

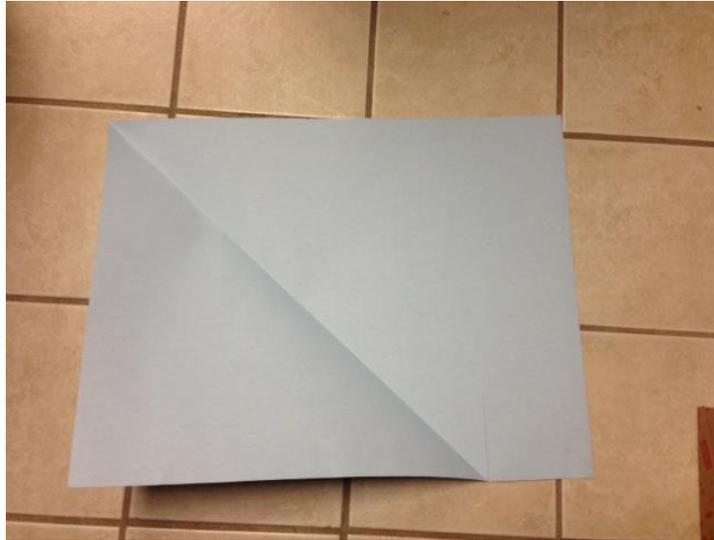
**Instructions for Making Pinwheels:**



**Materials:** (1) Poster paper (ideally with each side a different shade or color) (2) Ruler or measuring tape (3) Scissors (4) Hole Punch (5) Hole Punch Reinforcements (6) Brass Fasteners (7) Eraser

**Directions:**

1. Cut paper into a square of whatever size that you want your pinwheel to be. If you have a rectangular piece of paper to start with, you can fold your paper diagonally into a triangle to create a square and cut off the excess paper.



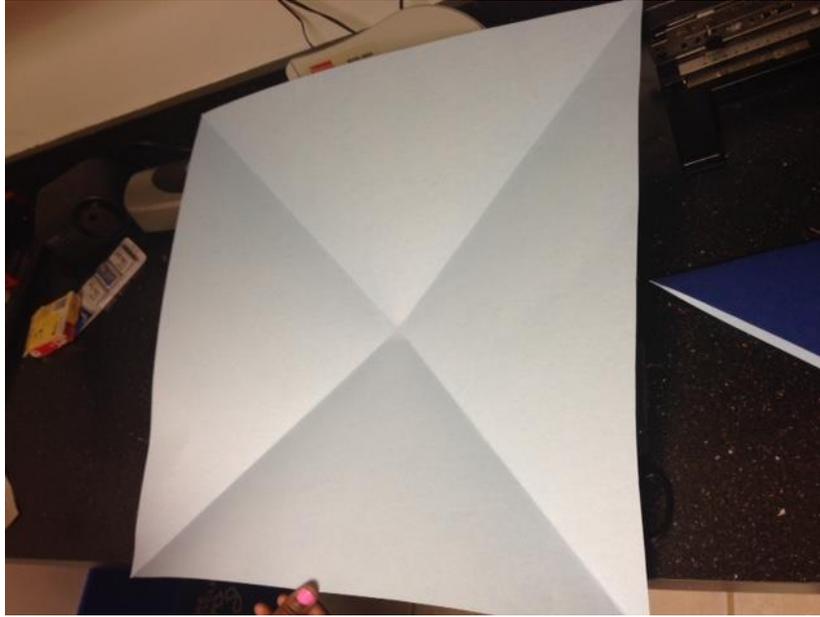
*Figure 1: Beginning with a rectangular sheet of poster paper*



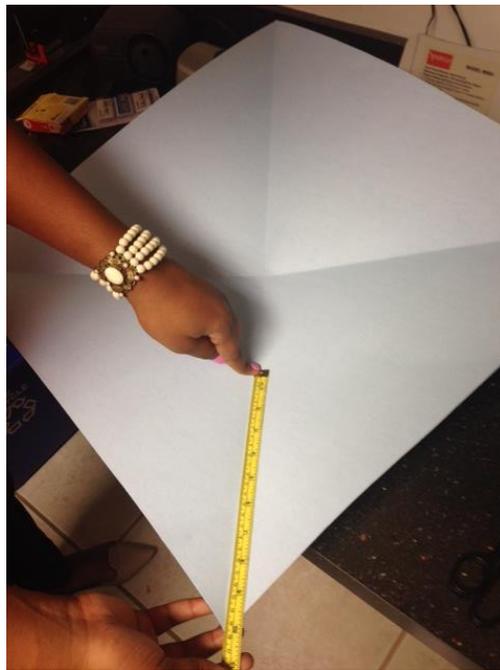
*Figure 2: Folding the paper into a triangle and cutting off the excess paper*

2. Fold the square into a triangle by pulling two opposite corners together, then unfold. This will create a diagonal crease across the square. Repeat with the other two opposite corners to create creases in the shape of an X across the entire square. This will divide the square up into four triangular sections. (Note: if you folded your paper into a triangle on the previous step to create a square, you will already have one of these creases.)

