Design a Paper Airplane
Primary Audience: Elementary School

Description: Who doesn’t love to make an airplane with a piece of paper and some basic folds? In this challenge, make it your own and be creative - design the BEST paper airplane!

Materials:
- Paper (printer paper will work fine; you could try cardstock too)
- A good spot to test your airplanes, such as a hallway or large room

To Make an Airplane, all you need to do is fold your paper. Below are two designs to try, or make up your own design!

Images from extension.wisc.edu
Challenge:
1. Your challenge is to design an airplane that will fly the farthest. After you have made a plane, test out your plane in a spot like a hallway to see how far it flies. If desired, place a small object like a toy to mark where it landed the first time.
2. Now make some changes to your design to see if you can get it to fly further than it did the first time. Test your plane again. Did the modification work?
3. Redesign and test again as many times as you would like!

Extension: The distance is determined not only by the plane design but also by the way you throw it. To have a better idea of how far your plane flies, throw it 3 times, measure the distance each time, and take an average (add all 3 distances and divide by 3) to find the average distance.

Additional Resources: Reach out the COSI Department of Science Content if you have any questions or comments.

Show us your completed Science Challenges - just tag us at @cosi (Twitter) or @cosiscience (Instagram and Facebook), and we’ll share it with our followers too!