

Your task is to redesign a glider out of paper that can travel the farthest distance before landing.

Step One: Get inspired!

Engineers sometimes are given a design and then are asked to make it better! Your task is to redesign a glider to make it go as far as possible in the air. Pick a glider you want to redesign.

Here are some ideas: <http://www.10paperairplanes.com/>

Step Two: Choose your Materials

- ❖ For materials only use paper and tape. Remember to only use paper and tape that you've found in your home. That's part of the fun!
- ❖ Things to think about:
 - How large do you want to make your airplane? Does size matter?
 - How much tape do you want to use? Remember that adding tape adds weight to your airplane.

Step Three: Making your Air Glider

- ❖ Build the paper airplane based on the directions you've found or a design that you like.
- ❖ Next, let it fly and measure how far the airplane went. Do you want to measure this distance in inches? Feet? Meters? What would help you be the most accurate?

Step Four: Redesigning your Air Glider

NOW comes the redesign. Carefully consider the different parts of the airplane.

- ❖ What causes an airplane to fly?
- ❖ What might you change about your airplane? The size of the "wings"? The weight of the plane itself? How tightly you folded the paper together?

Once you have an idea what to change in the design, build another airplane and test your ideas. Did it go farther?

If you liked this challenge, click below to find out more!

[Airplane Game](#)

[Air Glider Contest](#)

Step 5: Sharing your Air Glider on Instagram or email.

We want to see your air glider! With permission from your parent, or guardian, share a picture of your air glider for our instagram page. By direct messaging or emailing an image of your challenge, you are giving us written consent to redistribute the image on our official instagram page and [webpage](#).

- Instagram: @sciencecircuswhittier
- Email: sciencecircuswhittier@gmail.com

