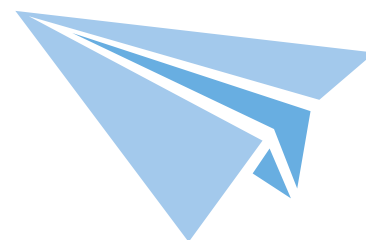


# Create your own windsock

## Materials

- › Hair dryer or fan
- › Plastic bag
- › String
- › Card
- › Scissors
- › Hole punch
- › Pen with clip
- › Sellotape

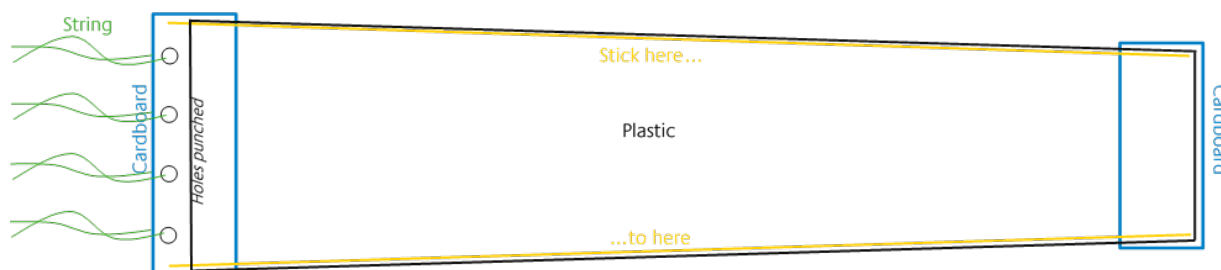


## Activity Overview

Create a windsock, then using a fan or hair dryer, test how your windsock works.

## Activity Plan

- › Cut a plastic bag into a 20cm x 15cm x 20cm x 10cm quadrilateral.
- › Cut one 15cm x 2cm and one 10cm x 2cm rectangles of cardboard.
- › Punch 4 holes along one of the rectangles of cardboard.
- › Place one piece of cardboard at each end of your plastic rectangle, ensuring that the holes stick above the edge of the plastic. Secure them together using sticky tape.
- › Now role up the plastic and card, sticking the long sides together to create a long tube.
- › Cut 4 lengths of string, each 10 cm.
- › Put each piece of string through one of the holes in the cardboard, tying the ends together to create a loop



\*Diagram not to scale. For representation only.

- › Loop each piece of string through the clip on your pen.
- › Hold the bottom of your pen so that your windsock is hanging from the top of the pen. Now point a hair dryer or fan at your windsock.
- › Try changing the direction of the air. If you can, change the strength. What happens?



## Learning Objective

- › Understand how a windsock operates
- › Discover why a windsock is an important bit of kit at every airfield



## Reflection Questions

- › When you move the direction that the air is coming from, what happens to the windsock?
- › If you can change the strength of the air flow, can you see a difference in the angle of the windsock?



## The use of windsocks when flying

Every single one of our 1,300 pilots relies on a windsock for every one of our 90,000 missions. This really simple bit of kit can be seen at the end of every runway, at every helipad and even on the side of the road. A pilot will check the exact weather before they get into their aircraft, but this can change quickly and can be quite different when you get to the end of the runway, ready to take off, so a windsock can really help to tell exactly what the wind is doing in that moment.



A windsock tells us two things. Firstly, it tells us which direction the wind is blowing. Using a compass, we can identify which direction the windsock is blowing. If it is pointing to the east, it means that we have a westerly wind, because the wind is coming from the west to the east.

Secondly, the angle of the windsock tells us how fast the wind is moving. You can buy different sized windsocks that will measure different speeds but if we have a 30 knots windsock then you would know that if the windsock is at a 90° angle to the pole, then the wind is blowing at 30 knots. If it is 45° from the pole, then the wind strength is 15 knots.

Windsocks are usually made of bright orange fabric so that they are clearly seen. Some windsocks will also have white stripes.