## How Does A Parachute Work? By Matthew O'Connell

Have you ever thought about how a parachute works? There are four main reasons. Air resistance, the design of a parachute, gravity and when gravity and air resistance both work together. Today I will tell you about them all!

## Gravity

What is gravity you may ask? Gravity is what pulls you down. For example, if I jumped out of a plane with a parachute of course, I would fall down, deploy the parachute and land safely. Well that is what you might think it is and that is not correct. When you jump out of a plane, gravity comes at you straight away! Gravity will then start to reduce once you deploy your parachute which will cause air resistance. This will then help you land safely by working with gravity.

## Air Resistance

Air resistance is what will pull you up a bit and will slow you down a bit - like when you are using a parachute. Air resistance is also invisible like gravity. You know when you deploy your parachute and the top part of the parachute is the shape of something round with a flat bottom? That is because of trapped air resistance! Also when you pull your parachute you get a little bump up higher? Again, that is because of air resistance! Gravity and air resistance will then work together to make a safe landing.

## The Design Of A Parachute

The point of a parachute is to slow you down from high speeds in the air. There are two main rules for a design of a parachute. The first rule is that the parachute must always be bigger than the person using it, otherwise it won't slow you down. The second rule is that the top part of a parachute (the part that traps air resistance) must be round at the top but flat once all the gravity and air resistance hits it.

By using these objects and forces to make a parachute successfully land, your parachute will surely land without a problem. I hope that you learnt from this. Just remember that air resistance is what pulls you up and gravity pulls you down. Without gravity, we would be flying around in space because the Earth is full of gravity and the space doesn't have gravity, which is why we are standing on the ground and are not flying around.

