

# Paper Boomerang

Who doesn't love boomerangs? Best of all you can make one with just a piece of paper and some tape.

## What do I need:

- Piece of A4 paper
- Tape

## How do I do it?

**STEP 1** - Cut your piece of paper in half lengthways.

**STEP 2** - Fold your paper in half to find the middle. Then unfold it.

**STEP 3** - Fold both of the outside edges back into the middle so you have a long strip of folded paper.

**STEP 4** - Now, fold your paper in half the other way and then unfold it to find the middle.

**STEP 5** - Fold your oblong by 90 degrees as accurately as you can both forwards and backwards as shown.

**STEP 6** - Keep one side flat to the desk and 'squidge' the other side in. Repeat this on the other side so that you have an 'L' shaped piece of paper.

**STEP 7** - Use your tape at the middle and the ends to secure your boomerang in place so that it's ready for flight.

**STEP 8** - Throw your boomerang by 'flicking it' in a similar way to how you throw a Frisbee.

## What's going on?

Did you manage to catch it? Your boomerang might look awesome but how does it work?! Why does it come back? It's all to do with the fact that it's spinning.

As your boomerang spins one side is travelling forwards while the other side is travelling backwards. This means that each side of your boomerang is going at a slightly different speed relative to the surrounding air. This makes a very slight difference in pressure that causes your boomerang to come back to you.

## More Fun Please - Experiment like a real scientist!

- How can you make the optimal boomerang?
- Can you make it work with adding a little bit of weight?
- Did you manage to catch it yet?!?

