Got Paper? Got Math!
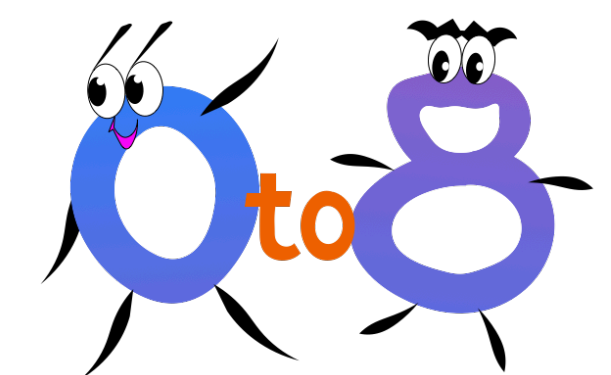
Naomi Reeley

Lisa Grant

Carolyn Pfister

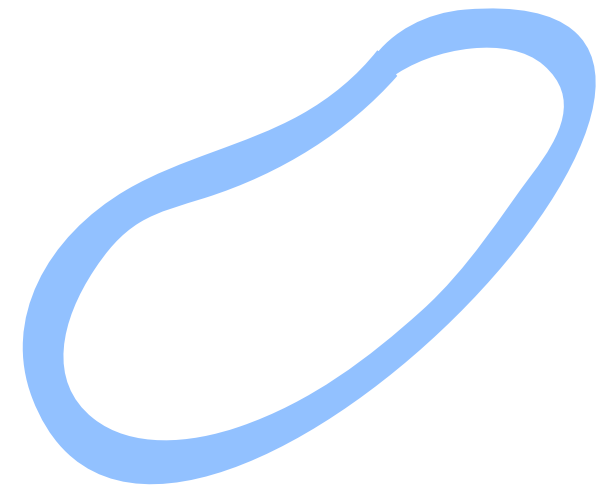**Try the activities with us
What math do you notice?
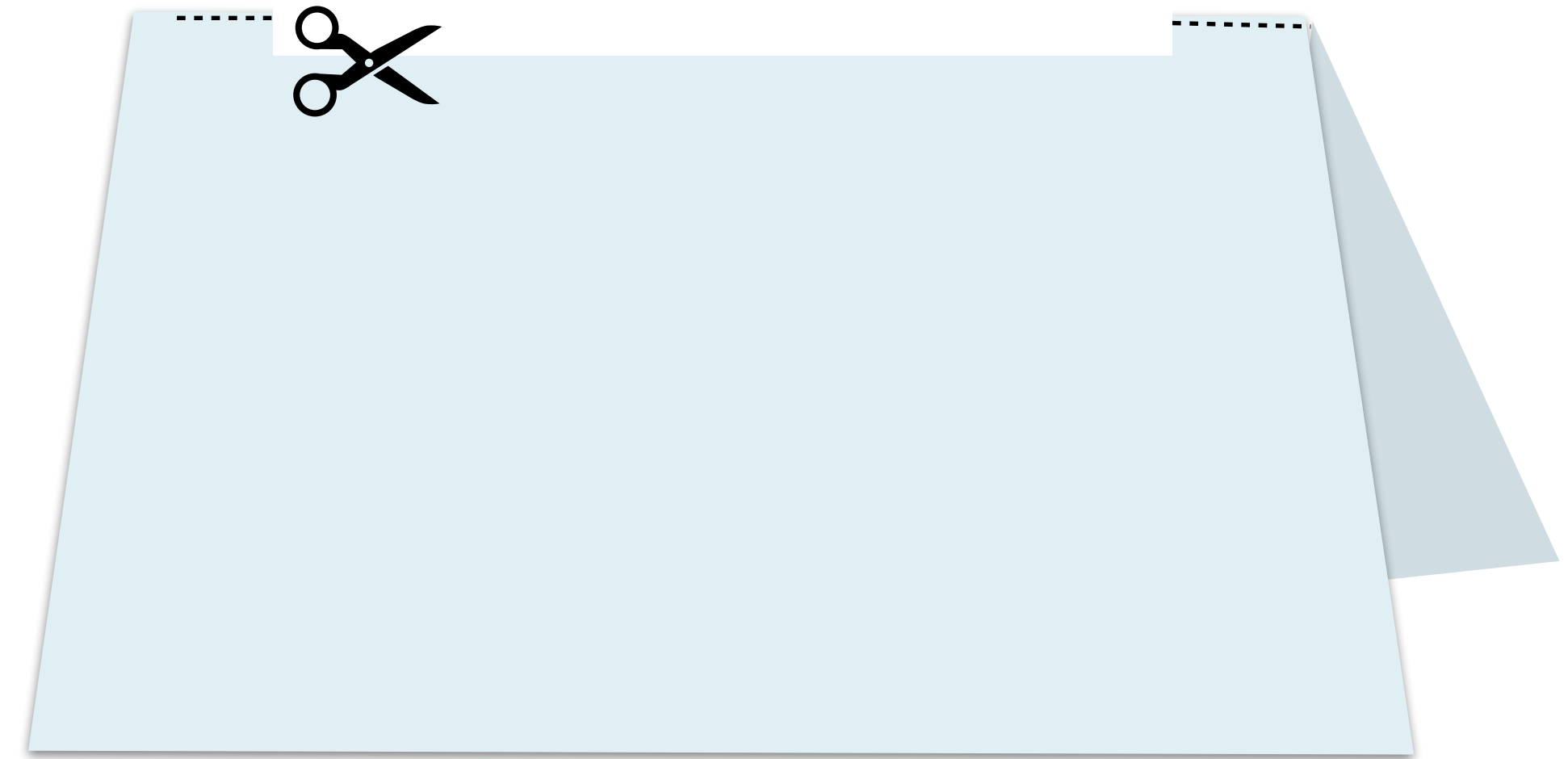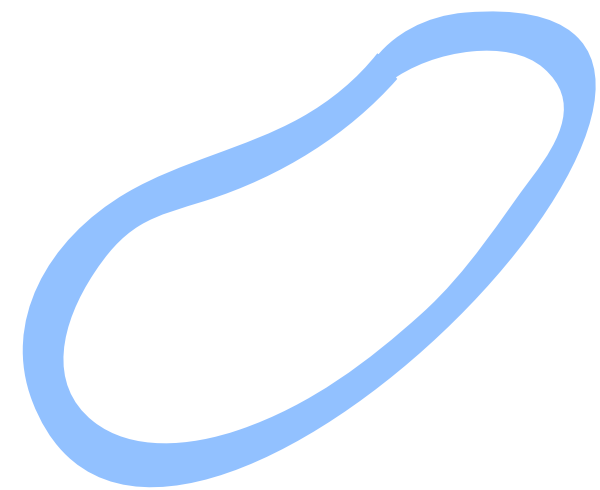Contribute to the chat and jamboard
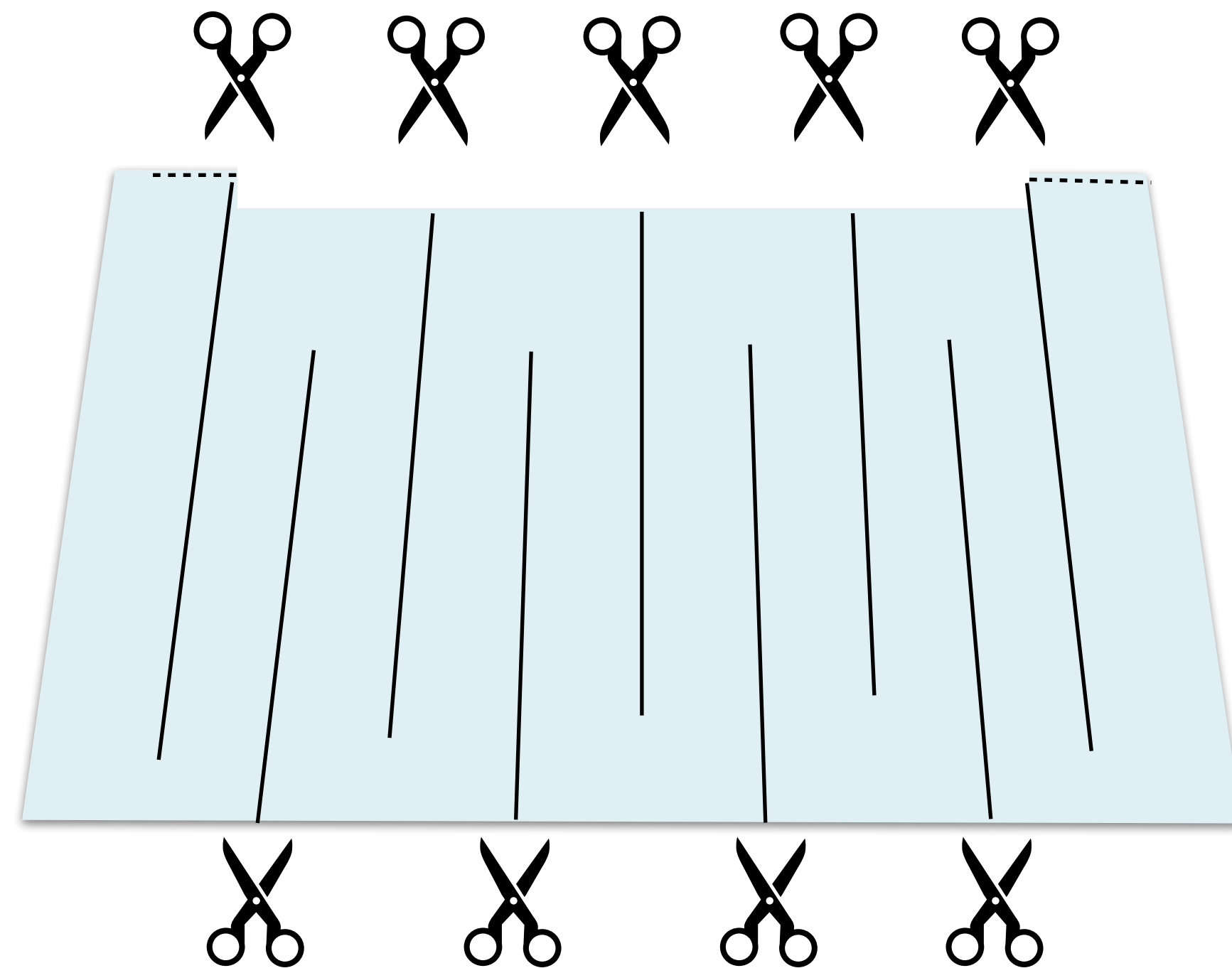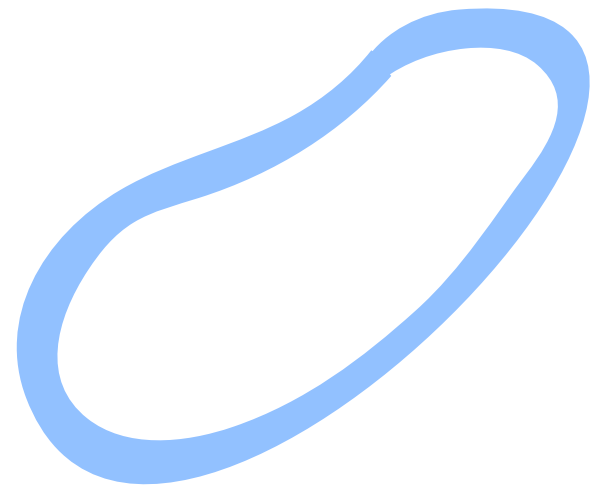https://bit.ly/3qJdCpl**

Can you walk through paper?

