| Ca++ moves into the cell |
| Vesicles with neurotransmitters move to synaptic membrane |
| Neurotransmitters diffuse from presynaptic axon through synapse |
| Neurotransmitters bind at postsynaptic membrane (dendrite) of another nerve cell |
| END HERE The signal is restarted |

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| --- |
| START HERE - RESTING POTENTIAL (Includes multiple other steps)  |
| Na+ is high outside the cell |
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| The cell is polarized (negative on the inside and positive on the outside) |
| A signal is received |
| Na+ channels open  |
| Na+ diffuses into the cell |
| K+ channels open |
| K+ diffuses outside the cell |
| Depolarization (May include multiple steps) |
| ACTION POTENTIAL (Includes multiple other steps)  |
| Na/K pump - pumps Na+ OUT and K+ into the cell |
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