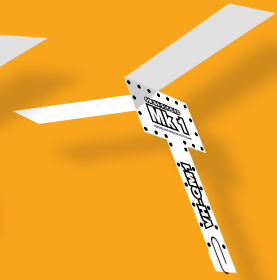
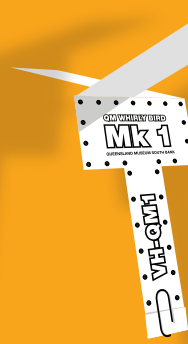
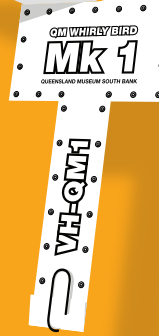


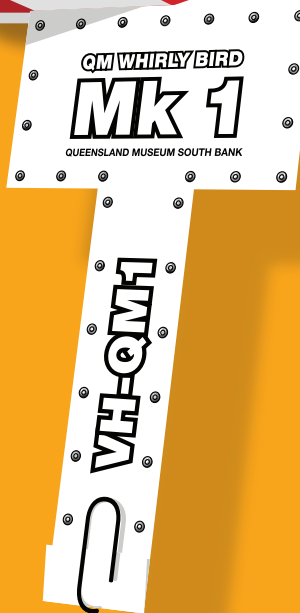
# Whirly Bird



Think about helicopter blades moving through air or seeds spinning as they fall from a tree.

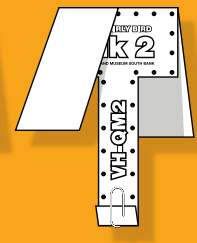
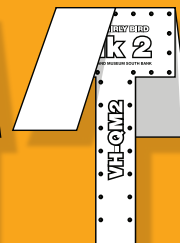
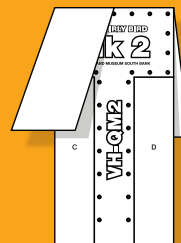
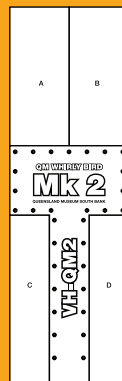
## What you need:

- Whirly Bird template x1
- Scissors
- Paper Clip



## What to do?

- Cut out the Whirly Bird shape along the solid lines only.
- Bend the parts (blades) labelled 'A' and 'B' downwards in opposite directions (as shown on the diagram).
- Fold the parts labelled 'C' and 'D' over each other so they overlap.
- Fold the bottom of the overlap section upwards and put a paperclip on it (as shown in the diagram).
- Hold the Whirly Bird just above the paperclip and throw it high like a ball. Watch it fall.



## What's going on?

As the Whirly Bird falls, the paper clip acts as a heavy weight and keeps the body pointed down. Whilst falling, air flows across the blades (A and B) and is deflected downwards. This causes an opposite force/push upwards and sideways on the blades. This force slows down the fall as well as making the bird spin, like a helicopter.

## Explore more

- Does the Whirly Bird spin in a clockwise or anticlockwise direction? Try reversing the bend on the blades. Does the Whirly Bird spin in the opposite direction?