Fold paper in half
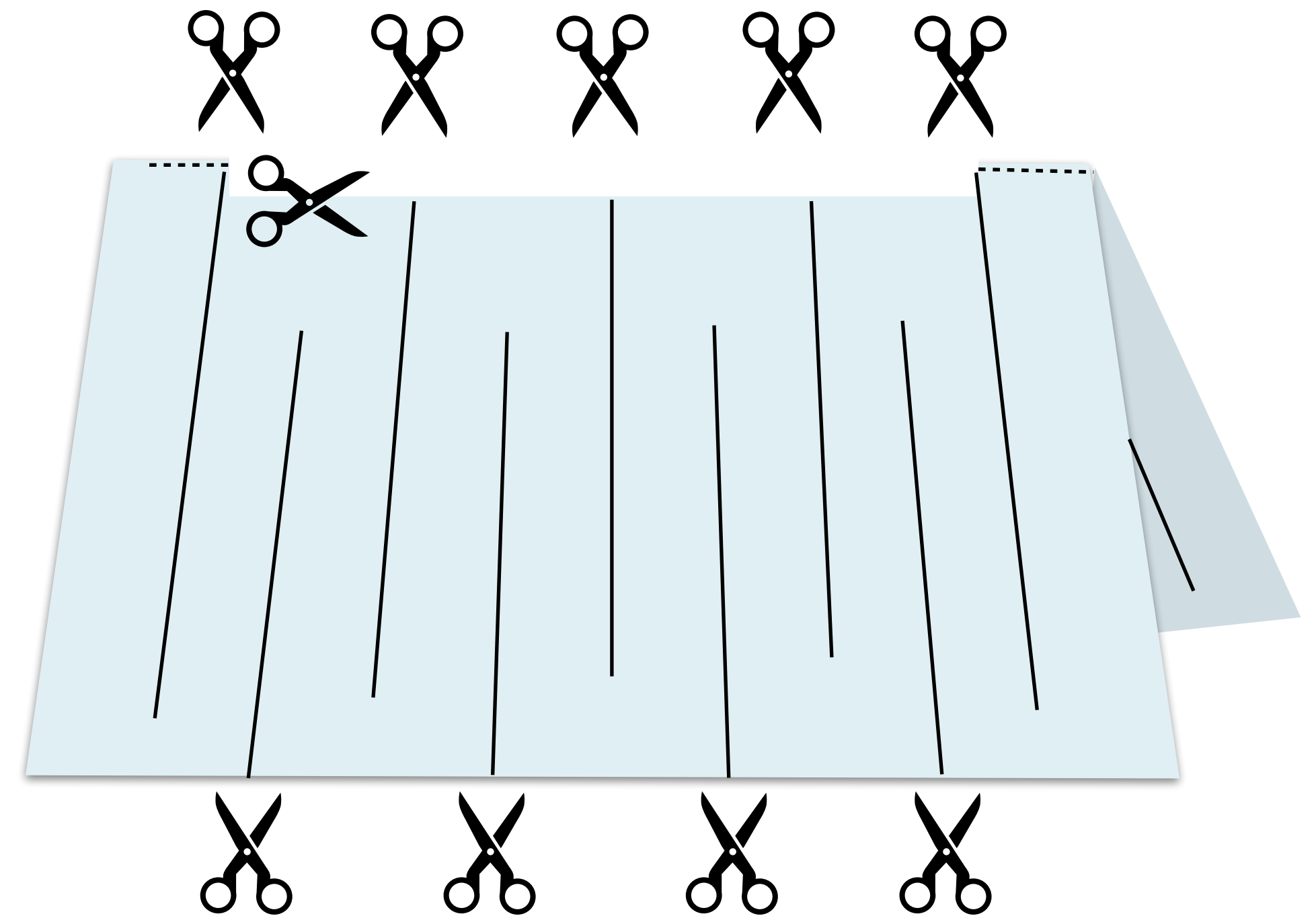**Cut a notch along the fold**
Keep paper folded while cutting
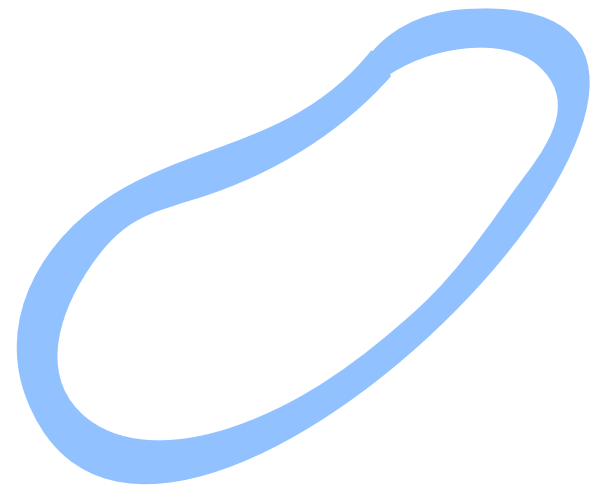
Cut paper as shown
Keep paper folded while cutting

How large was the hole you created?
What can you do to make it bigger?

Share your creation:
https://bit.ly/3qJdCpl

To think about:
Can you walk through the hole you cut?
What math did we use?
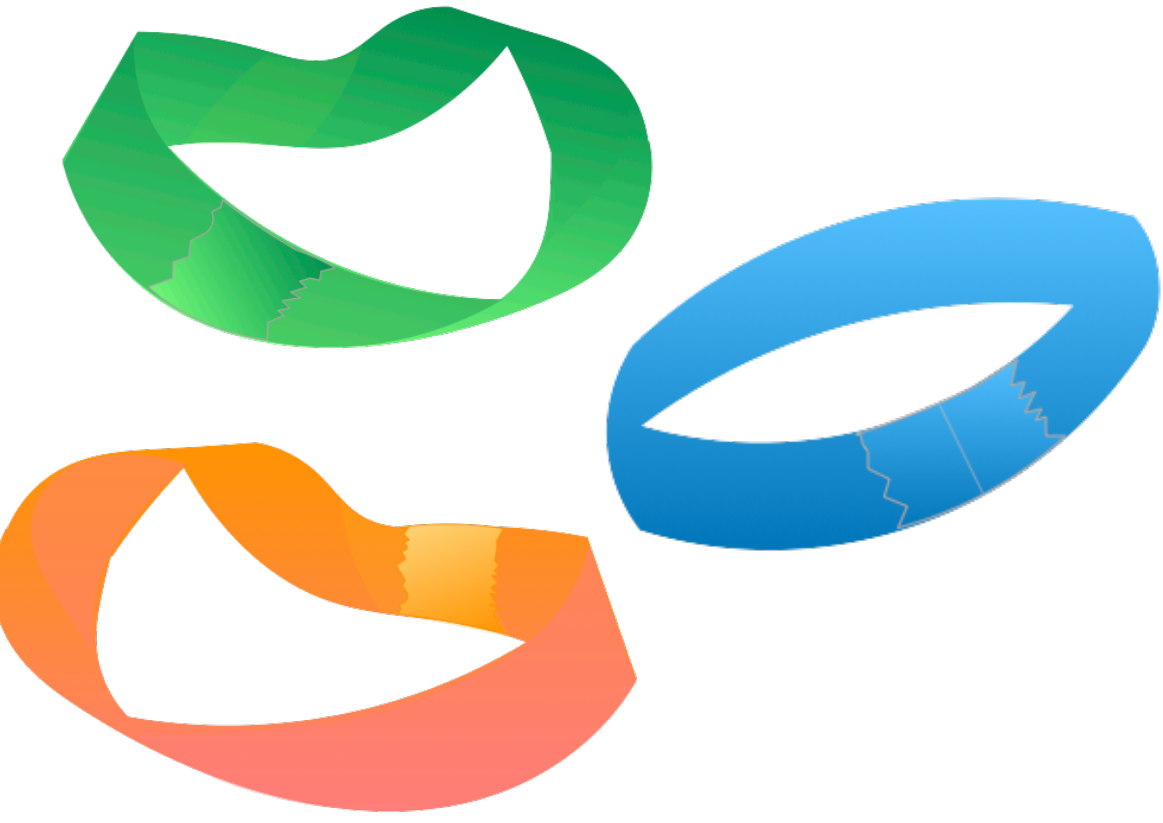
Share your creation:
https://bit.ly/3qJdCpl

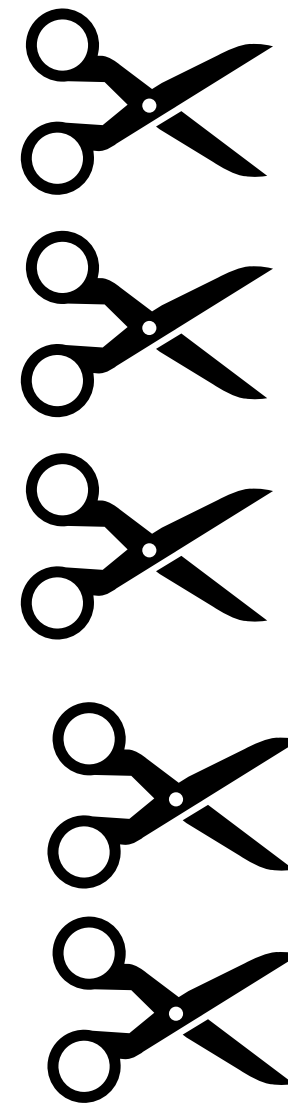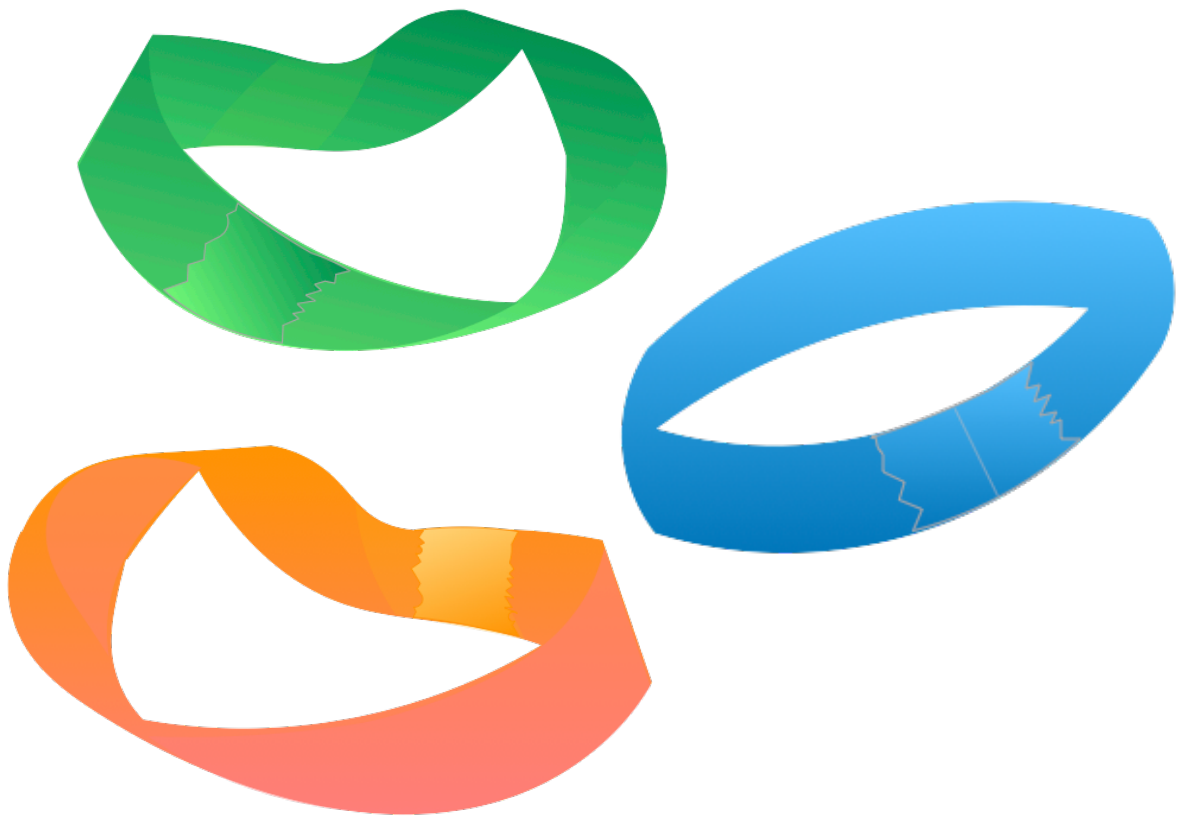**Challenges for later:**
Can you walk through an index card?
How else could you cut a paper hole?

