Think and feel

You are formed of tiny living cells working together. Your thoughts and feelings arise from brain cells (neurons) interacting. Intricate networks of neurons are responsible for controlling your body and hold a lifetime of memories and emotions.

Your brain contains around a hundred billion neurons and supporting cells (glia), and blood vessels. Each neuron can make thousands of connections with other cells. Tiny gaps between neurons (synapses) act as switches where chemicals (neurotransmitters) either pass on a signal (electrical current) or prevent it from being passed on.

These beautiful tree-like cells in your brain allow you to learn and develop. The brain is physically protected by your skull and surrounded by fluid. Pathologists can help understand changes and chemical imbalances.

Add colour to this forest of neurons and let them grow and flourish. While most cells are tiny, neurons can be surprisingly long so they're able to pass on signals swiftly. A neuron controlling muscles in the leg can be up to a metre long. The bar at the bottom represents one tenth of a millimetre (100 micrometres), which is around the width of a human hair.

