

Worksheet for class 7

- What are ions? What are the two most abundant ions in your body, and what is the charge of each?
- What is the 'resting membrane potential'? What key ions have relative differences in concentration between the inside and outside of the neuron? What is the 'sodium-potassium pump'?
- What does it mean to hyperpolarize or depolarize a neuron?
- Imagine that you were recording the electric potential in the initial segment of an axon. Draw a graph showing volts vrs. time for an action potential starting and ending at the resting membrane potential. Describe the cellular events responsible for each part of your graph.
- Describe how voltage-gated sodium channels are largely responsible for propagation of an action potential along the length of an axon.