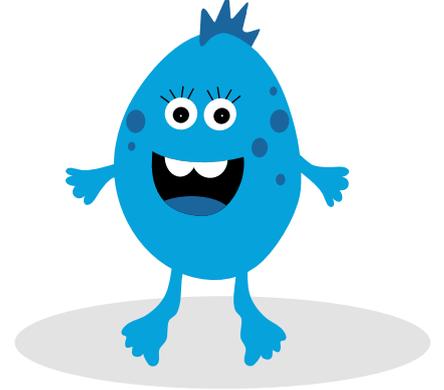


ELECTRIC JOURNEYS

Make a neuron, make memories



About this activity

Our brains control everything we think, feel, say and do. Inside our brains we have around 80 billion cells called neurons. Luckily, neurons are tiny, so we can fit them all in — about 30,000 neurons could fit on a pinhead!

A neuron connects to lots of other neurons; every second, millions of electrical signals journey through your brain, passing from neuron to neuron, a bit like a tiny game of pass the parcel.

When you learn something new, neurons make new connections. When you remember something, a signal passes through these connections.

In this activity, make your own neuron out of pipe cleaners and learn about some of the amazing parts of these cells.

Time

1 hour

Kit list

- Pipe cleaners
- Safety scissors
- Paper/luggage tags
- String/glue
- Pen and pencil

Instructions:

- 1 Take a pipe cleaner and make it into a circle. Twist the ends of the pipe cleaner around to secure it. This is the cell body and the control centre of the cell. It tells the rest of the neuron how to work.
- 2 The small branches that come out of the cell body and receive signals are called dendrites. Wind more pipe cleaners around the cell body and spread them out from one side of the cell body to make the dendrites.
- 3 Bend another long pipe cleaner around the cell body and then around itself to make a long tail on your cell. This is called the axon, it carries electrical signals to the end of the cell.
- 4 Twist more pipe cleaners around the end of the pipe cleaner axon. These are the branches that pass connections onto the next neuron.
- 5 The way your neurons link up in your brain is important for forming memories. Write your earliest or favourite memories onto a piece of paper and stick it on to your neuron.
- 6 Join up your neurons with others in your class to form a big network. Add these onto a pin board wall.

Next steps:

- Alzheimer's Research UK would love to see a photo of your neuron network, so please send them in to engage@alzheimersresearchuk.org
- This activity can be put towards a CREST SuperStar Award and there are plenty more online activities you could try for free. For more information, follow this link: crestawards.org/crest-superstar

