**Structural Classification**

Based on the number of processes that extend from the cell body

**Bipolar Neuron**

- Dendrite
- Cell body
- Nucleus
- Trigger zone
- Axon

**Multipolar**

- Cell body
- Nucleus
- Trigger zone (axon hillock)
- Axon

**Unipolar**

- Cell body
- Trigger zone
- Axon

**Action Potential**

- Makes up the neural impulse
- Electrical Message
- Due to an external stimulus (usually at dendrites)

**2 Types of stimuli**

**Excitatory** causes a local depolarization
- Opens Na+ channels near the receptors site
- Na+ floods in
- Causes the neuron to become more positive

**Inhibitory** causes a local hyperpolarization
- Opens K+ channels near the receptors site
- K+ moves out
- Makes neuron more negative

For a stimulus to cause an action potential, the membrane must be depolarized to -50 millivolts (mv); **threshold**