

# Nerve Impulses

Neurones send messages electrochemically, what does this mean?

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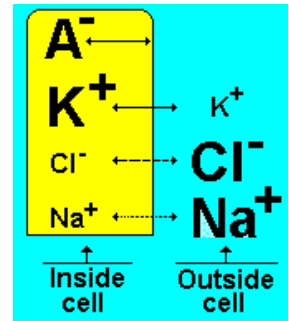
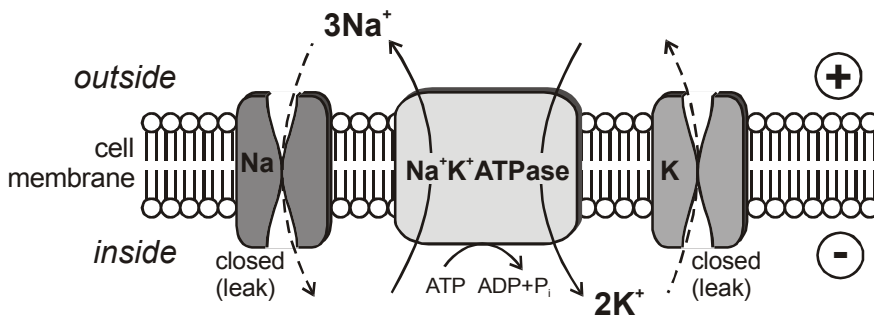
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## Resting Membrane Potential

How do the following diagrams help explain resting membrane potential?



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What is an axons resting potential? .....

# Action Potential

What is an action potential? .....

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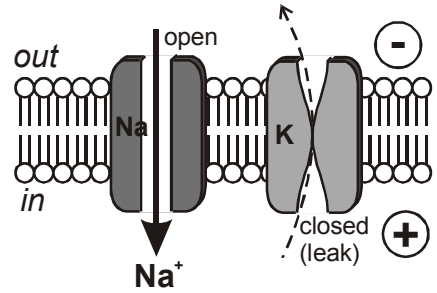
Use the diagrams below to explain the following terms:

Depolarisation: .....

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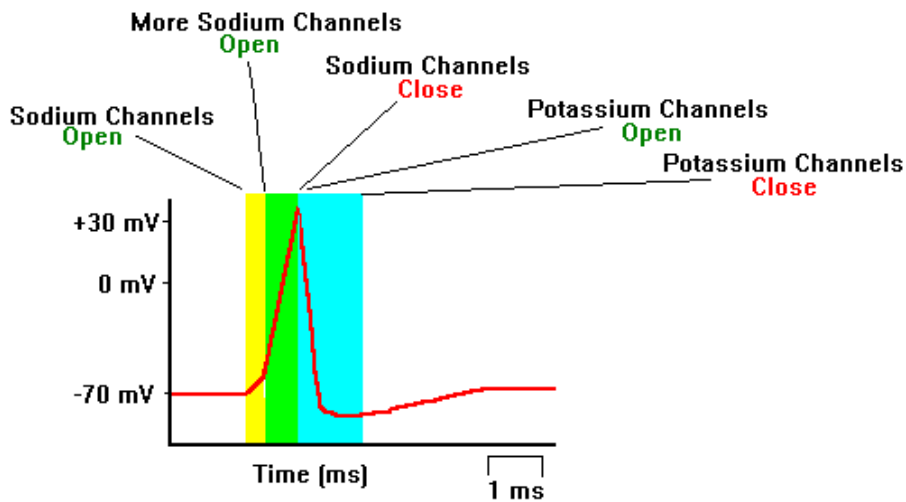
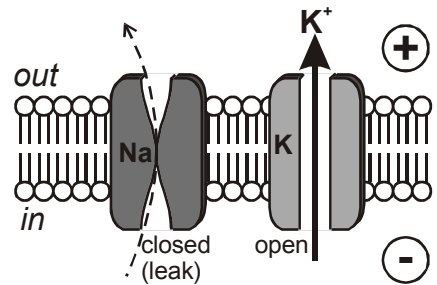


Repolarisation: .....

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Explain the 'all or nothing event' .....

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What is the refractory period? .....

## How do Nerve Impulses Start?

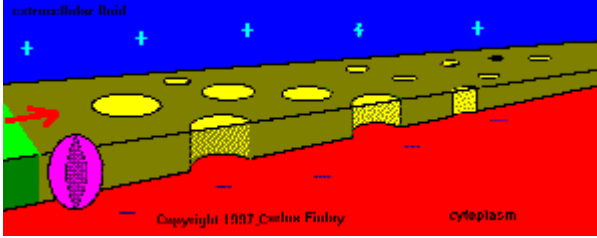
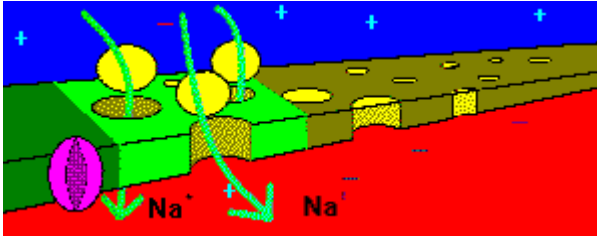
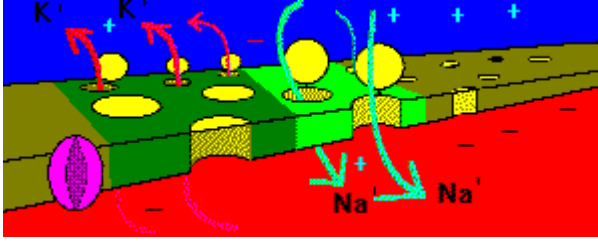


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## Summary of the Action Potential

Cut out the statements and match them up to the correct picture

	<p>When stimulated past threshold, sodium channels open and sodium rushes into the axon, causing a region of positive charge within the axon.</p>
	<p>The sodium/potassium pump restores the resting concentrations of sodium and potassium ions</p>
	<p>At rest, the inside of the neuron is slightly negative due to a higher concentration of positively charged sodium ions outside the neuron.</p>
	<p>The region of positive charge causes nearby sodium channels to open. Just after the sodium channels close, the potassium channels open wide, and potassium exits the axon.</p>
	<p>This process continues as a chain-reaction along the axon. The influx of sodium depolarizes the axon, and the outflow of potassium repolarises the axon.</p>