What can you do with a paper loop?

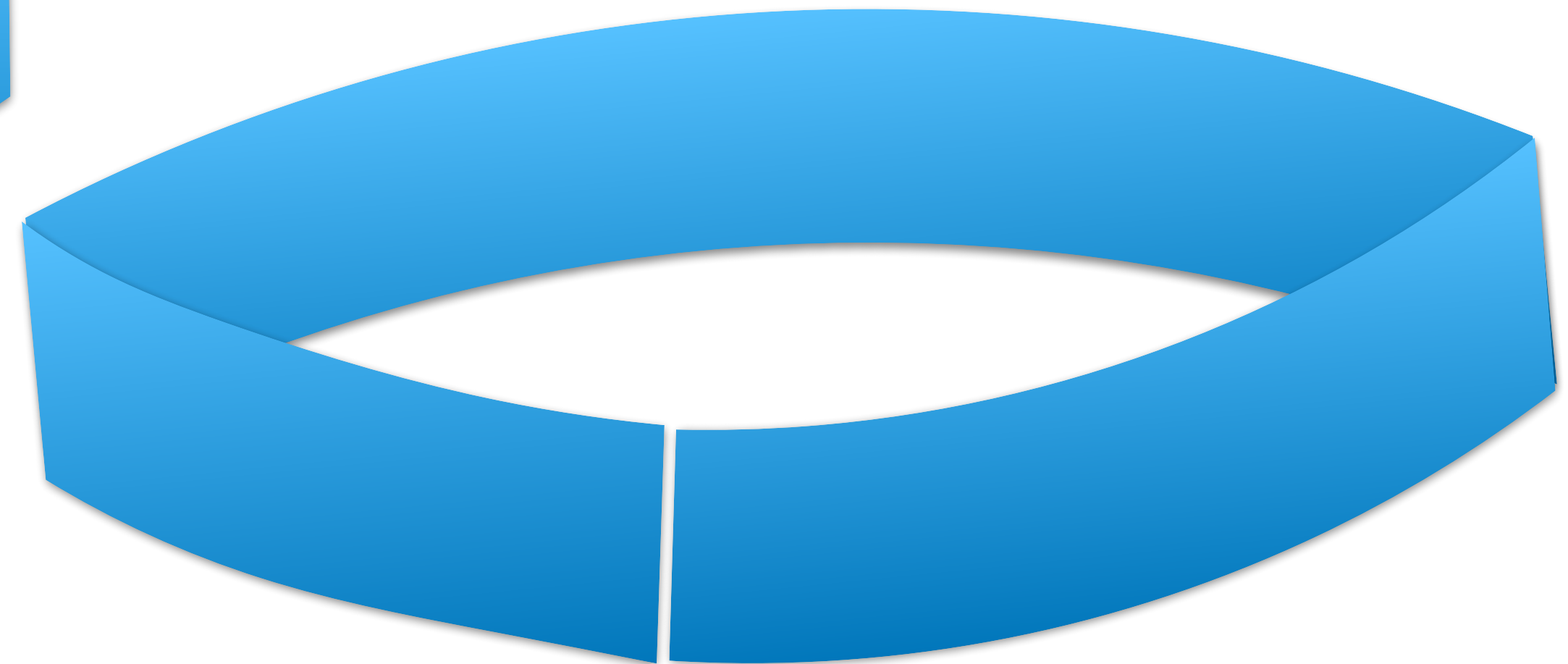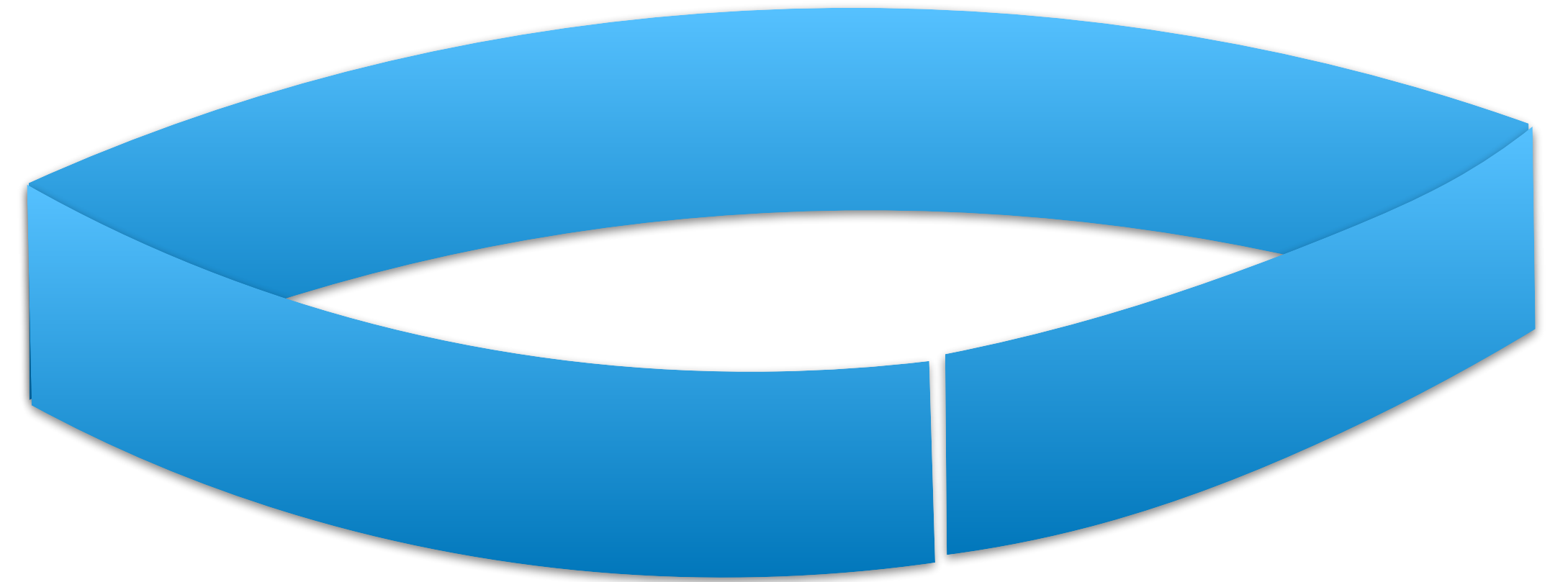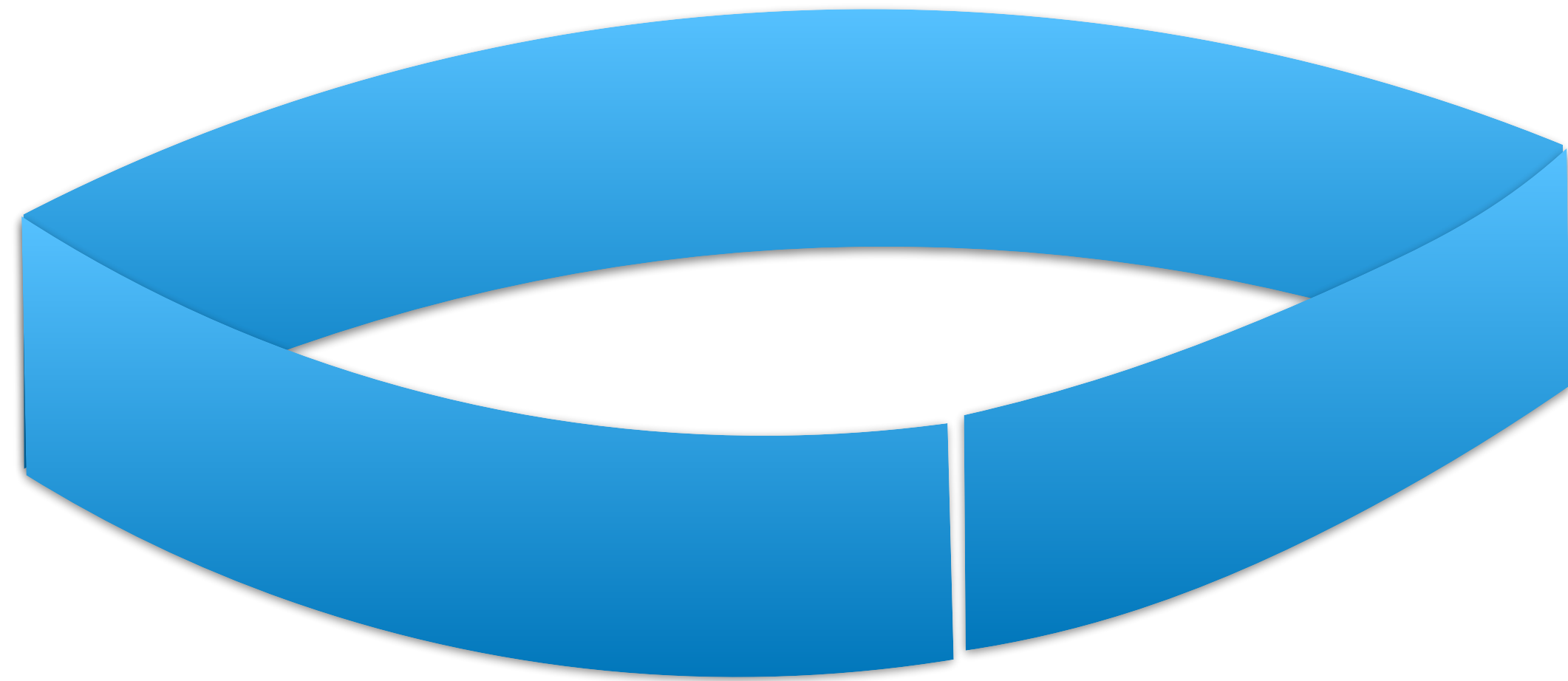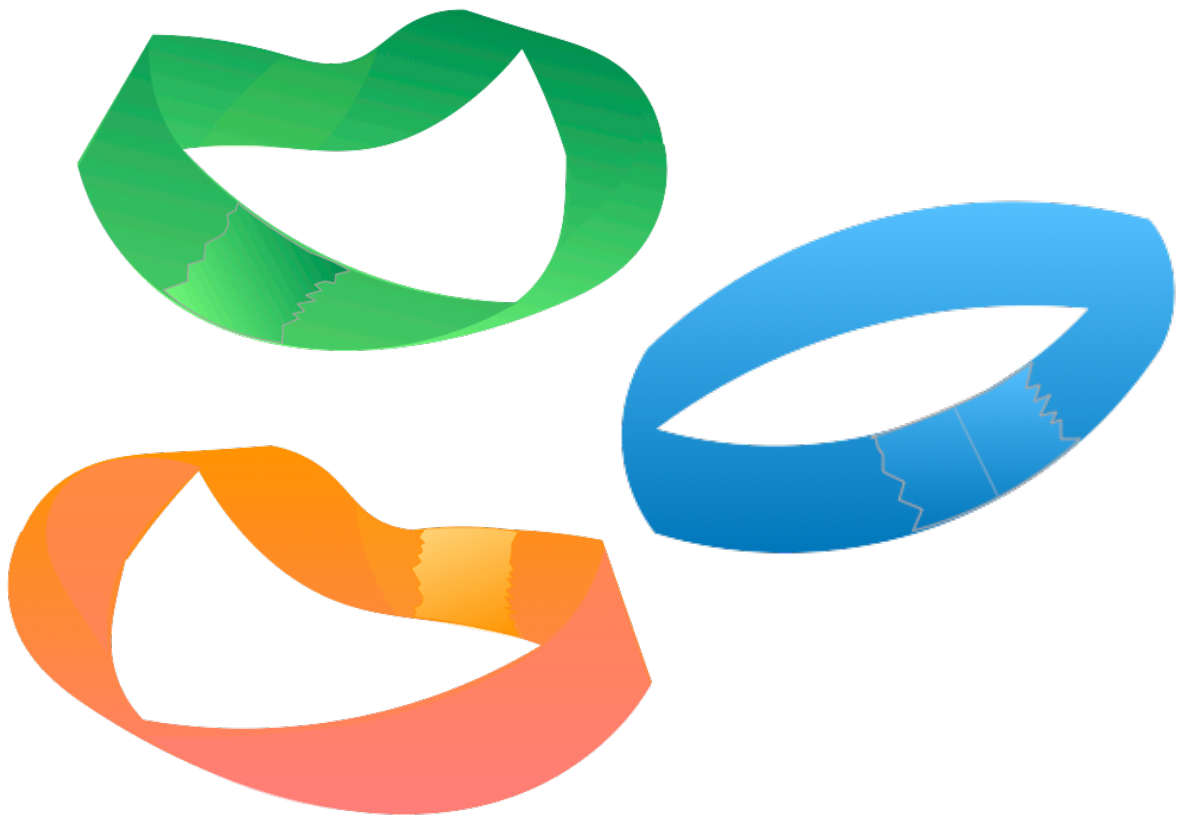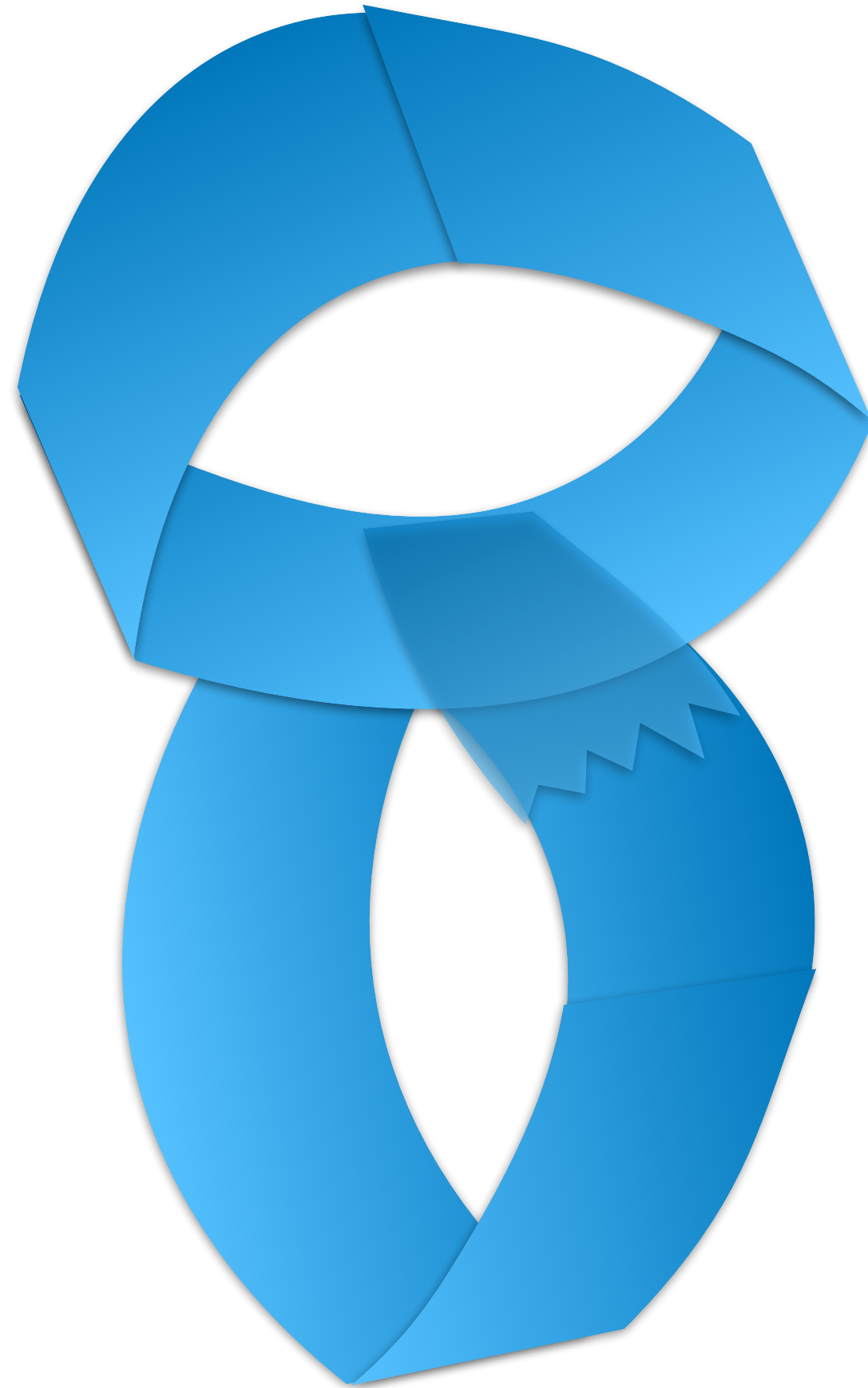# Cut six strips of paper
