What is a cell?

All living things are made of cells. Cells are tiny building blocks, so small that you can’t see them without a microscope. They work together as a team to do different jobs in your body. Cells in your muscles help you move. Cells in your tummy help you break down food. And cells in your brain are in charge of everything you think, feel, say and do.

Meet your brain cells

With your brain in charge of everything and acting as a control centre, it needs different types of cells to work together as a team.

Nerve cells – these are the ones you hear about the most. They are the ones that do the thinking and tell muscles to move. They do this by linking up with each other, passing along messages and instructions. The messages they send travel more than 150 miles per hour – faster than most trains!

Astrocytes – these cells get their name from their star-like shape (astro = star). They work as support cells in the brain, and are a bit like parents. They provide food for the busy nerve cells. Their long arms move around, checking on other cells and keeping an eye on what’s going on in the brain.

Microglia – these are another type of support cell, and work as defenders of the brain. Like the rest of the body, the brain is protected by the immune system. The microglia are the soldiers in the immune system in the brain. They also have long arms, which they use to watch out for attack and spot any damage.

There are lots of other types of cells in the brain, these are just three of the key ones. By working together, these cells make your brain more powerful, more complex and more clever than any computer in the world.