

Science Saturday @ Home

Max Paper Airplane



Gathering Supplies:

Printable Max Airplane
Or
Printer Paper
Colored Pencils or Markers

How To Steps:

The Max Flyer - Folding Directions. Print out the Max's Paper Airplane.

1: Start with laying the paper so that the small arrow at the top points up. Then flip the paper over so that the design is on the bottom.

2: Fold the top left corner down towards you until the fold line (1) becomes visible. Repeat with the right corner. Make sure to make a tight crease along the lines.

3: Fold the left side over again to the next fold line (2). Repeat with the right side.

4: Fold the right half of the plane over the left half, long the fold line (3) and crease well. The outside edges of the wings should line up.

5: Fold the wings downs along the fold lines (4) on each side of the plane. You can fold the outer corners of the wings up to help with flight stability.

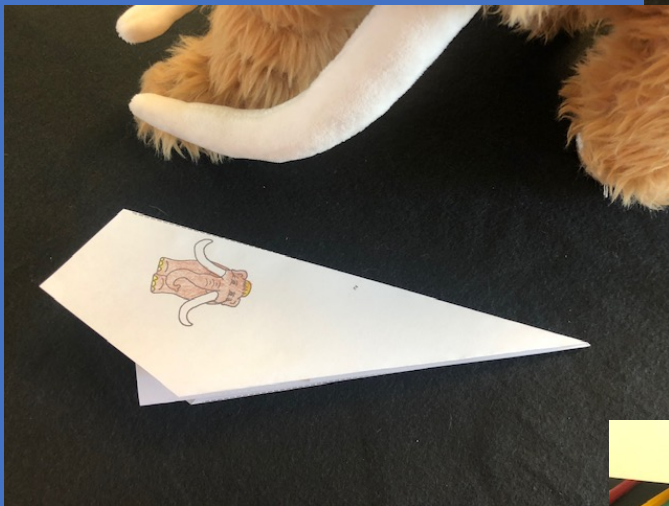
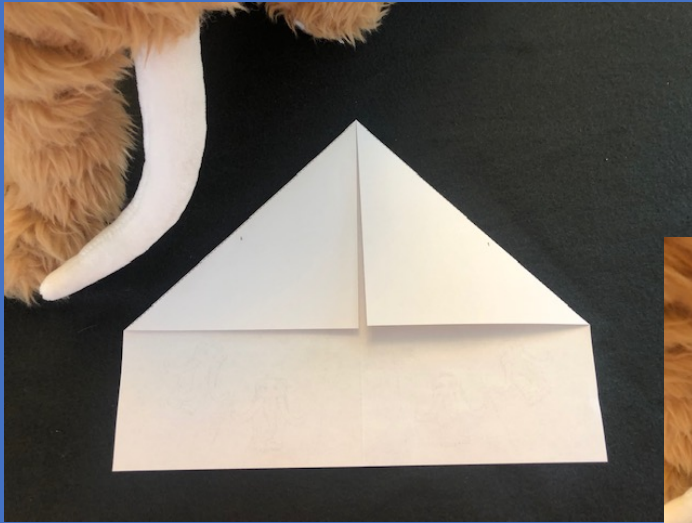
Tips

Make sure that the creases are tight, using your fingernail can help.

Make sure the folds for the wings are even at the center.

Tilt the wings up slightly away from the center of the plane to help with flight.

Max's Paper Airplane Building

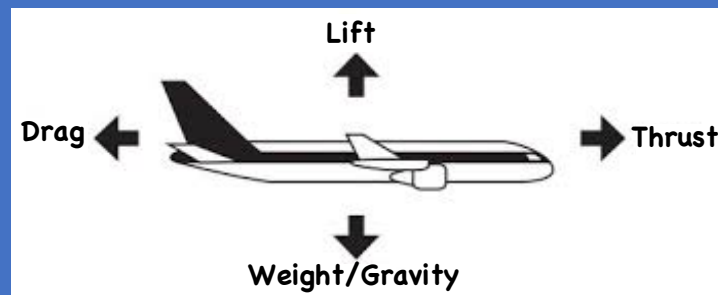


Did You Know?

Origins of the paper airplane are not well known. Paper airplanes were used for model building by the Wright Brothers and others when testing early plane designs. During World War II when metal and other materials were restricted for the war effort, paper airplanes became very popular as a fun toy. The Guinness Book of World Records has two entries for Paper Airplanes: Longest Flying Time (2010) at 29.2 seconds and Longest Distance (2012) at 69.14 meters, 226 ft. 10 inches.

How can something as heavy as a plane fly through the air?

Airplanes are very heavy and yet they can still fly through the air. This is possible because of 4 different forces that affect a plane. These are weight, lift, drag, and thrust. Weight is the force of the Earth's gravity on the plane. Drag is the resistance of air against objects moving through it, so a smooth plane shape and finish helps to reduce the drag force. Thrust is the force that moves planes forward and is created using propellers, jets, or rockets. Lift is the upward force that acts on the wings to pull the plane into the air. A plane can fly as long as its lift is greater than its weight and its thrust is greater than its drag.



For small aircrafts they have to be very careful about how weight is distributed. The airplane must be balanced in order to fly safely. Too much weight in the front or the back of the plane will make it unable to fly.