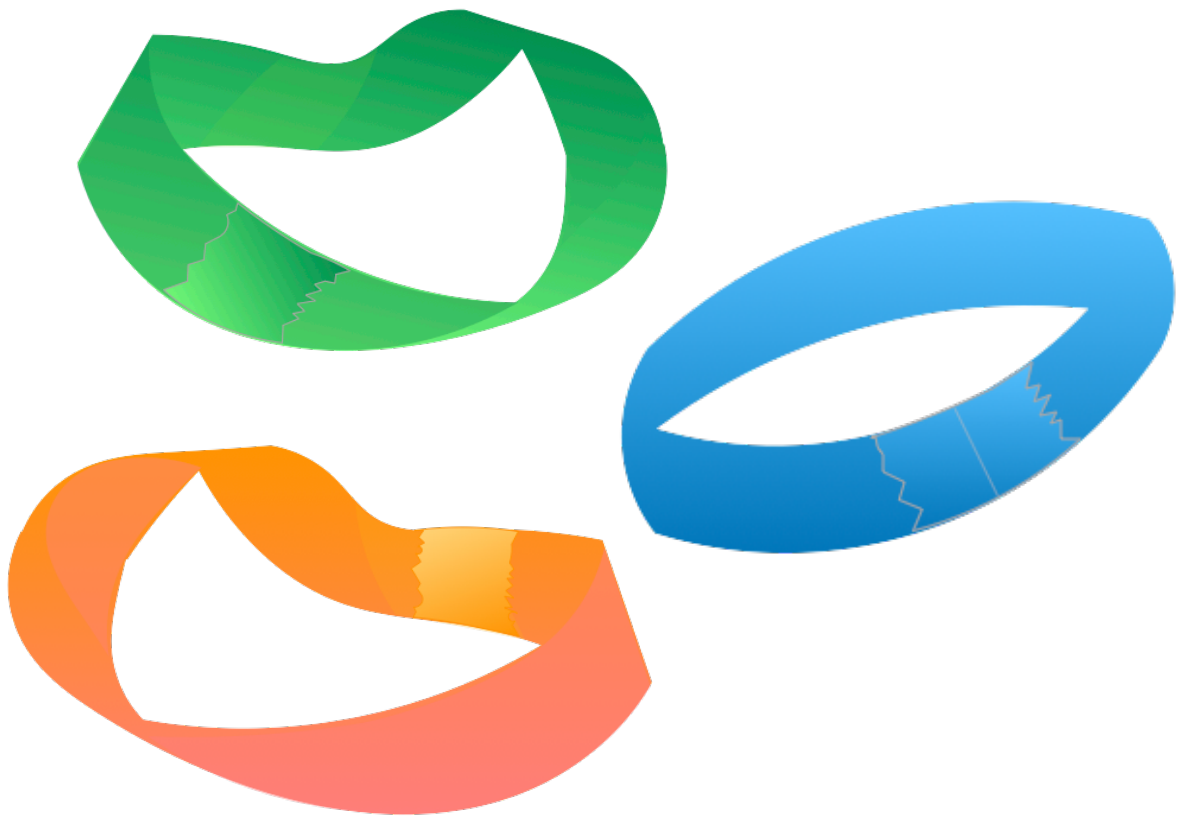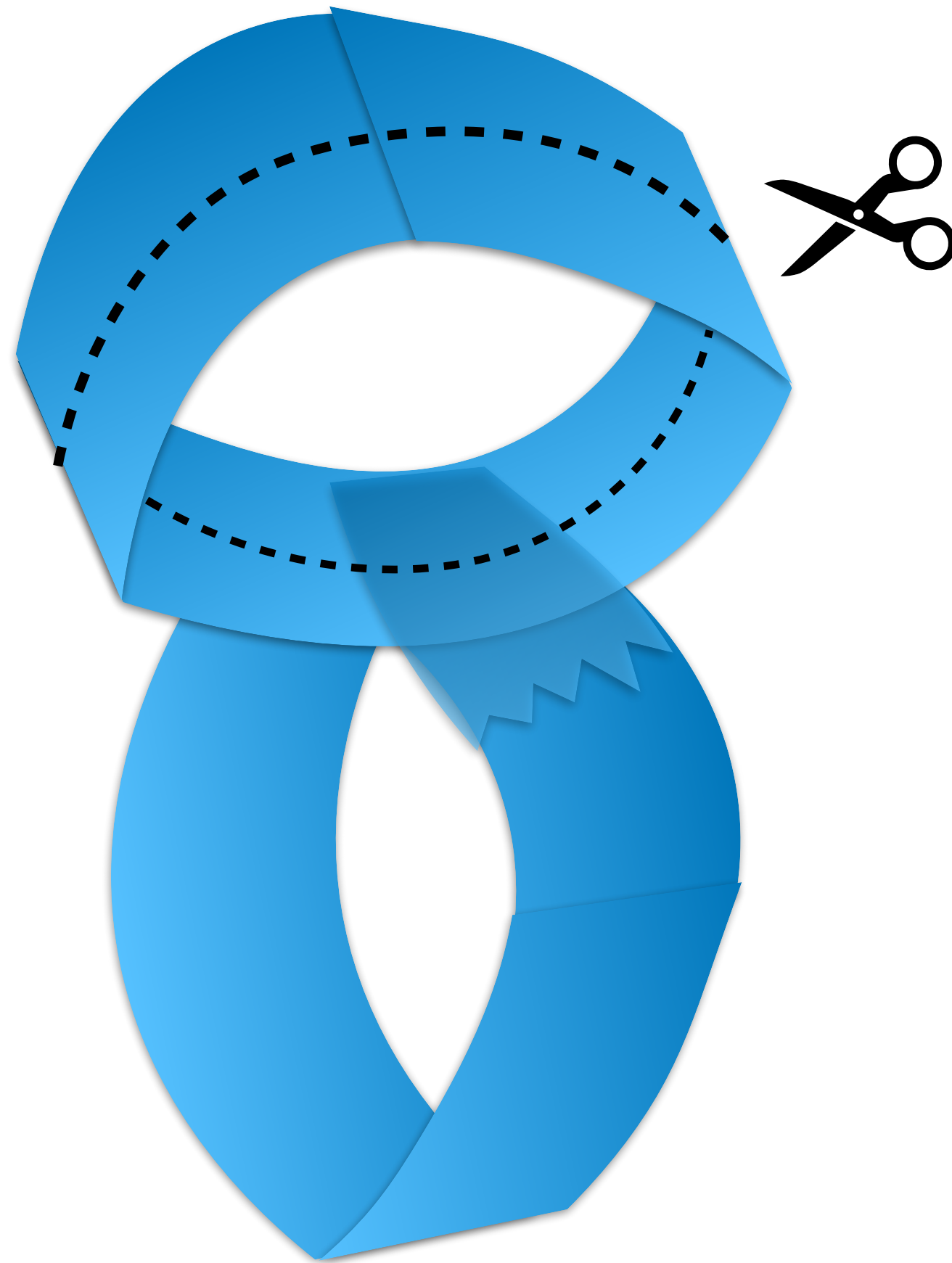
Use tape or a glue stick to make three loops
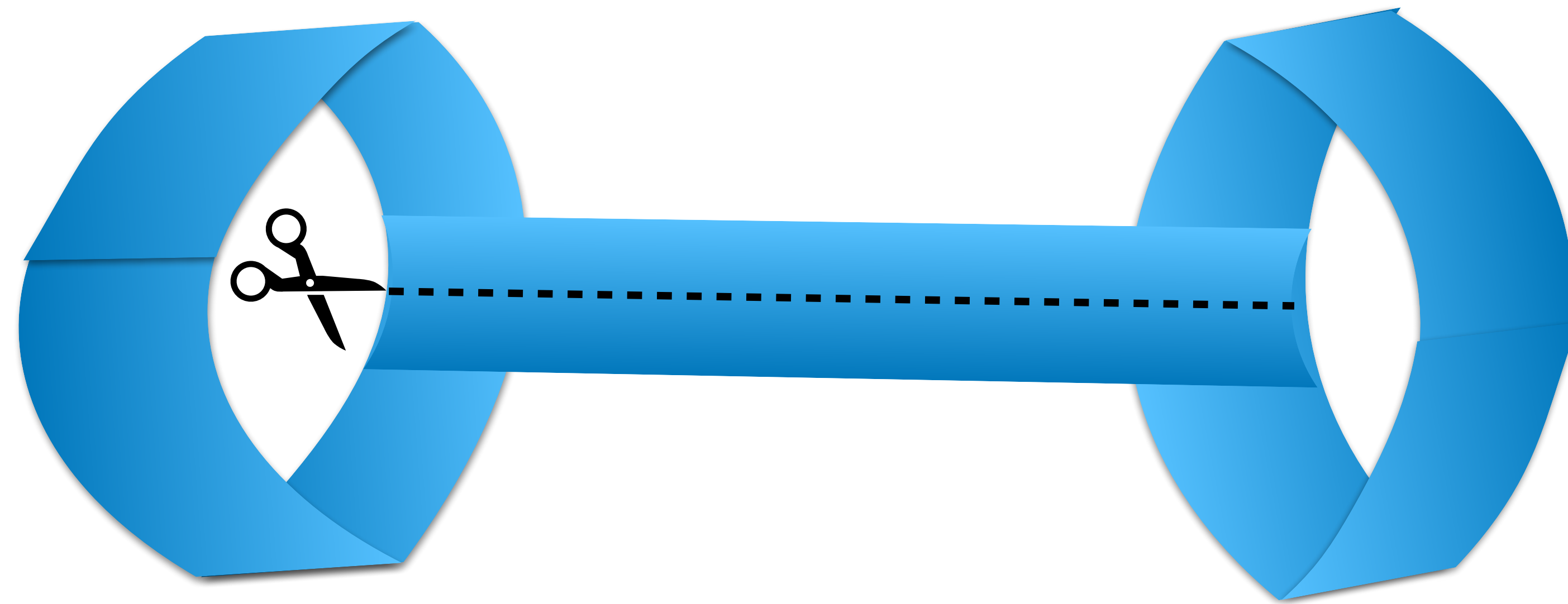
Tape or glue two loops together at 90 degree angles

