Transmission of Action Potentials

1. **Resting Potential**
    - -65-70mV
    - The membrane is polarised- there is a potential difference across the membrane
    - Only the potassium pump is in action, actively transporting 3Na+ out for every 2 K+ in
    - Sodium voltage gated channels are closed
    - Potassium voltage gated channels are closed
    - The inside of the membrane is more negative than the outside of the membrane due to dissolved substances such as amino acids
    - There is however, more Na+ inside the plasma membrane than out

2. **Depolarisation**
    - Sodium voltage gated channels open
    - This is an example of positive feedback;
    - Na+ come into the plasma membrane
    - Inside of plasma membrane becomes more positive, respectively to the outside
    - More Na+ come in
    - So more sodium channels open
    - More Na+ come in (like a domino effect- this is where local currents apply to transmit the info in one direction)
    - About -50mV is reached