**Neurons Study Guide**

1. Draw a **neuron** and label the main structures (dendrites, axon, cell body). Briefly describe the function of the **dendrites** and **axon**

2. What is a **resting voltage?** How is this maintained? (make sure you understand what voltage is)

3. Compare and contrast **hyperpolarization** and **depolarization**

4. Explain how an **action potential** occurs.

5. Explain the chart to the right:

6. Explain how an **action potential** is passed down the length of an **axon**.

7. Explain how **myelin sheaths** speed up transmission of an action potential. A sketch would be nice

8. Draw a picture of a **synapse**

9. Using your drawing, explain a signal is passed from one neuron to the next via the **synapse**

10. Describe some examples of responses to neural signals