

Build a Kite

Aim for the sky and turn a piece of paper into a soaring kite.

What you need

- One piece of A4 paper
- Ruler
- Pencil
- Stapler
- Scissors
- Sticky tape
- Hole punch
- Light string (about six metres)

TOP TIP
This kite works well in a good breeze rather than strong winds.

LET'S GO FLY A KITE!

The largest kite ever flown was 25.47 metres long and 40 metres wide. That's about as big as four tennis courts. The record was set in Kuwait in 2005.



1 Take a piece of A4 paper and fold in half.



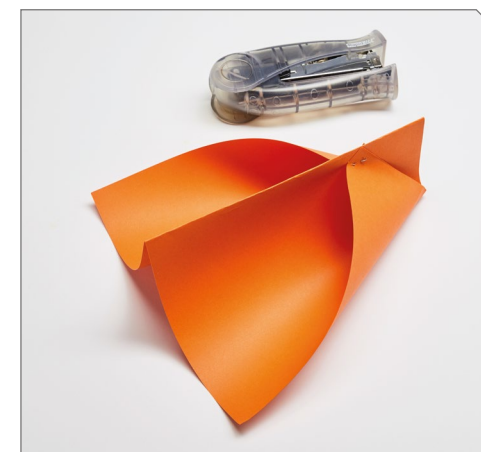
2 Using a ruler, measure 5cm from one edge, on the folded side, and mark a small dot.



3 Measure another 5cm further along from the first dot and mark a second dot.



4 Fold over the top left corner to touch the first dot. Hold in place, but do NOT make a crease.



5 Repeat on the other side. Pinch the corners together at the first dot and staple them together.



6 Cut a length of sticky tape. Stick it over the crease to cover the second dot on both sides of the paper.



7 Ask an adult to help you punch a hole, using a hole punch, on the second dot.



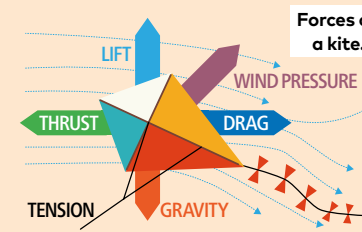
8 Thread one end of the string through the hole, then tie a knot to secure it.



9 Tie the other end of the string to the pencil. Wrap the string round the pencil – you're ready to fly!

How does it work?

There are four forces at work on any object in flight: lift, weight, thrust and drag. Lift is the upward force that keeps your kite in the air. This is created when air moves across the special shape of a wing. Lift counteracts the opposing force of



gravity. This downward force, created by the gravitational pull of the planet, wants to keep your kite on the ground. To fly, the lift force needs to be equal to, or greater than, gravity. When lift is greater than gravity, your kite will rise. When you pull your kite

forward using the string, you generate a forward-acting force called thrust. Its evil twin is called drag. This backward-acting force slows the kite down, and is mostly caused by friction when air moves across the kite.