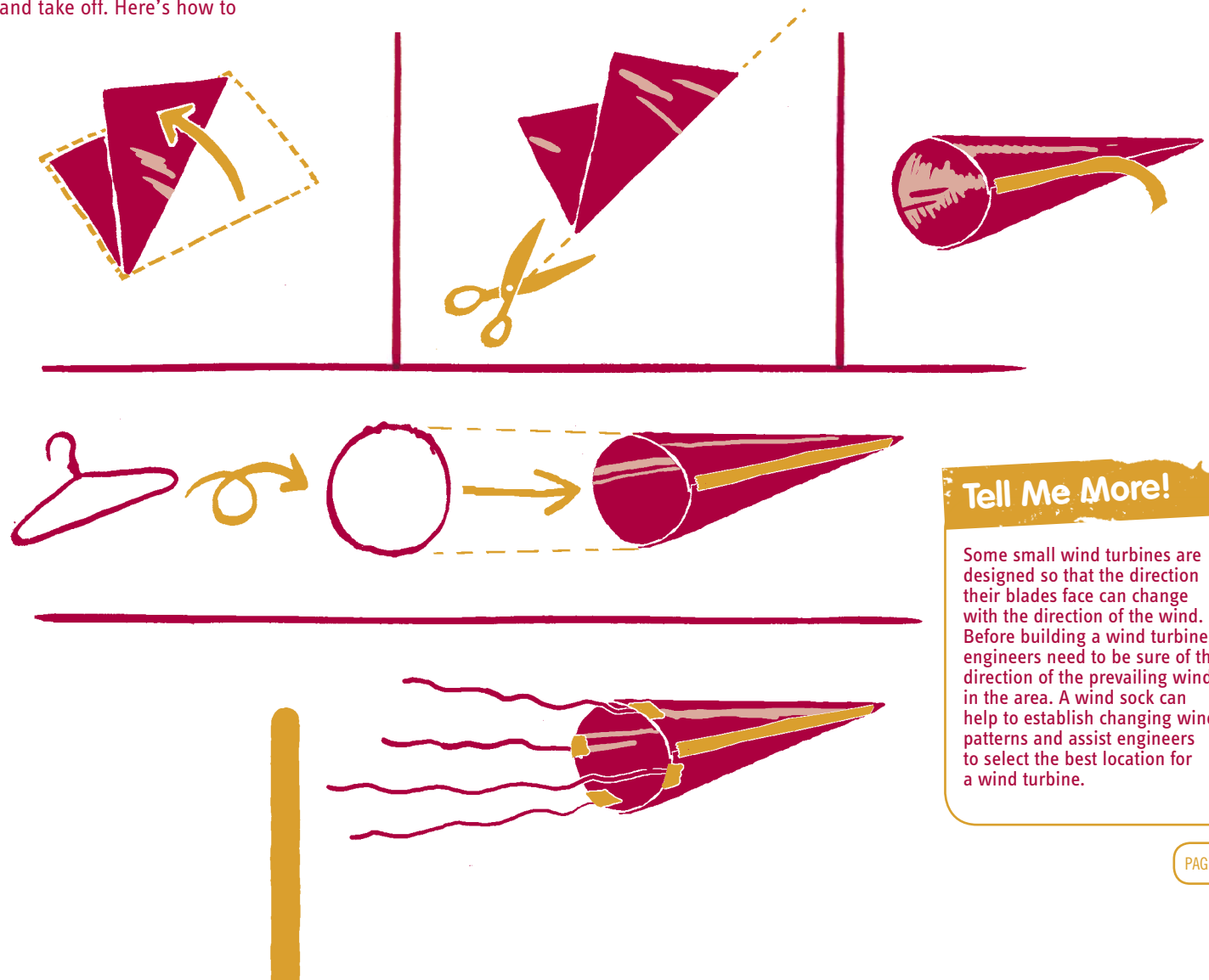


## Investigation 10b Make a wind sock

Wind socks are used in airports. They are important devices to enable airport traffic controllers to monitor the wind direction and determine the direction in which planes should land and take off. Here's how to make your own wind sock.

**YOU WILL NEED** A black bin liner •  
A wire coat hanger •  
Duct tape • A broom handle  
A scissors • A strong twine •

- 1 Lay the rectangular bin liner flat on the ground; fold it along the diagonal to make a triangular shape approx 50 cm long and 25 cm wide.
- 2 Cut along the diagonal, through both sides of the bin liner.
- 3 Open out one of the triangle shapes and fold the sides over to make a cone. Tape these sides together to secure. (You will not need the other triangle).
- 4 Unwind the coat hanger and bend it into a circular shape.
- 5 Fold the open end of the cone around the wire and hold it in place with the duct tape.
- 6 At four equidistant points attach four pieces of twine, measuring 25 cm long to the circular shaped hanger.
- 7 Bring the four pieces of twine together and tie them into a knot. Attach this to the top of the broom handle.
- 8 Secure the device in a windswept area of the school yard and, with the use of a compass, monitor the direction of the wind.



### Tell Me More!

Some small wind turbines are designed so that the direction their blades face can change with the direction of the wind. Before building a wind turbine, engineers need to be sure of the direction of the prevailing winds in the area. A wind sock can help to establish changing wind patterns and assist engineers to select the best location for a wind turbine.