Pipe Cleaner Neurons



Your brain, like all body tissues, is made of cells.

But brain cells (called *neurons)* often look very different from skin, or liver cells - they are remarkably diverse in shape and size. How something is structured determines what it can do - and neurons can do many things!

Most neurons do have a few standard parts that you can create by bending, twisting and linking up pipe cleaners…

*Cell body, or soma:* typically a spherical structure (though sometimes it’s shaped like a 3D pyramid!). The cell body is home to the *nucleus,* which contains *DNA* - the genetic instructions for building the entire neuron!

*Dendrites:* the input end of neurons, with multiple, cell membrane-bound branches where other neurons deliver *excititory* (fire!) and *inhibitory* (stop!) messages, by releasing chemicals called *neurotransmitters*…

*Axon:* output from neurons (in the form of electric current!) travels away from the cell body along this wire like projection, which can be short - or extremely long. Some wires travel from your toes all the way to the

base of your brain - that’s one long neuron!

Ask about other parts of neurons you can make: the *nucleus* in the cell body, for example, filled with twisted pipe cleaner DNA, or *myelin,* supportive insulation for the axon wires that makes electric messages travel faster…