

Build a Paper Airplane with Launcher

Materials & Tools

Different colours of A4/Letter paper, and maybe different weights of paper so you can test the results.

A few pieces of cardstock

Ruler

Pencil

Hobby knife

Hole punch

Stapler

Rubber bands

Scissors

Stopwatch and a measuring tape for racing the planes

How to Make Paper Airplanes with Launchers

The Secret to Paper Airplanes that Fly Fast and Far!

Follow these tips to ensure success with your paper airplanes.

- Press every crease well. Sharp creases help a plane cut through the air smoothly and reduce drag. Use the back of your nail or the plastic part of your scissors to strengthen the creases and make them sharp.
- Always fold on a hard, flat surface so that you can make firm creases.
- Make sure your wings are angled up before launching. This helps with stability.
- Follow the folding instructions carefully. When folding, keep checking to make sure your model looks like the step-by-step drawings. If it doesn't ... don't panic! Just unfold one or two of the new creases until your model looks like an earlier drawing, then try again.
- Want even more distance? Consider adding a bit of tape or a paperclip to the nose. This helps with stability by moving the center of gravity forward, so the nose doesn't go straight up, forcing your paper airplane to immediate crash down.

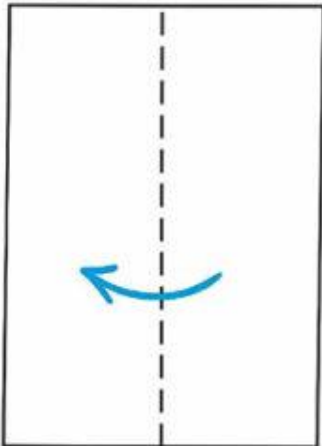
Folding Paper Airplanes

Paper Airplane Design 1

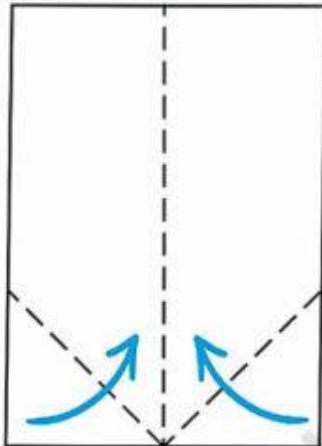
Grab a piece of paper. A4 or letter (printer) paper is perfect.

1. Fold the paper in half on the middle line as shown and re-open.
2. Fold the two bottom corners upwards into the center crease.
3. Now, fold the two sides into the middle crease.
4. Then, fold in half horizontally.
5. Fold down to form the wing.
6. Repeat on the other side.
7. Press those edges to get them nice and crisp and make that dart nose sharp!
8. Now lift the flaps so they come up and make nice wings.

PAPER PLANE 1



STEP 1 - Fold the paper in half on the middle line as shown and re-open

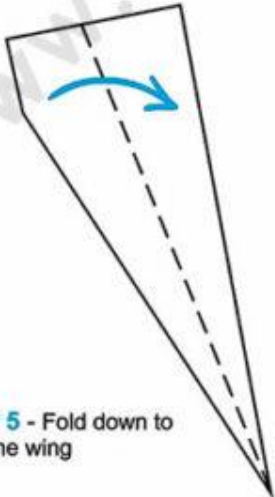


STEP 2 - Fold the two bottom corners upwards in to the center on the lines as shown



