

## Neurones Key Information

Nerve cells, or neurones, are specialised cells that transmit electrical impulses throughout the body. Each neurone typically consists of a cell body (soma) containing the nucleus and organelles, dendrites that receive signals from other neurones, and a long axon that carries impulses away from the cell body. Many axons are surrounded by a myelin sheath made by Schwann cells, which insulates the axon and increases the speed of impulse transmission through saltatory conduction. Gaps in the myelin sheath, known as nodes of Ranvier, allow the impulse to "jump" along the axon. Neurones end in axon terminals, which communicate with other neurones or effectors across a synapse.

## Key words & definitions

Key word	Key information
<b>Neurone (Nerve Cell)</b>	<b>A specialised cell that transmits electrical impulses throughout the body.</b>
<b>Schwann Cell</b>	<b>A type of cell that produces the myelin sheath around axons in the peripheral nervous system.</b>
<b>Dendrite</b>	<b>Branch-like extensions that receive signals from other neurones.</b>
<b>Axon</b>	<b>A long projection that carries impulses away from the cell body.</b>
<b>Myelin Sheath</b>	<b>A fatty insulating layer surrounding the axon, made by Schwann cells, that speeds up impulse transmission.</b>
<b>Axon Terminal</b>	<b>The end of the axon that forms synapses with other neurones or effectors.</b>
<b>Synapse</b>	<b>The junction between two neurones or between a neurone and an effector, where chemical transmission of the nerve impulse occurs.</b>