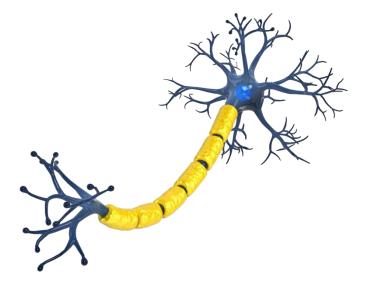
## Neural Pathways

Our brain is made up of billions of cells called neurons. They are shaped a bit like a tree with a 'trunk' called the axon, and 'branches' called dendrites. With every thought or action, we create a neural pathway in our brain as information travels through each neuron and across the 'synaptic gap' to the next neuron.



Every time we repeat a thought or action, the coating on the axon becomes thicker. Scientists think that the thicker the coating, the faster the signal can travel between neurons. This means the pathway becomes more established. The more established a pathway is, the more likely we are to think or behave in the same way in future.

This explains why we develop habits, as signals in our brain follow well-trodden paths! However, it does also tell us that it is possible to rewire the brain when we make an effort to do things differently and create a new pathway. As we practise skills or thoughts, they become more natural to us. This means we can all improve our skills and get better at managing our emotions in helpful ways.

At the Baird we teach the children that all the time they are learning they are growing their pathways, and we assure them that everything they practise will get easier in time.