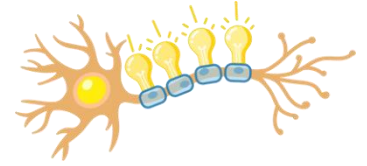


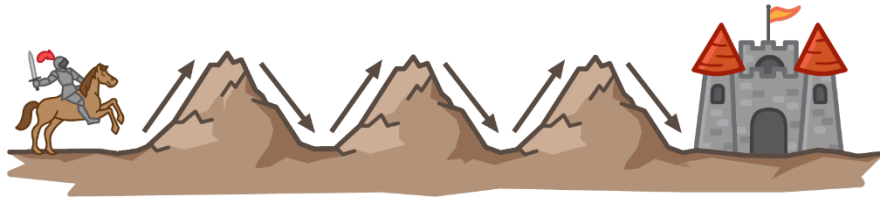
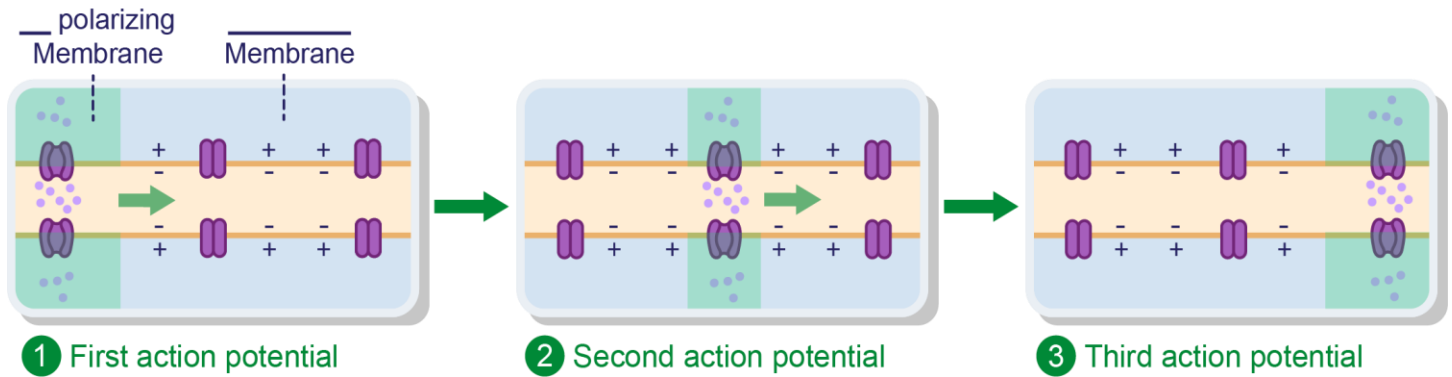
## TOPIC: PROPAGATION OF ACTION POTENTIALS

### Types of Propagation: Continuous Conduction



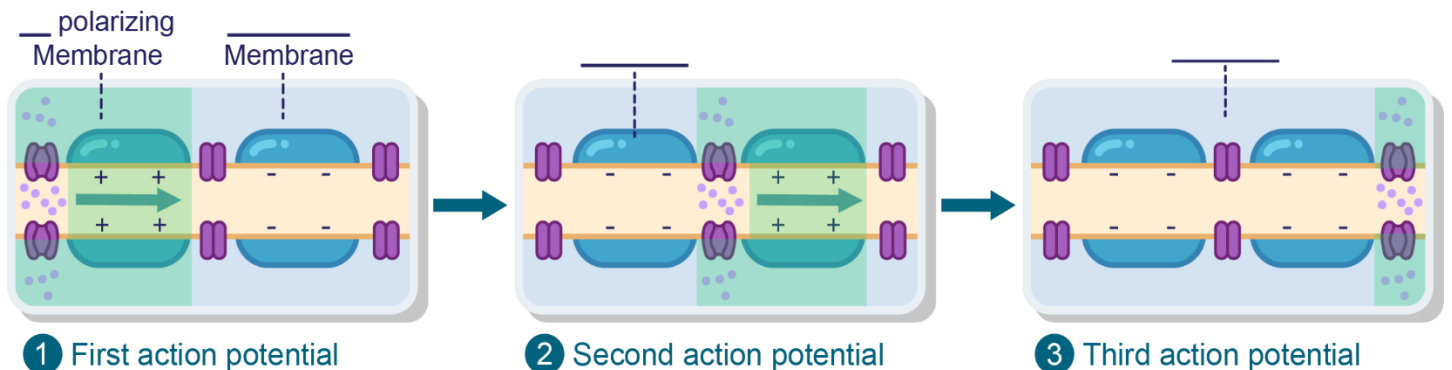
- **Propagation:** Unidirectional spread of an action potential down plasma membrane.

- **Continuous Conduction:** Relatively \_\_\_\_\_ propagation along unmyelinated axon.



### Types of Propagation: Saltatory Conduction

- **Saltatory Conduction:** \_\_\_\_\_ propagation along myelinated axon – only nodes of \_\_\_\_\_ depolarized.



## **TOPIC: PROPAGATION OF ACTION POTENTIALS**

**EXAMPLE:** During saltatory conduction, action potentials are generated \_\_\_\_\_.

- a) Regardless of if threshold is reached.
- b) When the entire axolemma depolarizes.
- c) Along the length of the entire unmyelinated axon.
- d) Only at the nodes of Ranvier of myelinated axons.

**PRACTICE:** In unmyelinated axons, action potentials are propagated by \_\_\_\_\_ conduction.

- a) Continuous.
- b) Saltatory.

**PRACTICE:** Dr. Roberts is testing a new drug that blocks sodium channels in the axons of a neuron. Which of the following statements is correct?

- a) The drug would prevent both the generation of graded potentials and the propagation of action potentials.
- b) The drug would prevent the generation of graded potentials.
- c) The drug would prevent the propagation of action potentials.
- d) The drug would only have a mild effect on the neuron because potassium channels are still operational.