**Cut one loop and through the other loop as shown
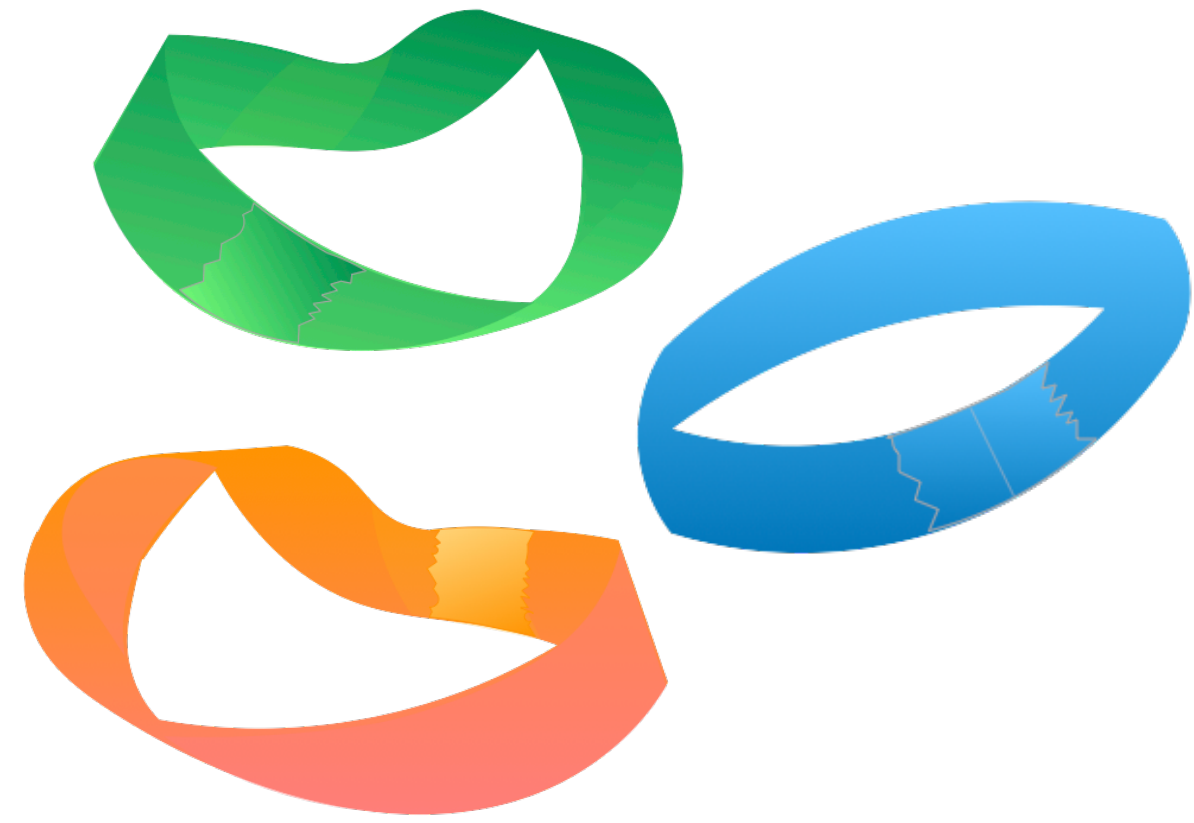Predict what the new shape will look like before you cut**

Cut the straight strip
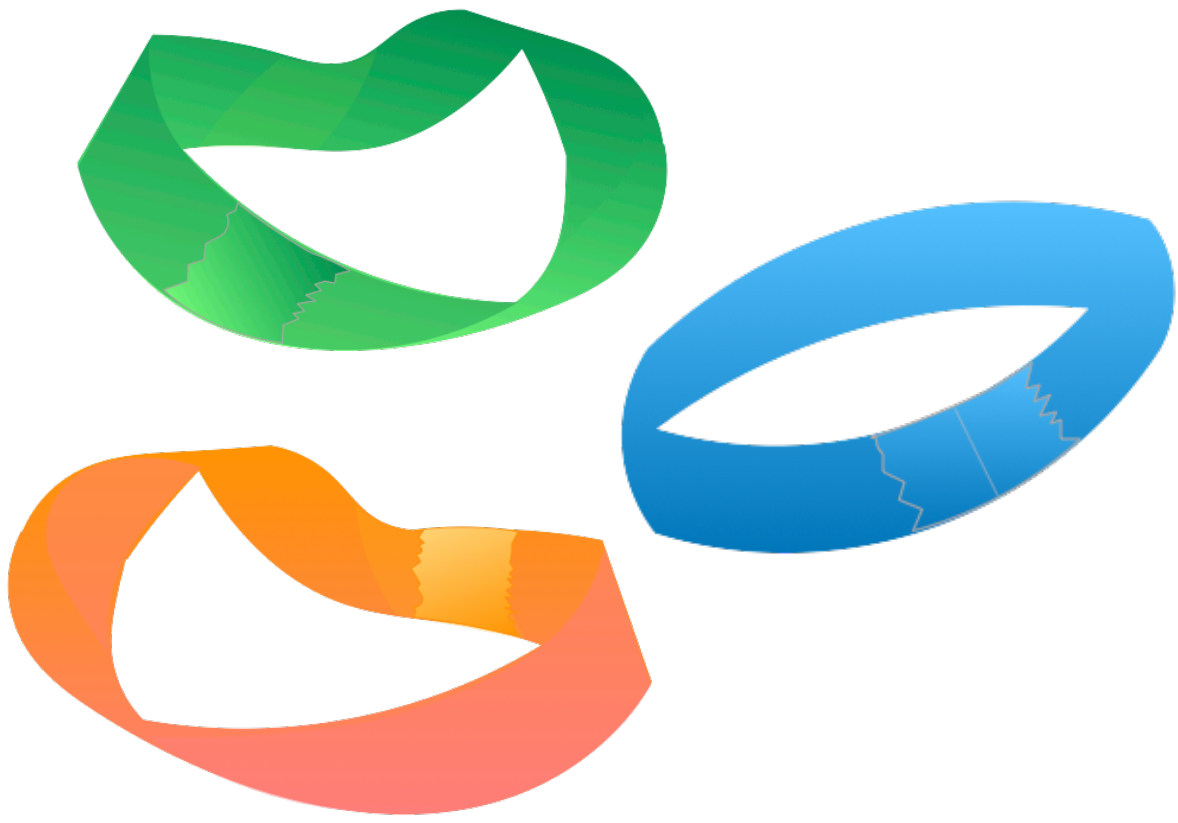**Predict what the new shape will look like before you cut**

