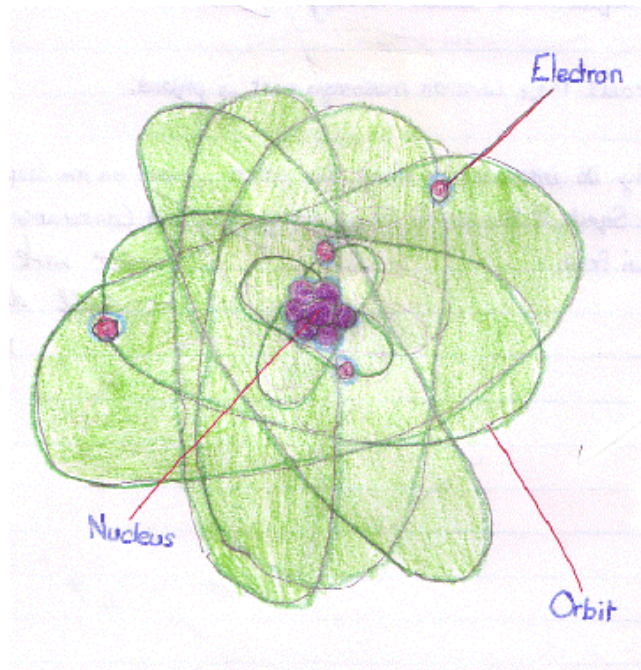


## The Atom



If you were to chop a gold ring in half, then throw one half away and then chop the remaining half in half until you are left with the smallest microscopic particle, you end up with an atom. Atoms are the smallest things in the universe. There are 115 different types of atom. They differ by the numbers of protons, neutrons and electrons they have. You could fit 100,000,000 atoms on a single full stop! You would need 600,000,000,000,000 to completely cover a pin head!! Atoms make up absolutely everything.

In the centre of the atom is the nucleus and this is orbited by negatively charged electrons. The protons in the nucleus are positively charged, while the neutrons (also in the nucleus) are neutral.

An electric current occurs when electrons move. Positive and negative electrons attract, while like charges (positive and positive or negative and negative) repel - just like the poles on a magnet.

We are all negatively charged so if you rubbed a balloon against your hair or your jumper all the negatively charged electrons try to jump off us on to the balloon so we become positively charged and the balloon becomes negatively charged, so that means it will stick against the wall.

So that's how we create static electricity.