

Step 1: Build wing

First, glue rectangular spar pieces (red) down at back of wing
(put glue on rectangle)

Next, form two 45 degree angles (purple) on cut between the leading edge and lower wing section by running marker end over the cut line several times.

Then form airfoil by bending wing over on the cut lines until it rests smoothly on the spar.

Optionally form dihedral (a v in the wing shape) to help the plane self right by putting glue in the center section and use the guide piece (blue) to establish the correct angle. Simply line up the notch with the back fold on the wing

Step 2: Build Fuselage

First, remove side section of foam (black)
now remove paper from foam in red section.

Then apply glue to side section (purple arrows) and glue side of fuselage to bottom at a 90 degree angle.

Form curve in nose section and crease another double 45 at the tip of nose crease line (purple).

Form 45 deg angle on tail area to accept the tail section (purple)

Finally, glue tail and nose section ONLY in the blue areas



Step 3: Assemble tail and glue wing and tail to fuselage

First, tape the two sections together on side without the score lines.
Then create a 45 degree angle on each of the score lines (purple) using marker tip.

Apply glue to section between the two tail pieces (blue arrows).
Form angle using tail angle gauge.

Glue wing to top of fuselage, be careful to center the wing and move forward to notch.

Glue tail to fuselage.

Step 4: Balance plane - VERY important.

In order for any plane to fly, it must be balanced front to back on the wing.
This is called the CG or center of gravity.

The correct balance point is at the second crease on the airfoil.

Simply add clay into the nose until it balances on your finger tips at that point.

Feel free to experiment with the CG and the control surfaces to perform tricks such as loops and rolls.