

Create a glider

Try making this great glider, which 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

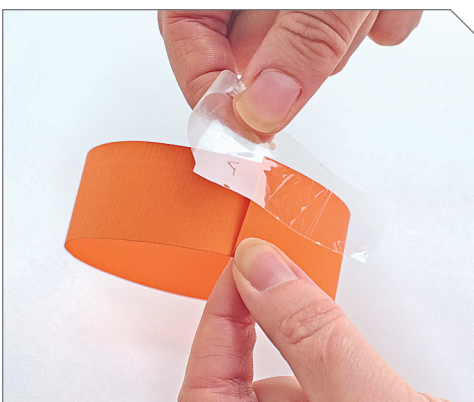
- Ruler
- Pencil
- A piece of thin card or craft paper
- Scissors
- Sticky tape
- Straw

How does it work?

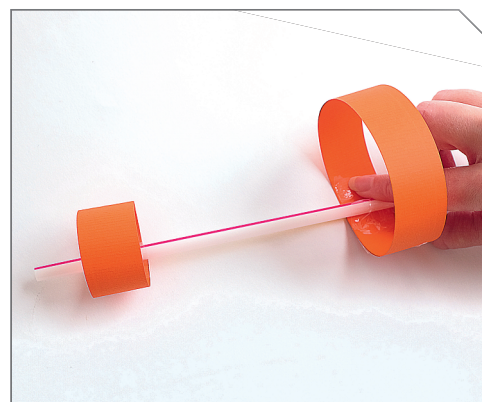
How does this "hoopster" fly without wings? Four forces act on any flying object – forward force, known as thrust, which fights the force of air resistance, called drag, and the upward force, called lift, which battles the downward force of gravity. The super-duper hoopster's two rings provide the lift.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



1 Cut two strips of card. One should be 2.5 centimetres wide and 12 centimetres long, and the other should be 2.5 centimetres wide and 24 centimetres 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.