Share your creation:
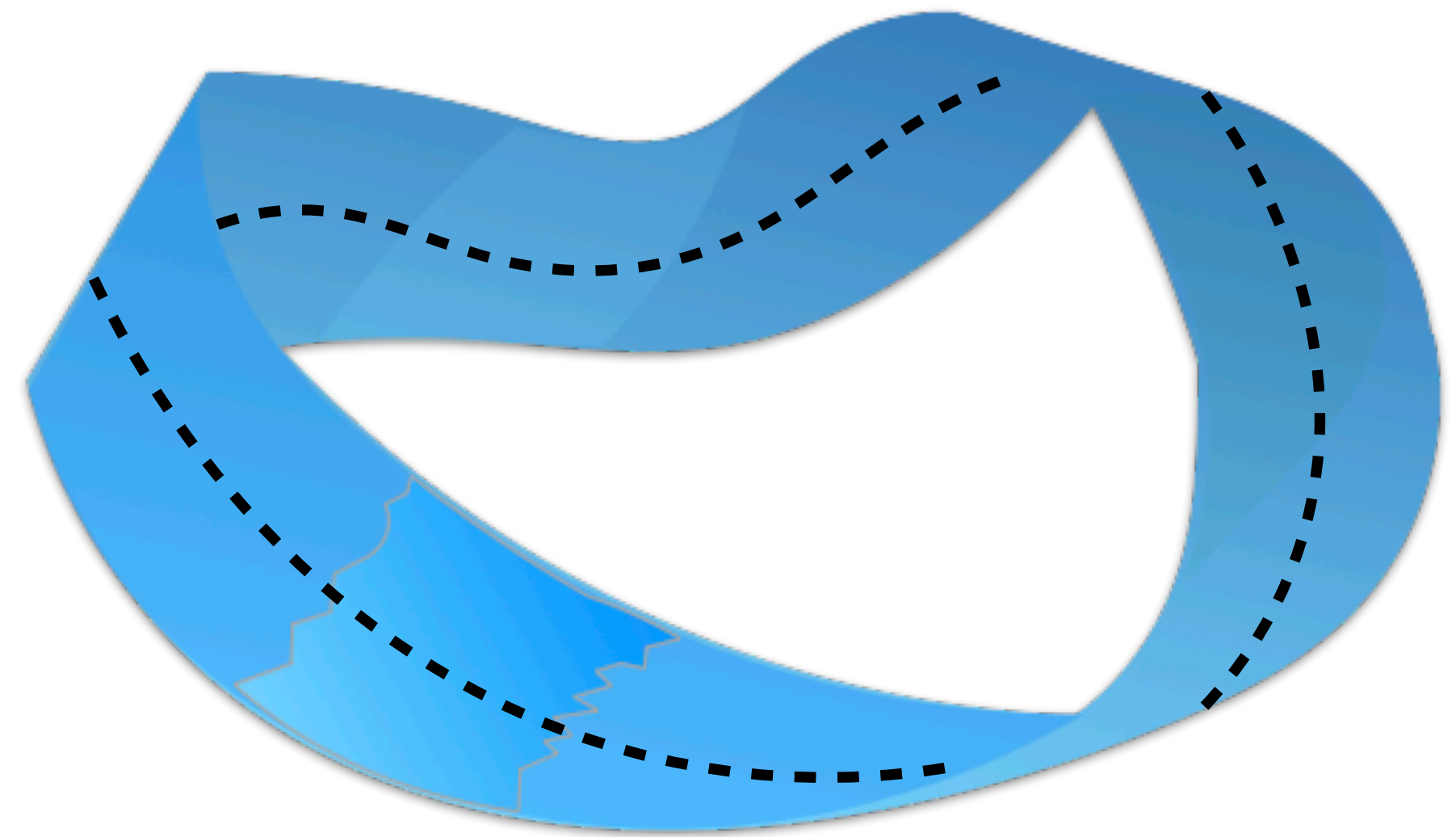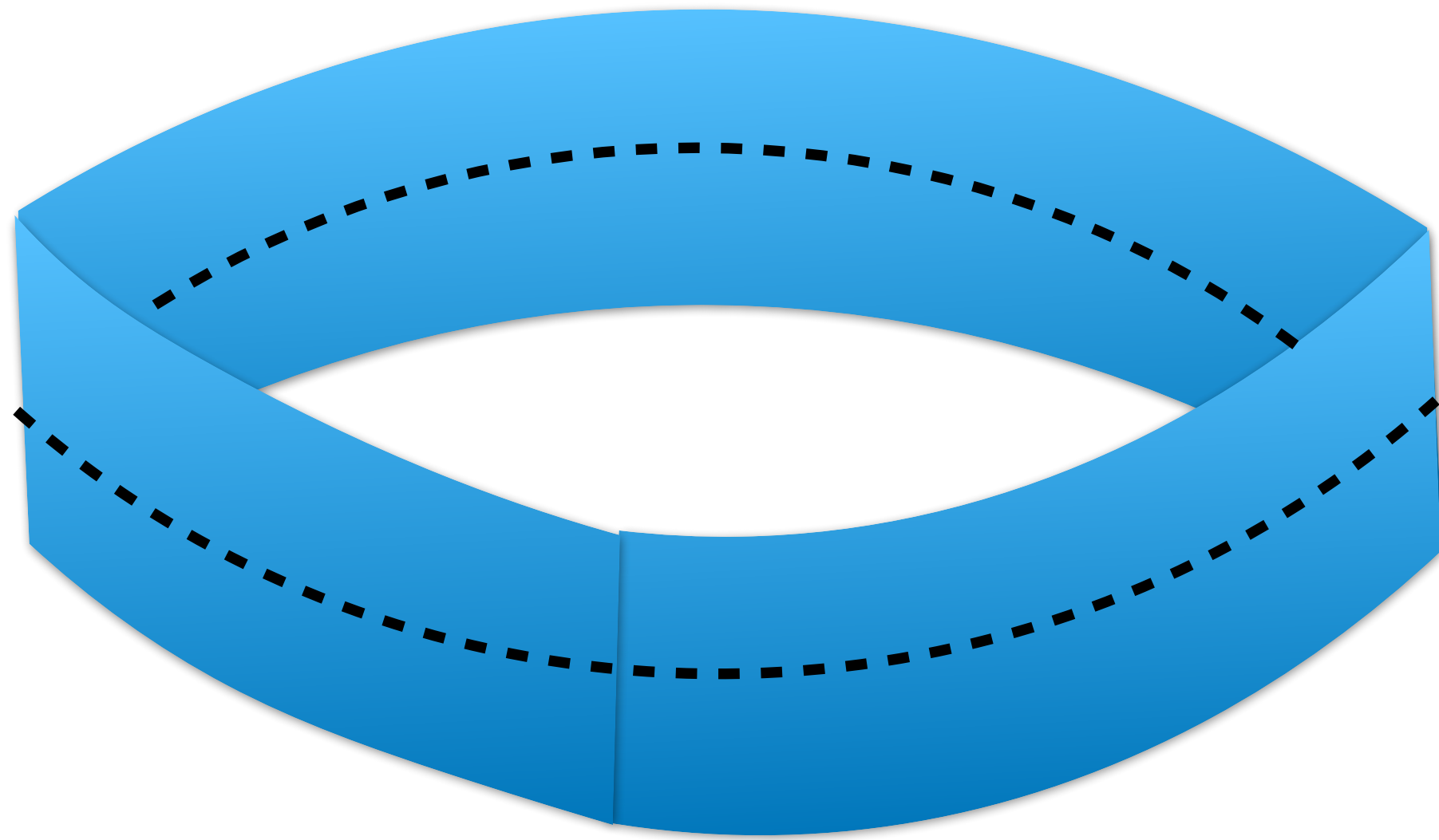**https://bit.ly/3qJdCpl**

Make a loop
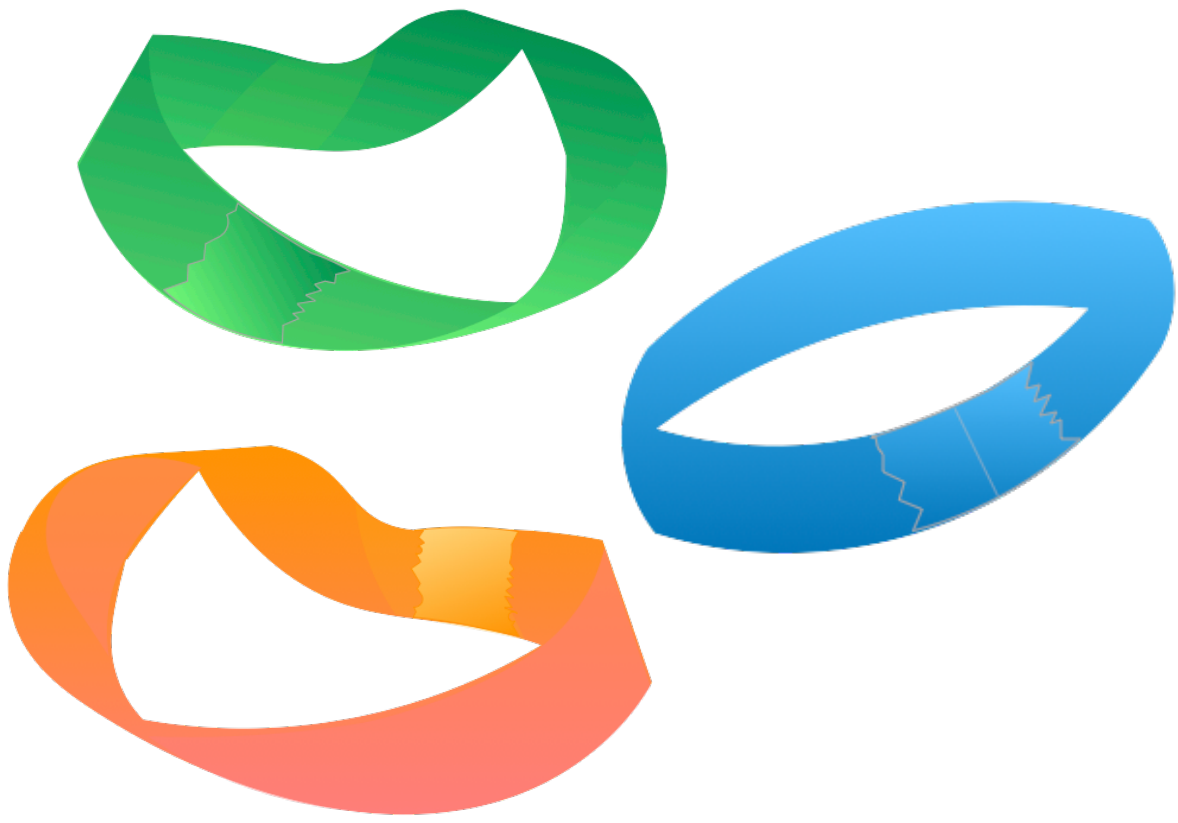**Twist the paper before you tape it together**