STEP 3 - Fold the two sides into the middle as shown

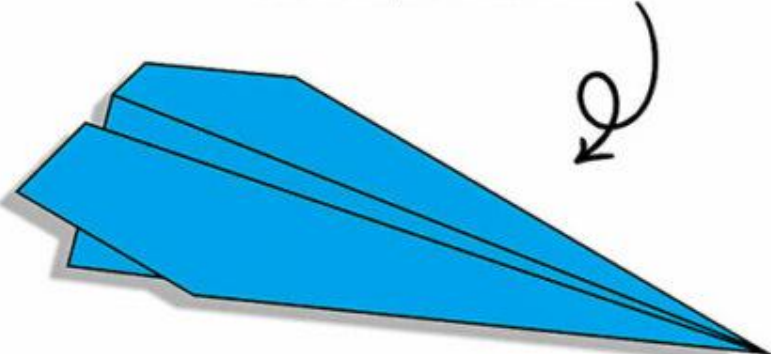
STEP 4 - Fold in half horizontally



STEP 5 - Fold down to form the wing



STEP 6 - Repeat on the other side

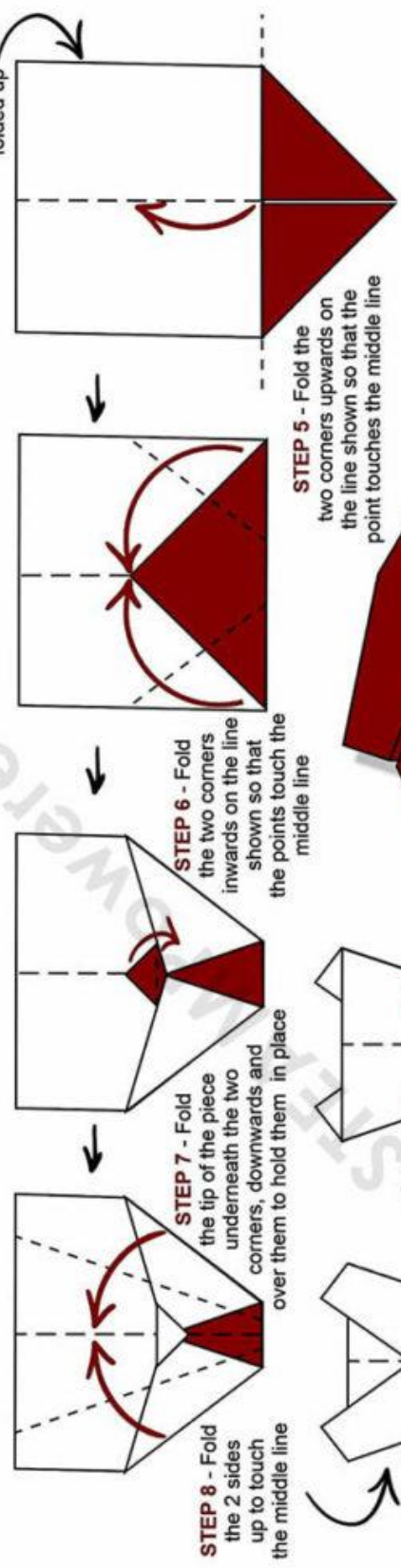
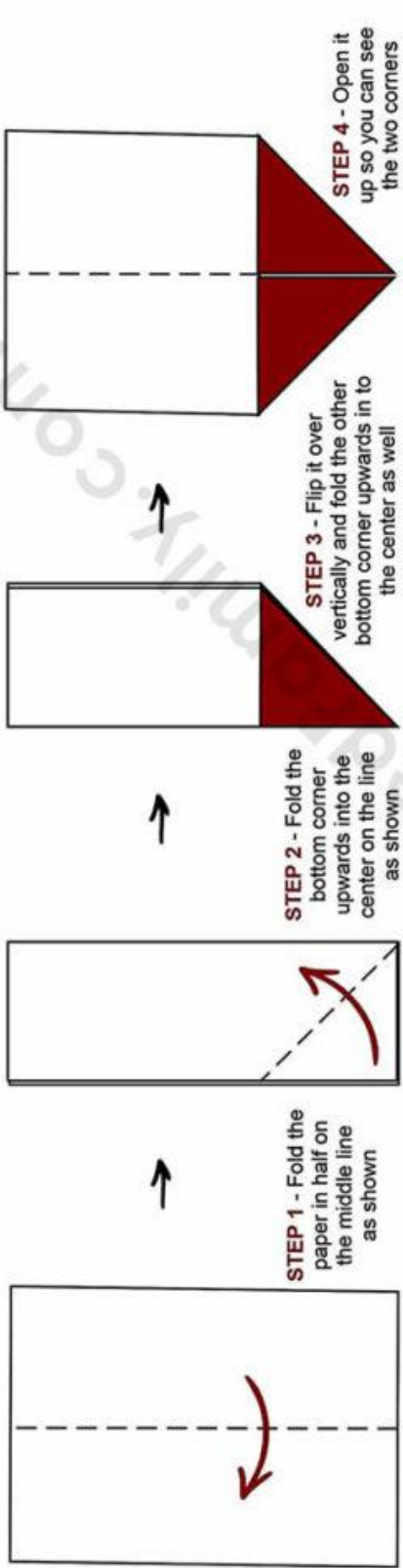


This is what your plane should look like. It is ready to launch!

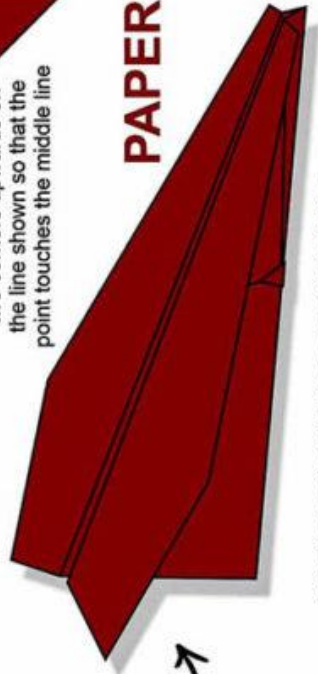
Paper Airplane Design 2

Using another piece of A4 or letter (printer) paper, follow all the steps in the correct order to create this second paper airplane design.

1. Fold the paper in half on the center line as shown. Remember to make nice crisp creases.
2. Fold the bottom corner upwards into the center on the line.
3. Flip it over vertically. Now fold the other bottom corner upwards into the center as well.
4. Open it up so you can see the two corners folded up.
5. Fold the left corner then the right corner upwards on the line shown so that the point touches the middle line.
6. Next fold the two corners inwards on the line shown so that the points touch the middle line.
7. Fold the tip of the piece underneath the two corners, downwards and over them to hold them in place.
8. Fold the two sides up to touch the middle line.
9. Turn it upside-down vertically.
10. Fold it in half.
11. Now hold the bottom of the plane, and lift the wings up.



