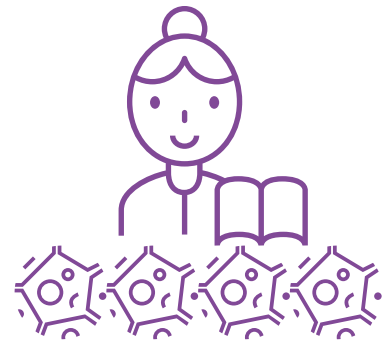




All living things are made of trillions of cells. Each type of cell has its own job to do, for example fighting germs that make you sick, or making flowers' petals bright to attract bees. There are around 200 different types of cells in your body, with 200 different jobs.



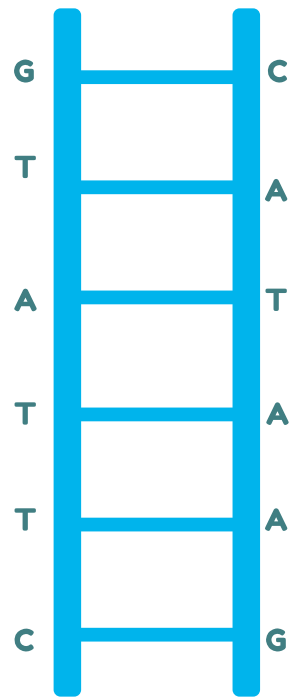
If you could see DNA close up, you would see that it looks like a cool twisty ladder. This shape is called a double helix.

Now, these cells don't have a teacher or a boss to tell them what job to do – our cells are told what to do by DNA. DNA is like a set of instructions that tell the cell what job it's going to do.



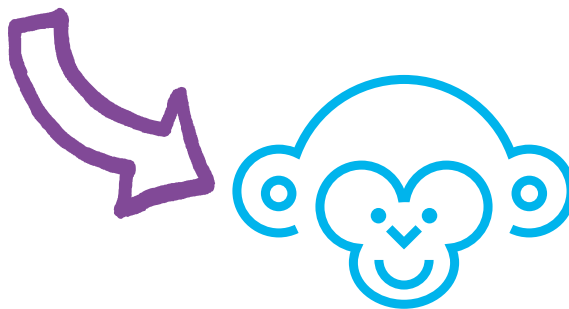
If you untwisted the ladder and looked very closely, you would see that pairs of letters make up the steps of the ladder. These letters are A, T, C and G.

A, T, C and G don't like to be by themselves – so they always pair up with a friend. But they are very choosy and only ever pair up with their best friend. A and T are best friends and always stay together. G and C are best friends and always stay together.



Put these pairs of best friend letters together and they make up “words” that are always three letters pairs long. These words are called codons. To read and write codons, we only use the letters on the left. So the words on the DNA above would look like this:

GTA TTT GTG GTA AAC CCA GTG



GTA TTC

Put lots of these three letter words together and they make sentences that tell the cell what to do. These sentences are called genes. Different combinations of words make the genes for different living beings.