**Cut around the middle of both loops
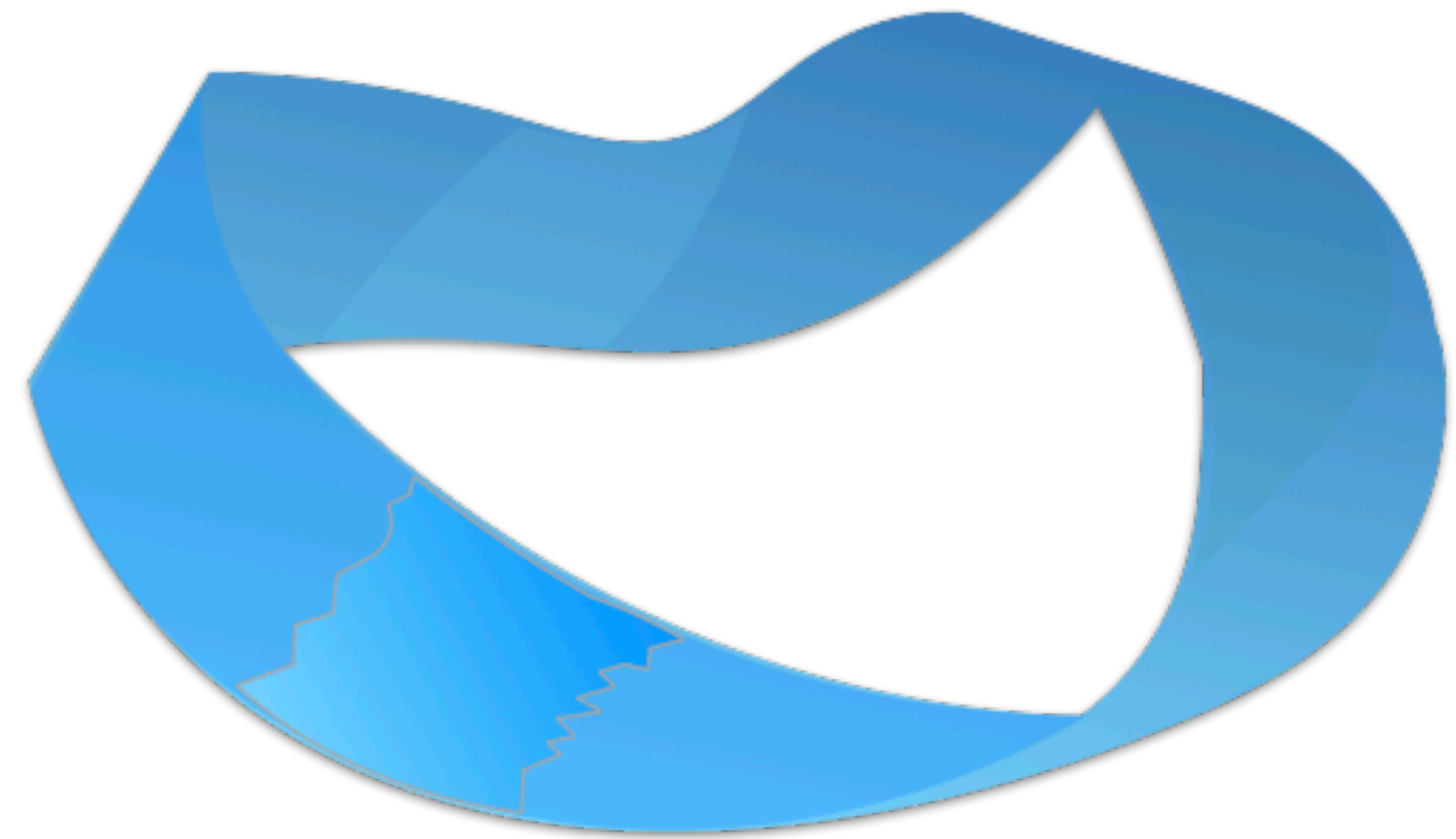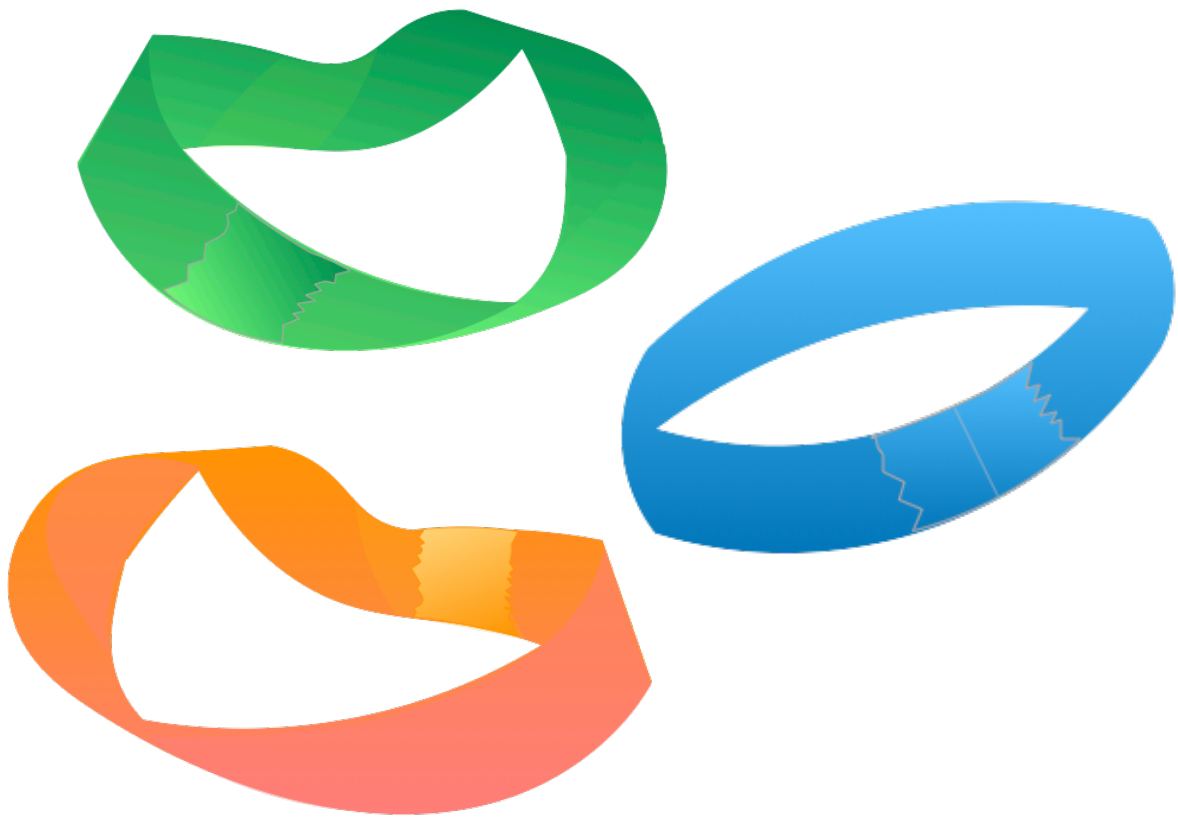What do you notice?**

Make two loops with twists
Make one loop with a twist to the right
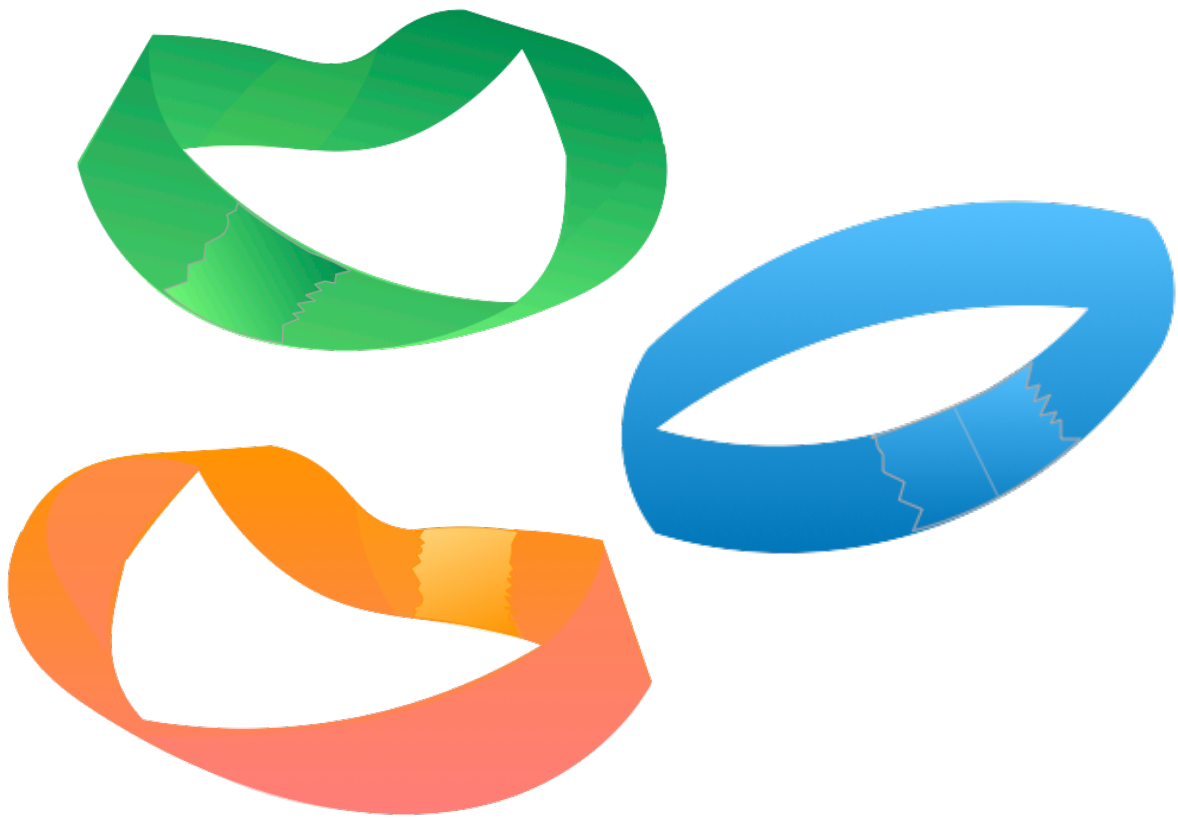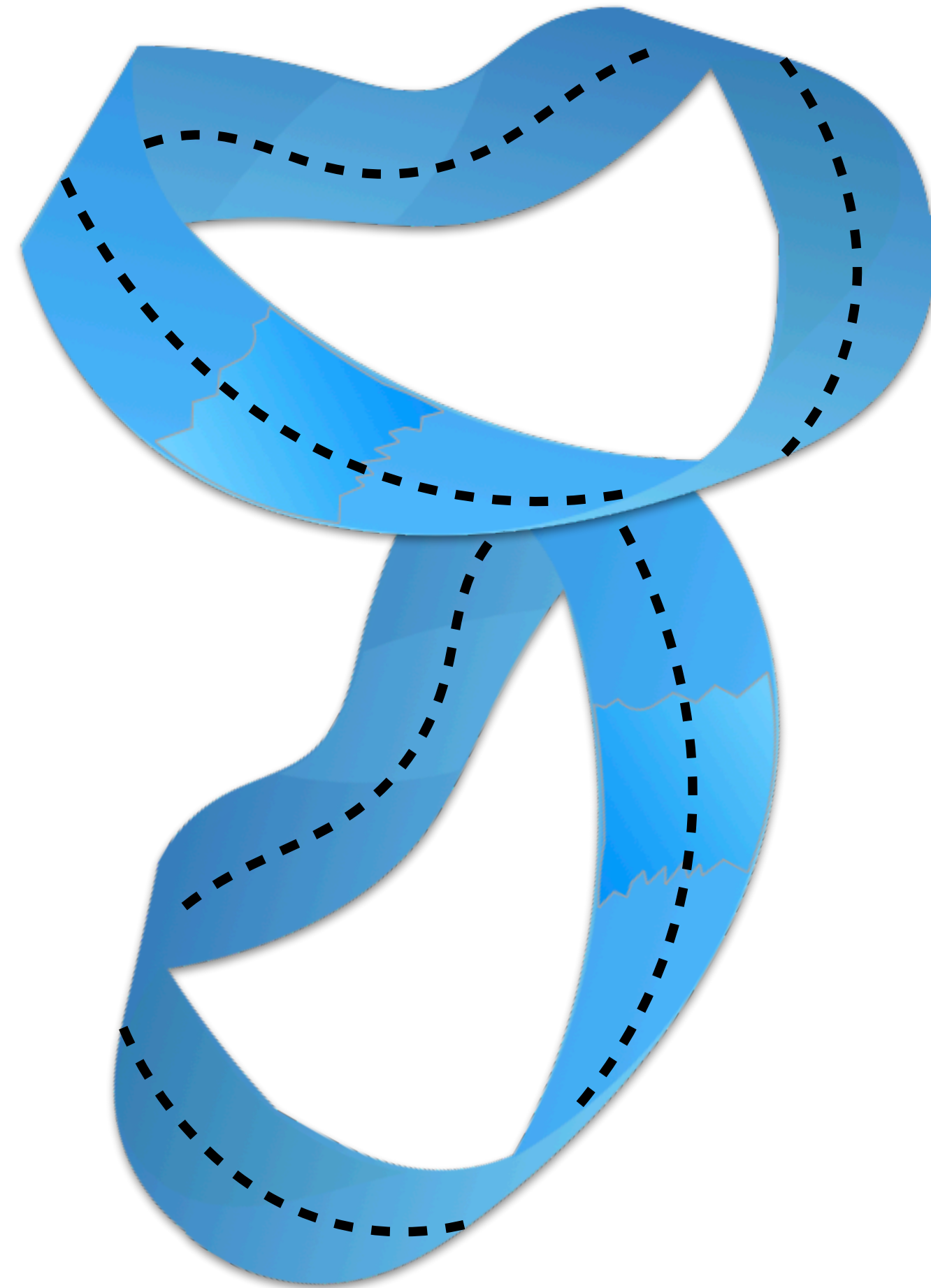**Make the other loop with a twist to the left**
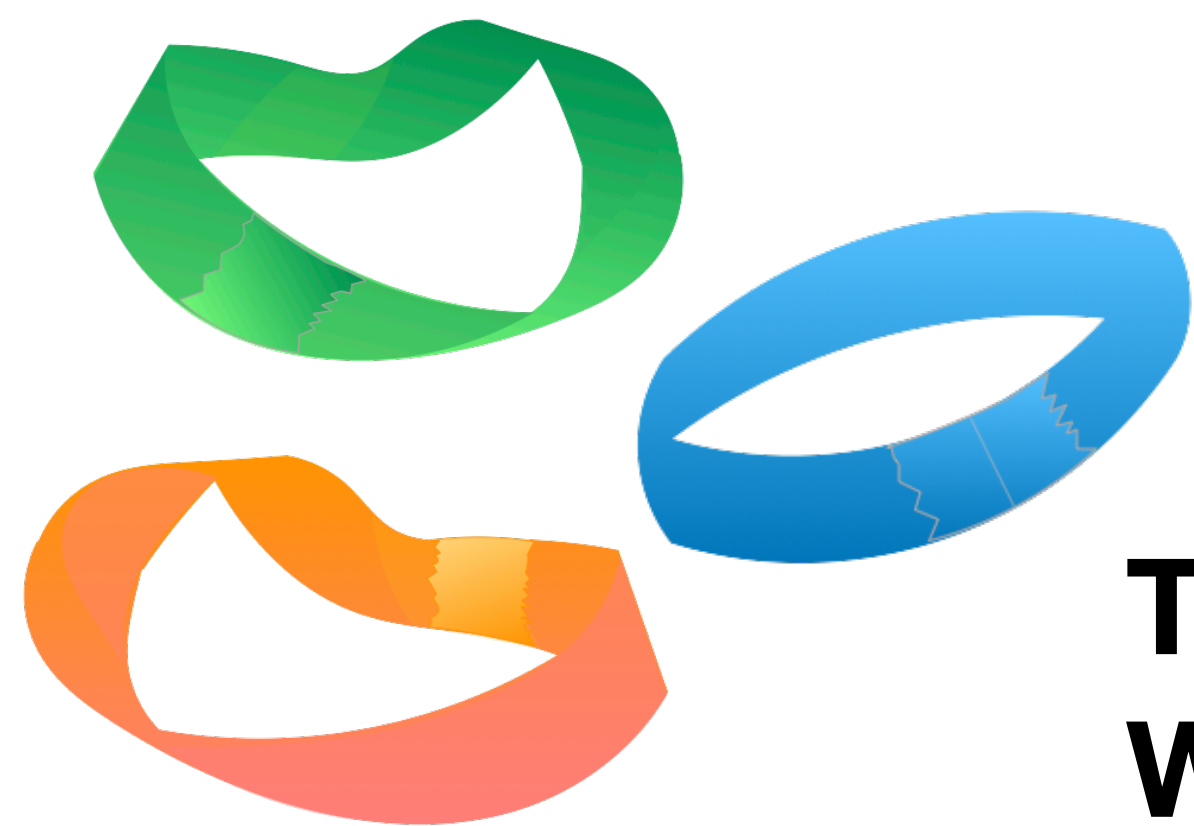
Tape or glue two loops together at 90 degree angles

