

## ACTIVITY!

# GLIDER CONTEST

## IDEAS FOR SUPPLIES

paper • templates

**In this activity, you will design paper airplane gliders to experiment with the effects of wind. Do this experiment on a windy day with friends.**

**1** Make three different glider patterns using the templates for Master Glider, High Glider, and Flying Wing. For templates and more detailed instructions go to [nomadpress.net/templates](http://nomadpress.net/templates).

**2** To create the Master Glider, take a piece of 8½-by-11-inch paper. Cut off the bottom 2 inches using a ruler to measure. Fold the paper in half lengthwise and fold the top down 1½ inches.

**3** Fold the top two corners down to the center, creating an airplane look. Fold the wings down and tape them together. Bend the wings up a little to help with the glide.

**4** To make the High Glider, fold another piece of 8½-by-11-inch paper in half lengthwise. Open it back up but make sure you can see the crease.

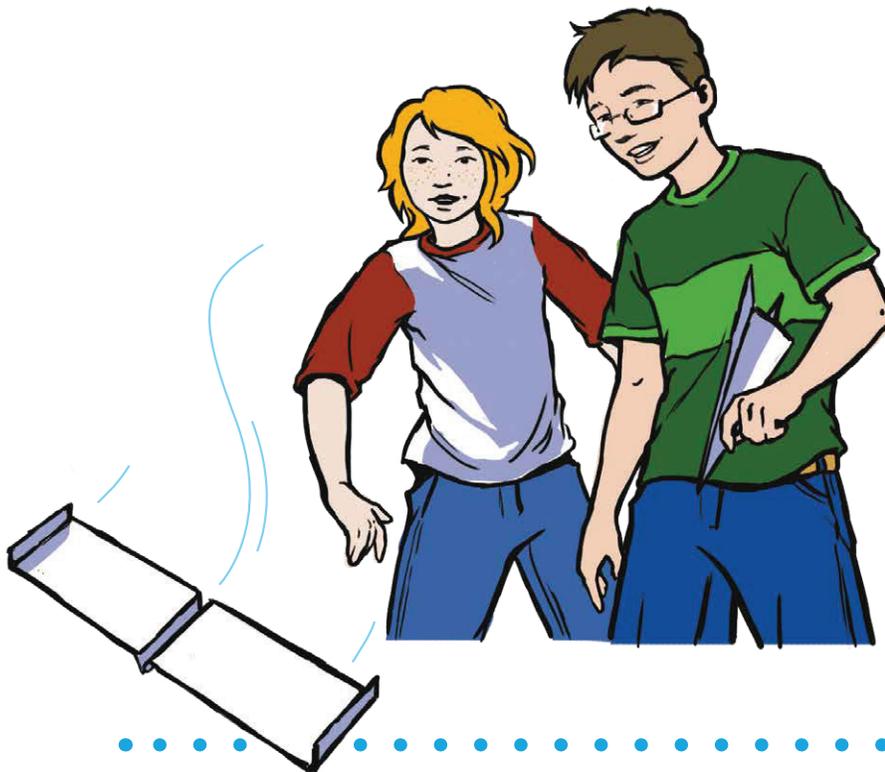
**5** Fold the top two corners down into the center. Fold the point down to the crease you created. Fold the top two corners to the center and fold it lengthwise in half. It should look like a plane. Fold out the wings in your own design and you have your High Glider ready to test.

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**6** To make the Flying Wing, fold a piece of 8½-by-11-inch paper in half lengthwise. Fold the top third of the paper down from the open end. Fold the top down again to the bottom of the previous fold. Now fold the paper in half away from you. Fold down the wings and design them so they look like they can fly.

**7** Now that your gliders are all built, examine them. Which glider do you think will fly the farthest? Write your hypothesis in your science journal.

**8** Test each glider design you make. Try to throw the gliders all the same way so you can compare them. Which one flies the farthest? Why?



**THINK ABOUT IT:** The lifting force that lifts the gliders is the same force that acts on the blades of wind turbines and makes them spin. What can you learn about the shape of wind turbines by testing different shapes of gliders?