Aeroplane Wing

What makes an aircraft fly? How does the aircraft’s wing produce lift? You can find this by making a model of part of an aircraft wing.

1. Cut a piece of paper 20 cm long and 10 cm wide. Bend it in half as in and stick the edges together. Run a fold along the edge with your finger nails so that it bends, curved at the top and almost flat underneath. The flat end of the wing is the leading edge, and the thin edge is the trailing edge.

2. Make a hole straight through both parts of the wing about 3 cm from the leading edge. Pass a piece of empty ball pen refill or soda straw through it and fix it with a dab of glue.

3. Stick a piece of paper on the centre line of the trailing edge. This fin will stand vertically on the trailing edge and will help in stabilising the wing. Pass a thin thread through the refill and fix it on two sticks.

4. As you swing the sticks through the air the wing will rise on the thread. The top curved portion of the wing is longer than the bottom portion, so the air moving over the top has further to go and therefore it moves faster. This produces a lower pressure on top of the wing producing lift. This is how a wing helps an aeroplane to rise in the air.