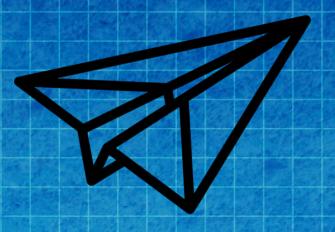
# FIU@HOME CREATE: PAPER AIRPLANES



#### **Getting Started**

Use this guide to test five different airplane models with similar but contrasting materials collecting evidence on which works best and why.

#### Materials

Printer Paper • Wax Paper • Construction Paper • Magazine Paper Heavy Cardstock Paper • Ruler • Scissors • Writing Utensil

### Step 1: Cut Your Materials

Take the materials and measure an 8" by 8" square with a ruler then mark each with your pencil.

Safely cut the printer, wax, magazine and heavy cardstock papers with scissors. Lay them out in a row.

## Step 2: Crease and Fold

Follow the folding guide on page 3 for each of the five different materials.

Quick tip: make sure each crease is defined and tight. This will help the airplanes keep their forms.



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### Step 3: Make a Hypothesis

A hypothesis is an educated guess. Looking at your five different paper airplanes, which do you think will be the most successful? The least successful? Why? Input your hypotheses in the below table:

	Rank what you think will be most aerodynamic (1 – 5)	Rank from farthest to shortest the flight of each airplane (1 – 5)
Printer Paper		
Wax Paper		
Magazine Paper		
Construction Paper		
Aluminum Foil		

#### Step 4: Observe

Now is the fun part, fly each of your planes. To keep it consistent try to launch each with the same amount of power from the same location.

Now observe what happened. Measure from the starting point to where each landed. Rank them from farthest to shortest distance in the above table.



#### Step 5: Communicate Results

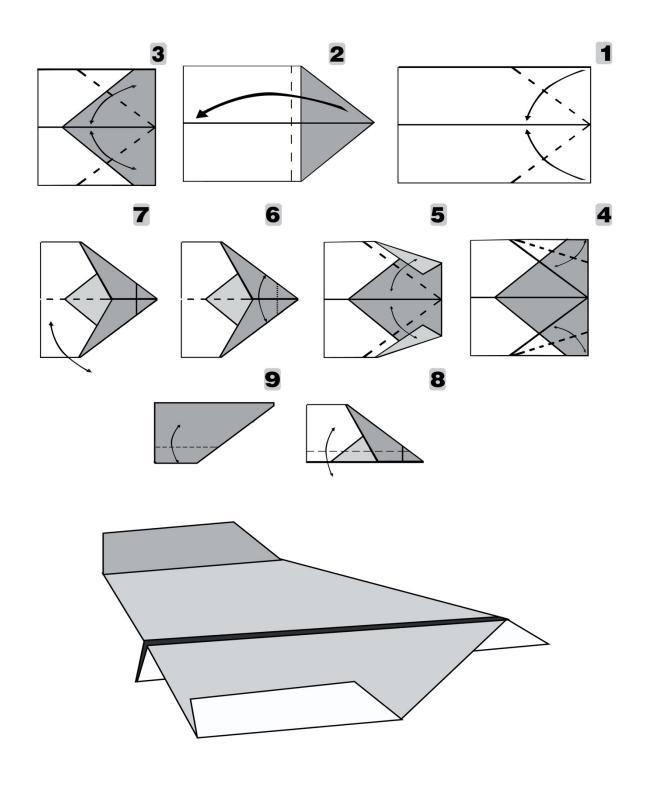
So what happened? Do you think your results were similar or different to others?

Learn more about the principles of physics (lift, drag, gravity and thrust) by comparing and contrasting results to others who performed this experiment. Share on our social media channels for all to see:



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# FOLDING GUIDE



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