## Papel Picado: Mexican Paper Craft

Papel picado is a traditional Mexican folk art. The name papel picado means cut paper. Papel picado is used as decoration for holidays throughout the year and especially for Día de Muertos celebrations. Your family can participate in this tradition-all you need are scissors and paper. As you fold and cut the paper, look for opportunities to talk about shapes, symmetry, and other key early math ideas. Conversations about math help promote children's math learning!


## Materials

- 1 piece of paper (Any rectangular or square piece of paper will do.)
- 1 pair of child-safe scissors
- 1 pencil (To make cutting easier, first draw the shapes on paper as a guide.)


## Instructions

| Step 1: Place the paper so the long sides <br> are on the top and bottom. | Step 2: Fold the paper in half by bringing <br> the two short sides together. |  |
| :--- | :--- | :--- |
| Step 3: Draw a half-circle on the folded <br> edge. | Step 4: Cut the half-circle on the folded <br> edge. What shape do you think you'll see <br> when you unfold the paper? |  |
| Step 5: Unfold the paper. What shape do <br> you see? | Step 6: Fold the paper in half again by <br> bringing the two long sides together. |  |
| Step 7: Draw two triangles on the folded <br> edge. You can make them in different <br> sizes! | $\ddots$ | Step 8: Cut the two triangles on the <br> folded edge. What shape do you think <br> you'll see when you unfold the paper? |


| Step 9: Unfold the paper. What shapes do <br> you see? | Step 10: Fold the paper back in half by <br> bringing the two long sides together. |
| :--- | :--- | :--- |
| Step 11: Draw four triangles on the <br> opposite side of the folded edge. You <br> can make them in different sizes! | Step 12: Cut the four triangles on the <br> opposite side of the folded edge. How <br> many triangles will you see when you <br> unfold the paper? |
| Step 13: Unfold the paper. How many <br> triangles do you see? | Step 14: Admire your papel picado! Compare the top and <br> bottom halves. What shapes look exactly the same (are <br> symmetrical)? Compare the left and right halves. What do you <br> notice? |

## Explore Math While Making Papel Picado

Having conversations about math can promote children's math skills. This activity offers many opportunities to find and talk about math:

- Shapes. Talk about the features of shapes: "How do you know this is a triangle?"
- Symmetry. If you fold a piece of paper in half and cut on the folded side, it looks the same on both sides of the fold. The shape is symmetrical, as if it were reflected in a mirror! Compare both sides of your papel picado: "What shapes are the same on the right side and the left side? Why?"
- Spatial relations. Talk about where each shape is on the paper: "The circle is in the center of the paper. What shape is next to/above/below it?"
- Make predictions. Ask your child to predict what the shapes will look like before unfolding the paper. Then open the paper and compare what you see to what you predicted you would see.
- Compare. Talk about how shapes are the same or different: "Which one is bigger, the circle or the diamond? How are the triangle and the diamond different and similar? Why?"

These steps are just to get you started. Explore different ways to fold and cut the paper. Plan what you want your final design to look like and see how you can fold and cut to get there. For example, you can fold the paper twice: from top to bottom and then from left to right. By doing this, where should you cut triangles to make diamonds? Where to make triangles? You can also experiment with cutting other shapes, such as squares and rectangles. Have fun making papel picado and exploring math!

