



BREWING UP SOME STEAM

TANGRAM TANGLE

What are tangrams?

An ancient Chinese 7 piece puzzle made from a square!

Let's explore where math meets art...

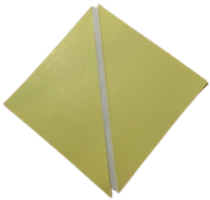
Materials You Will Need:

- a square of heavier weight paper
- scissors (you can also crease your paper and gently tear)

DIRECTIONS

Instructional video:

York Public Library YouTube Channel
yorkpubliclibrary.org



1. Start with a square piece of cardstock. Fold it in half on the diagonal and cut (or crease and tear) to create 2 large triangles.



2. Pick up one of your triangles and fold it as shown. Cut into 2 triangles. Set these 2 aside. They are your first 2 tangram shapes.



3. Pick up your other big triangle. Fold it as you did to the other one in step 2 but don't cut it. Open it back up and fold a second time as shown. Cut along this second fold to get a smaller triangle. This is your 3rd tangram. Set it aside.

Tangram Tangle (cont.)



4. Pick up your last remaining piece. Cut it along the fold you already made. These 2 sections will each be cut differently. Pick up one of them and fold it as shown. When you cut along this line, you will get a small triangle and a square. These are your 4th and 5th tangram pieces.

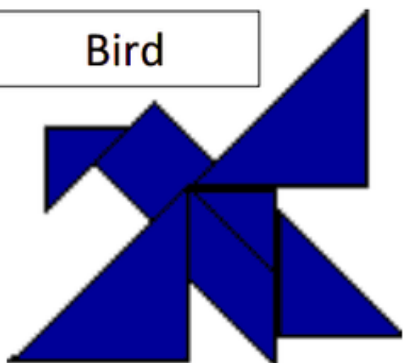


5. Pick up the last shape. Fold it as shown. Cut into another small triangle and a shape called a parallelogram. These are your 6th and 7th tangram pieces! Can you put them all back together in a big square?

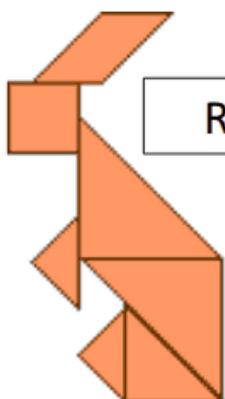
Take this further:

- Sort your tangrams according to shape and size. Make patterns with the pieces.
- Try and complete puzzles with all 7 pieces such as the ones on the next page.
- Design your own 7 piece tangram puzzle for someone else to solve.
- Challenge someone else to make them back into a square.

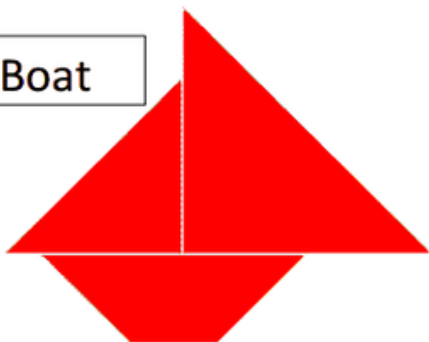
Bird



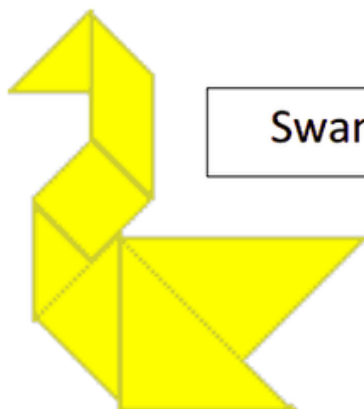
Rabbit



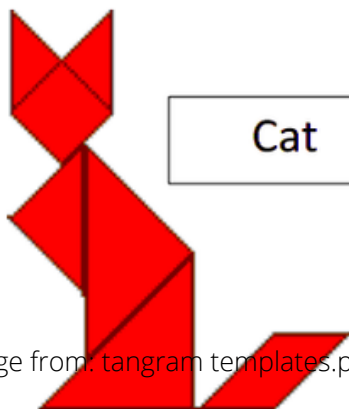
Boat



Swan



Cat



House