PAPER PLANE 2



This is what your plane should look like. It is ready to launch!

STEP 9 - Turn it upsidedown vertically

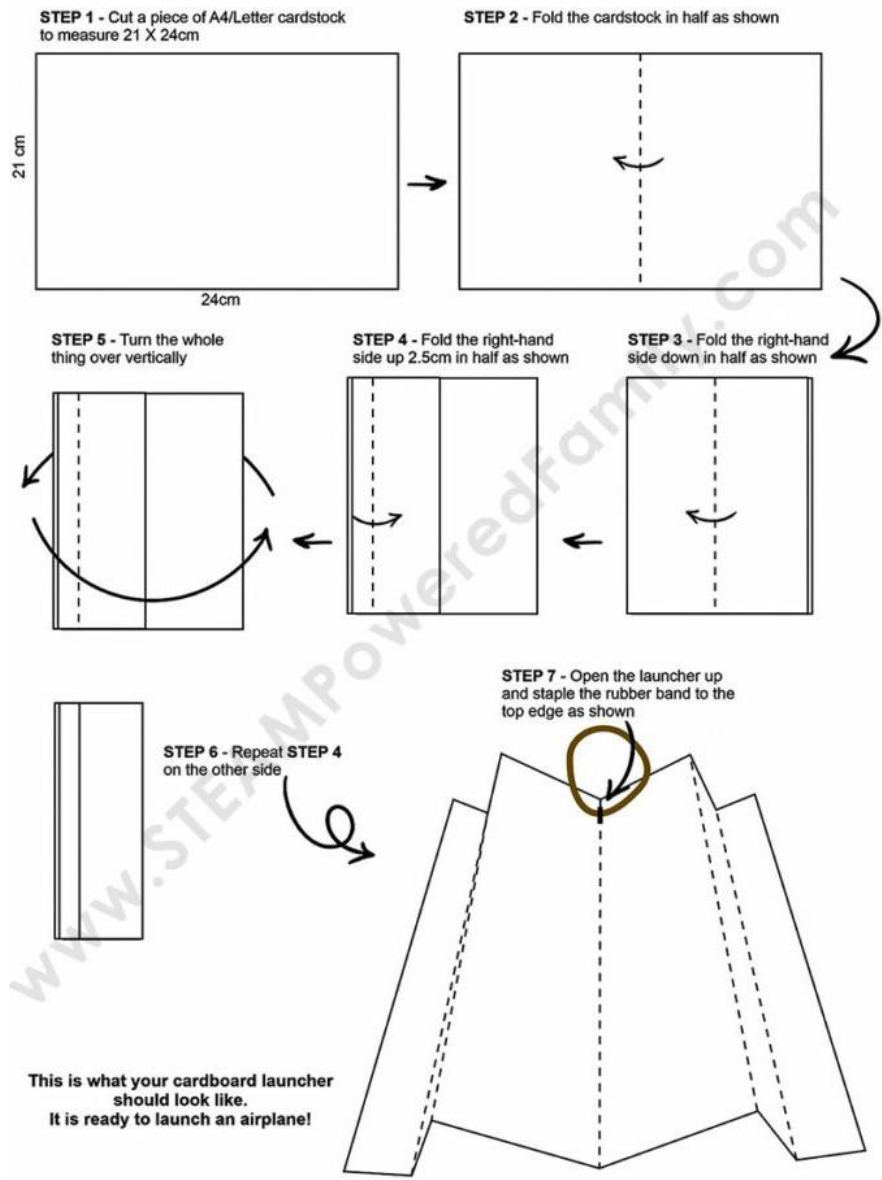
STEP 10 - Fold it in half

Directions for Cardstock or Cardboard Airplane Launcher

You can make this design with cardstock or cardboard. If you use cardboard, simply make sure you score the cardboard so you can fold it neatly.

1. Cut a piece of A4/Letter cardstock to measure 21 X 24cm.
2. Fold the cardstock in half as shown.
3. Fold the right-hand side down in half as shown.
4. Fold the right-hand side up 2.5cm in half as shown.
5. Turn the whole thing over vertically.
6. Repeat STEP 4 on the other side.
7. Open the launcher and staple the rubber band to the top edge as shown.

CARDBOARD AIRPLANE LAUNCHER



Rubber Band Paper Airplane Launcher

Another simple way to build a paper airplane launcher is to use elastics. There are two different ways you can do this. Both are quite easy, but kids may prefer the hole method if they have difficulty holding the paper airplane and elastic on the notch.

Cut a “V” notch about 2.5cm from the nose of the plane. Wrap the rubber band around your fingers on one hand (see diagram) and hook the notch you cut onto the rubber band, pull the plane back towards you and launch the plane into the air!

Punch a hole about 1cm from the nose of the plane and thread and loop a rubber band through the hole. Use your finger or a pencil to stretch the rubber band away from you and launch the plane into the air!

PRO TIP! You can use a small piece of tape or paper hole reinforcers to strengthen the notch and the punched hole before cutting or punching.