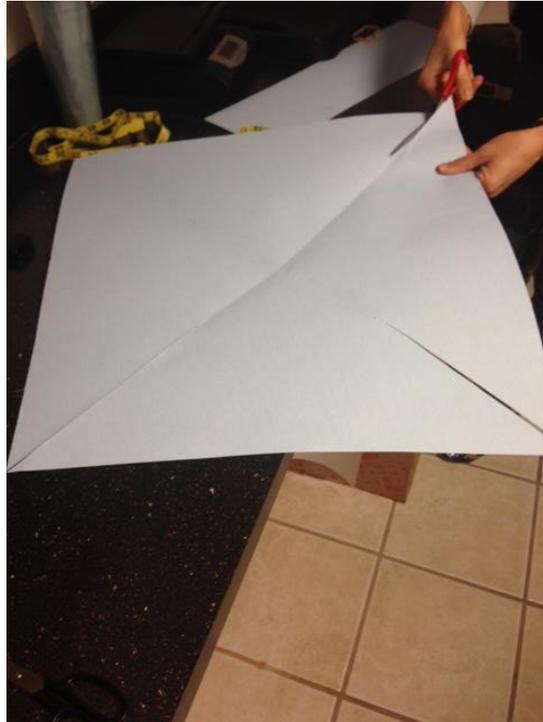
*Figure 3: Folding across the diagonal to create a square and cutting off excess paper*



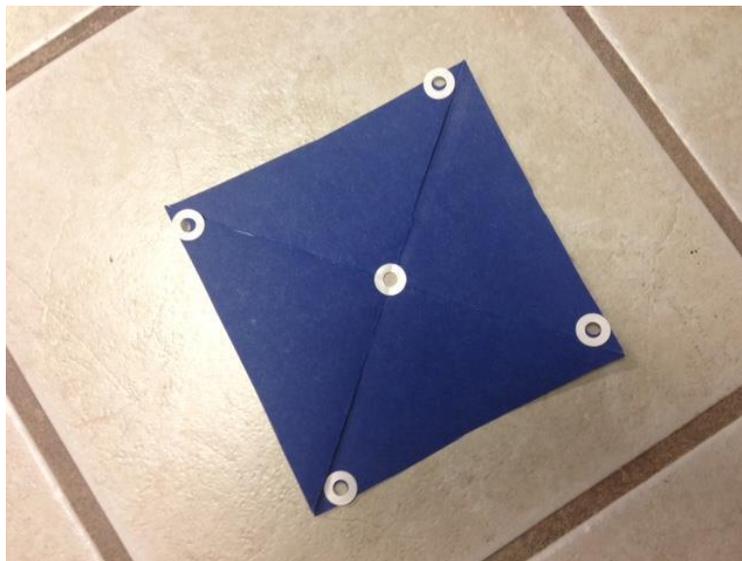
3. From each corner, measure out  $\frac{2}{3}$  of the way to the center of the square, and mark this distance with a pen or pencil.



4. Cut each corner up to the  $\frac{2}{3}$  mark that you made in the previous step.



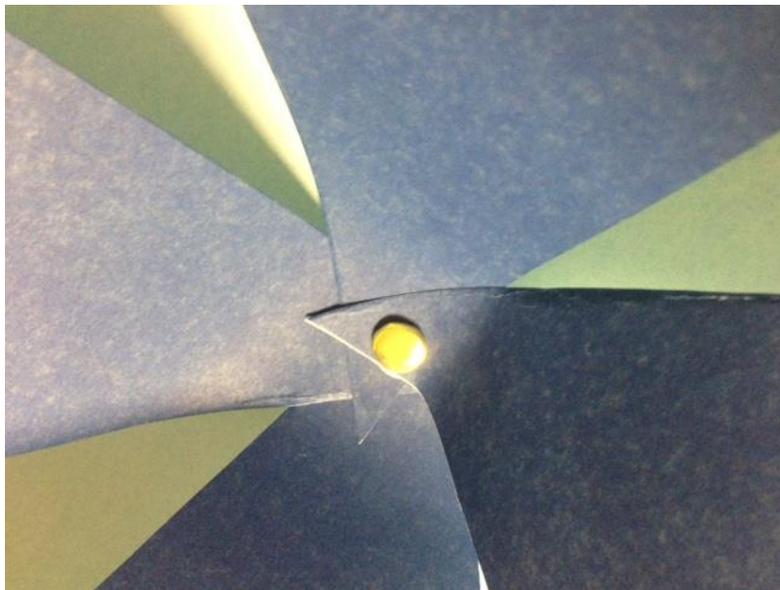
5. Using a hole punch, punch one hole in the center of the square. Then, punch one hole in the right side of each the four triangular sections. Apply hole punch reinforcements (on the side that you want to be the background color) to reinforce each hole.



6. Next, pull each corner with the hole to line up with the center hole. This should give you the pinwheel shape.



7. Fasten all of the corner holes to the center hole by inserting a brass fastener through all of the holes



8. Optional Step: To make the pinwheel more likely to spin, place an eraser on the back of the brass fastener. You can attach a stick to the back if you wish.

