

Peg parachute

Materials

- String
- Scissors
- Cotton handkerchief
- 2 pegs

Instructions

1. Cut two pieces of string, the same length. To measure the correct length, stretch the string across the diagonal of the handkerchief and allow about 5 cm extra for tying knots.
2. Tie the end of one piece of string to a corner of the handkerchief and tie the other end to the diagonally opposite corner. Repeat with the other piece of string, tying it to the other two corners of the handkerchief.
3. Hold up the handkerchief by the middle so the strings hang down.
4. Clip the peg onto the strings so it is hanging below the middle of the handkerchief.
5. Drop your parachute to test that it works.
6. Drop the parachute again, but this time, drop a second peg (without a parachute) from the same height as the parachute peg, dropping them at the same time. Which one hits the ground first?



What happens?

When you drop something, it falls to the ground because of the force of gravity. A parachute is designed to use air resistance to make things fall more slowly. As the parachute falls down through air, the air pushes back up on the parachute. This makes the peg fall more slowly than if it were falling without a parachute.

Why does it matter?

If there were no air resistance, all falling objects would fall to the Earth in exactly the same way. On the Moon, there is no air, so there is no air resistance and a parachute is useless!

Related activities

Use big and small handkerchiefs to make parachutes of different sizes and test how fast they fall.

Ask children to draw a picture of themselves, cut it out and tape it to the peg so they can watch themselves falling with a parachute.

Make paper planes and talk about how air helps a glider to stay in the air.

Health and safety considerations

- Risk of falling from heights: assist children to find safe ways of observe their peg parachutes falling.