

ACTIVITY

INVESTIGATE THE SCIENCE OF PAPER AIRPLANES

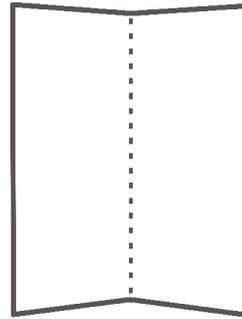
THE AGE OF FLIGHT was just taking off in the 1920s. The only airplane the average citizen would have flown at that time would have been one made of paper! Paper airplanes use some of the same science as real planes—including physics. By adjusting the weight of paper used in your airplane you will influence the distance your planes can fly.

You'll Need

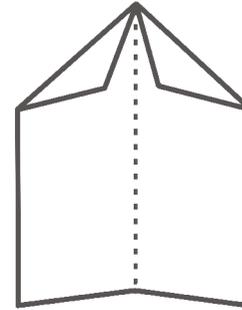
- ✎ 1 sheet 8½ by 11-inch (216 by 279-millimeter) printer paper
- ✎ 1 sheet 8½ by 11-inch (216 by 279-millimeter) construction paper
- ✎ 1 piece 8½ by 11-inch (216 by 279-millimeter) posterboard
- ✎ Duct tape or chalk
- ✎ Tape measure
- ✎ Pencil and notepad

1. Fold all three pieces of paper into the airplane shape:

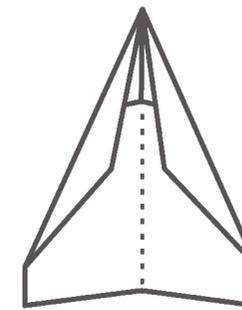
- a. Fold paper in half lengthwise (figure a).
- b. Fold each corner at one end to form triangles (figure b).
- c. Fold triangles to meet in the middle of the plane (figure c).



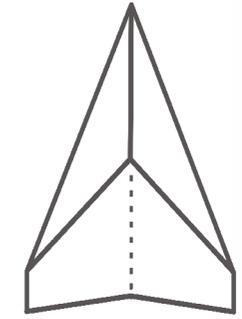
a



b



c



d

d. Fold the middle of paper in half where the original fold was made.

e. Fold both “wings” down as shown (figure d).

2. Go to a location where you can test the distance of the planes’ flights. It should be a wide open space.

3. Tape a line on the ground, or draw a line with chalk. This is where you will stand to throw your plane. It’s important that you stand in the same spot each time so that your measurements are consistent.

4. Throw the paper plane five times. Record the distance for each flight.

5. Repeat for the construction paper plane and the posterboard plane.

6. Average the distances for each plane. (Add up the distances, then divide by 5.)

7. Use the average to record the planes’ flight distance.

8. Ask yourself which plane flew the greatest distance?