

Create a glider

Try making this great glider that doesn't need wings to fly.

FIRST FLIGHT

The Wright brothers invented and flew the first plane in 1903. It was called the Wright Flyer and flew about 36 metres.

TOP TIP

Hold the glider in the middle when you throw it with the small hoop at the front.

FLYING HIGH

The furthest a paper plane has been thrown is 69.14 metres, launched by Joe Ayoub in the US in 2012.

What you need

- A piece of thin card or craft paper
- Ruler
- Pencil
- Scissors
- Sticky tape
- Straw

How does it work?

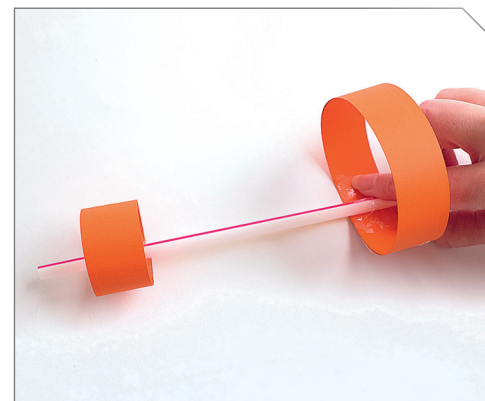
How does this "hoopster" fly without wings? Four forces act on any flying object – forward force, known as thrust, which fights the force of air resistance, called drag; the upward force, called lift that battles the downward force of gravity. The super-duper hoopster's two rings provide the lift. They also produce less drag than wings. The two different-sized hoops keep the glider steady helping it fly further.



1 Cut two strips from your card. One strip should be 2.5cm wide and 12cm long, and the other should be 2.5cm wide and 24cm long.



2 Bend the longer strip of card to form a circle and secure with sticky tape. Do the same with the shorter strip of card.



3 Place a straw inside both of the hoops – the small hoop at the front and the larger hoop at the back – and fix with sticky tape.