#### **Neurons Communicate**

- Sensing Pain
- What is Pain?
- Neuron Anatomy
- Charge and Membrane Potential
- Membrane Potential Changes Over Time
- Stimulus Threshold
- Muscle Contraction
- Lidocaine
- Summary of Part 1

## **Neurons and Electricity**

- Neurons Work Because Ions Move
- Charge and Voltage
- The Equilibrium Potential
- Conductance
- Ion Pumps
- The Brain and Electronics
- Summary of Part 2

### **Voltage-Gated Ion Channels**

- How Do Neurons Generate Action Potentials?
- Transduction of Stimuli
- Voltage-Gated Channels
- Phases of the Action Potential Puzzle
- Threshold and Sensitivity
- Myelination
- Multiple Sclerosis
- The Neural Detective
- Summary of Part 3

# **Action Potentials Challenge**

- Explore More
- Conductance, Concentration, and Current
- The Refractory Period
- The Hodgkin-Huxley Model

# **Quiz Questions**

• Quiz Questions