

## Build Your Own Tangram Set

**Let's create!** Do you want to do a puzzle? Or maybe you want to create your own unique sculpture? Do you want to do both of those things at the same time? Do you have no idea where to start for either of those things? Have no fear, tangrams are here! A tangram is a geometric puzzle comprised of seven pieces that can fit together perfectly into a square but can also be rearranged into a multitude of designs and pictures. Tangrams were invented in China approximately 200 years ago and are created by cutting just one piece of paper into seven shapes. The design possibilities with tangram shapes are endless, and it only takes some paper and scissors. You can even take your tangrams to the next level by using clay!

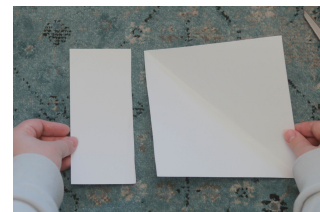
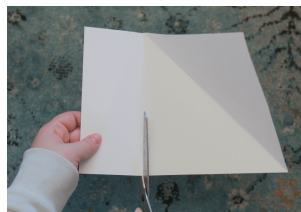
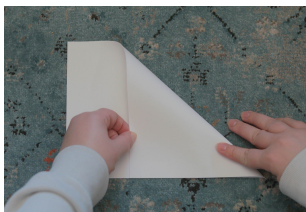


### Materials:

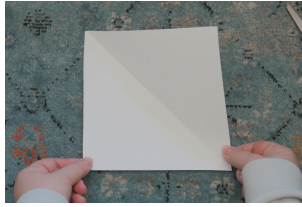
- Ruler
- Paper
- Scissors
- Things to decorate your tangrams like paint, markers, etc.

### Steps

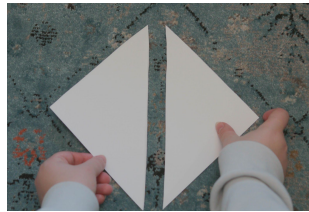
1. Measure and cut the paper into a perfect square. If you want the decoration to be more abstract, you can decorate your paper now, before you fold and cut. If you want each of the seven pieces to be decorated differently, wait until after you cut to decorate.



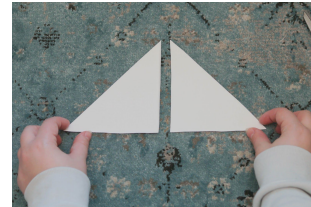
2. Once your paper is a perfect square, fold in half diagonally



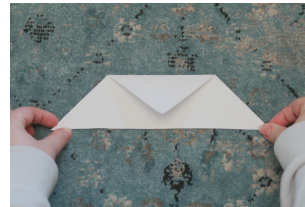
3. Cut along the diagonal fold. You now have two big triangles. Set one big triangle aside.



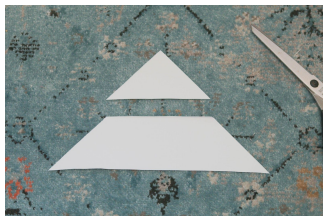
4. Fold one big triangle in half. Open back up and cut along the folded line, creating two medium triangles. Set the two medium triangles aside. Grab the remaining big triangle.



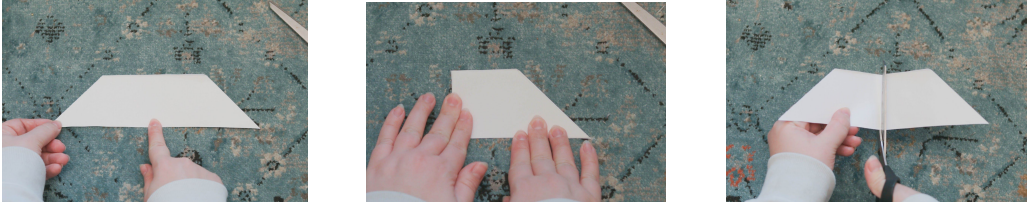
5. Fold the big triangle in half then open back up. Fold in half again, but this time folding the top point down to the bottom.



6. Cut along the fold created by folding the top point down. You now have a trapezoid and a small triangle! Set aside the small triangle.



7. Fold the trapezoid in half and cut along the folded line. Set one half aside.



8. On the other half, fold the pointy side down so it meets up with the bottom edge. Cut along the folded line. You now have a mini triangle and a square! Set mini triangle and square aside.



9. Grab the other trapezoid half, and position the shape so the pointy part is facing left and positioned on top.



10. Fold the top right corner down to meet with the bottom left corner. Cut along the folded line. You now have a parallelogram and another mini triangle!



11. Your set is complete! If you didn't decorate your paper before, now's the time. If you want to create a more permanent set with clay.





12. Shapes time! Play around with your shapes and see how they can fit together to create different images. With the help of a grownup, you can look-up tangram images on the internet as inspiration.



What was the most challenging part of the process? What was the most fun? What images will you make with your shapes?

**Caregiver tip:** If your learner is wearing out their paper tangram set, level up with a homemade clay set! On a sheet of wax paper, roll out a ball of clay into a slab. Lay your paper tangram shapes on top of the clay and carefully use the paper as a guide to cut out each shape. Let fully dry and enjoy a sturdy set!