Tape or glue two loops together at 90 degree angles
Predict what the new shape will look like before you cut

To think about:
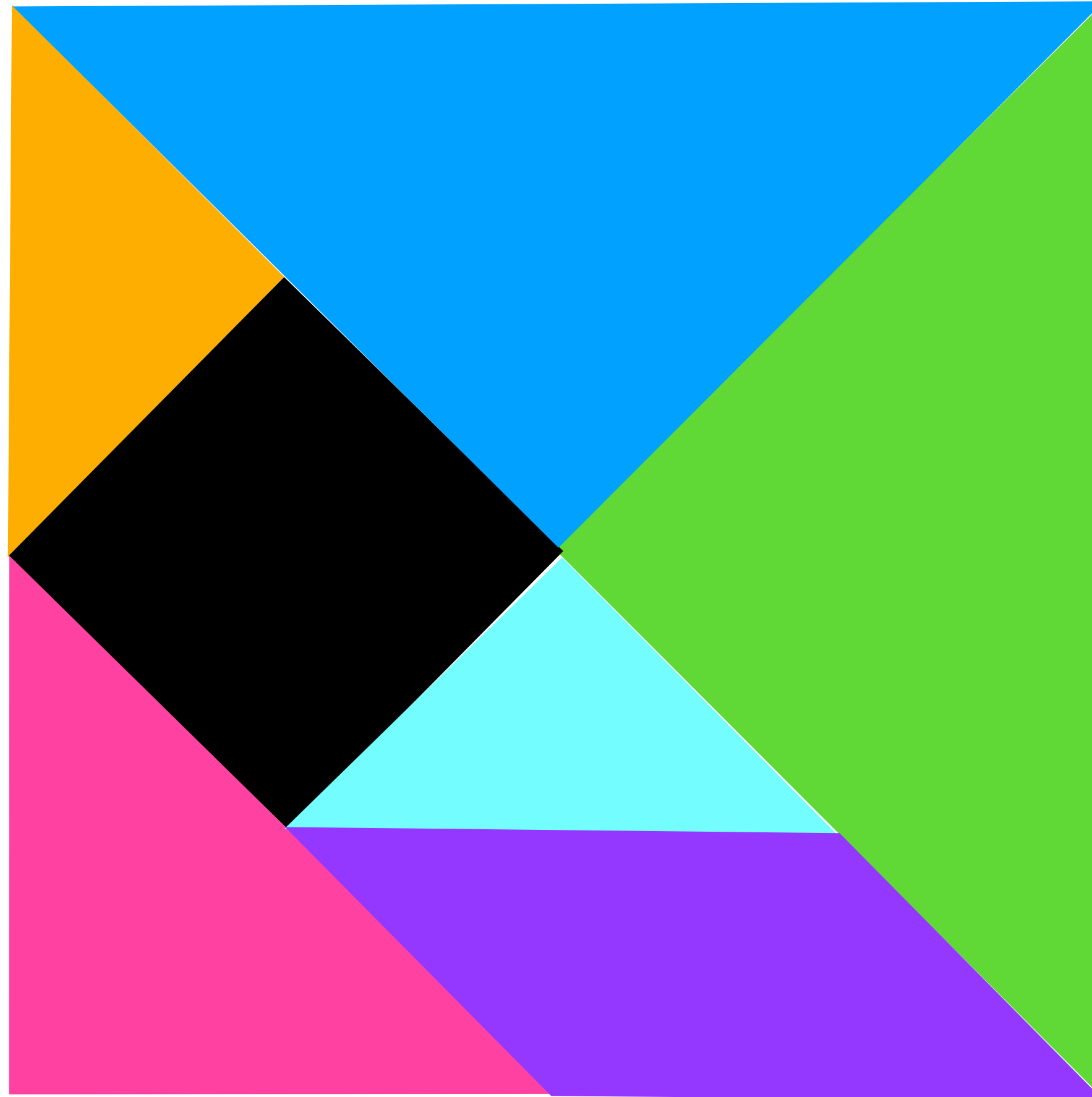**Would you try this with children? What ages?**
What math did we use?

Share your creation: https://bit.ly/3qJdCpl

Challenges for later:
Explore loops with more twists
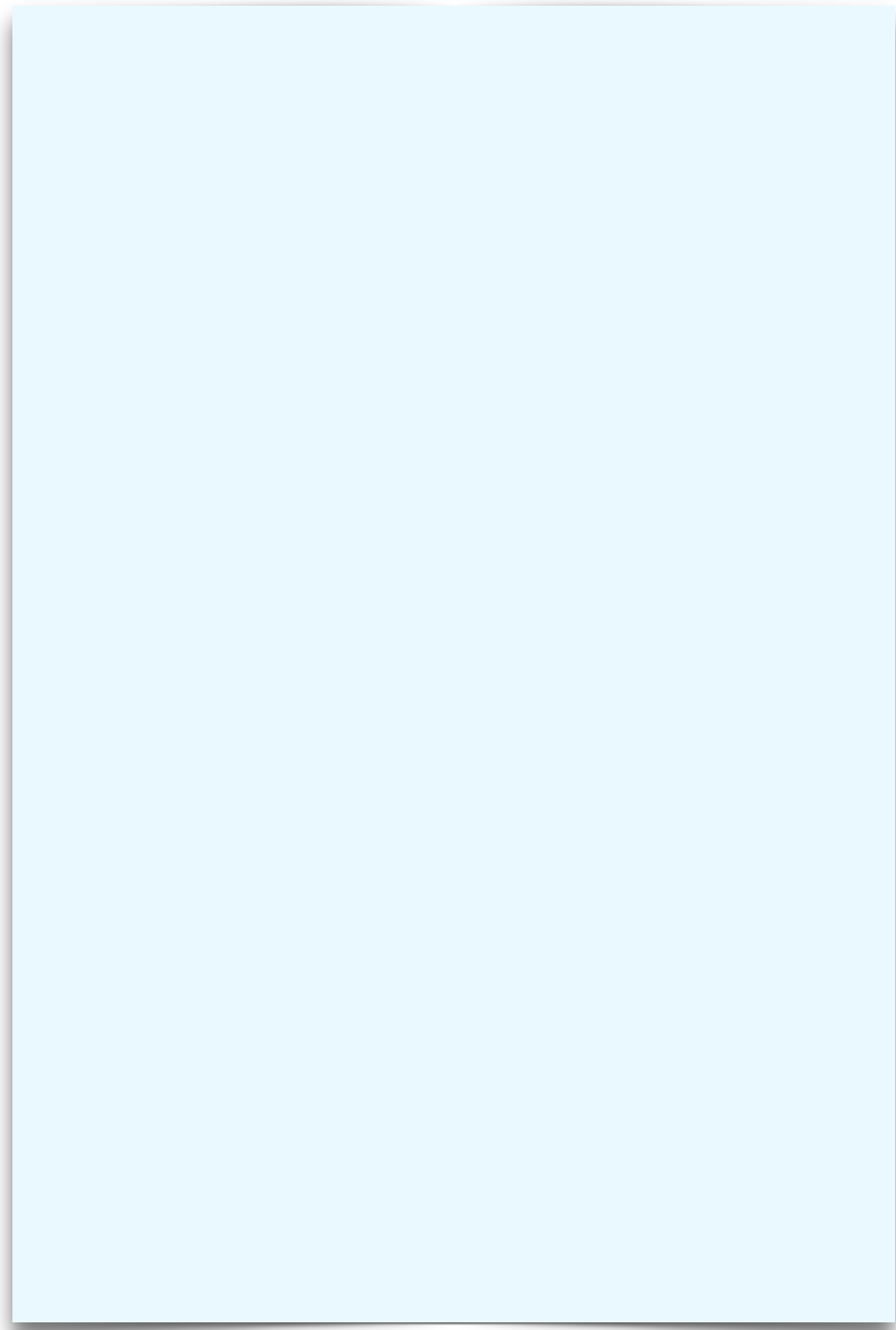**Combine and cut other groupings of loops.**
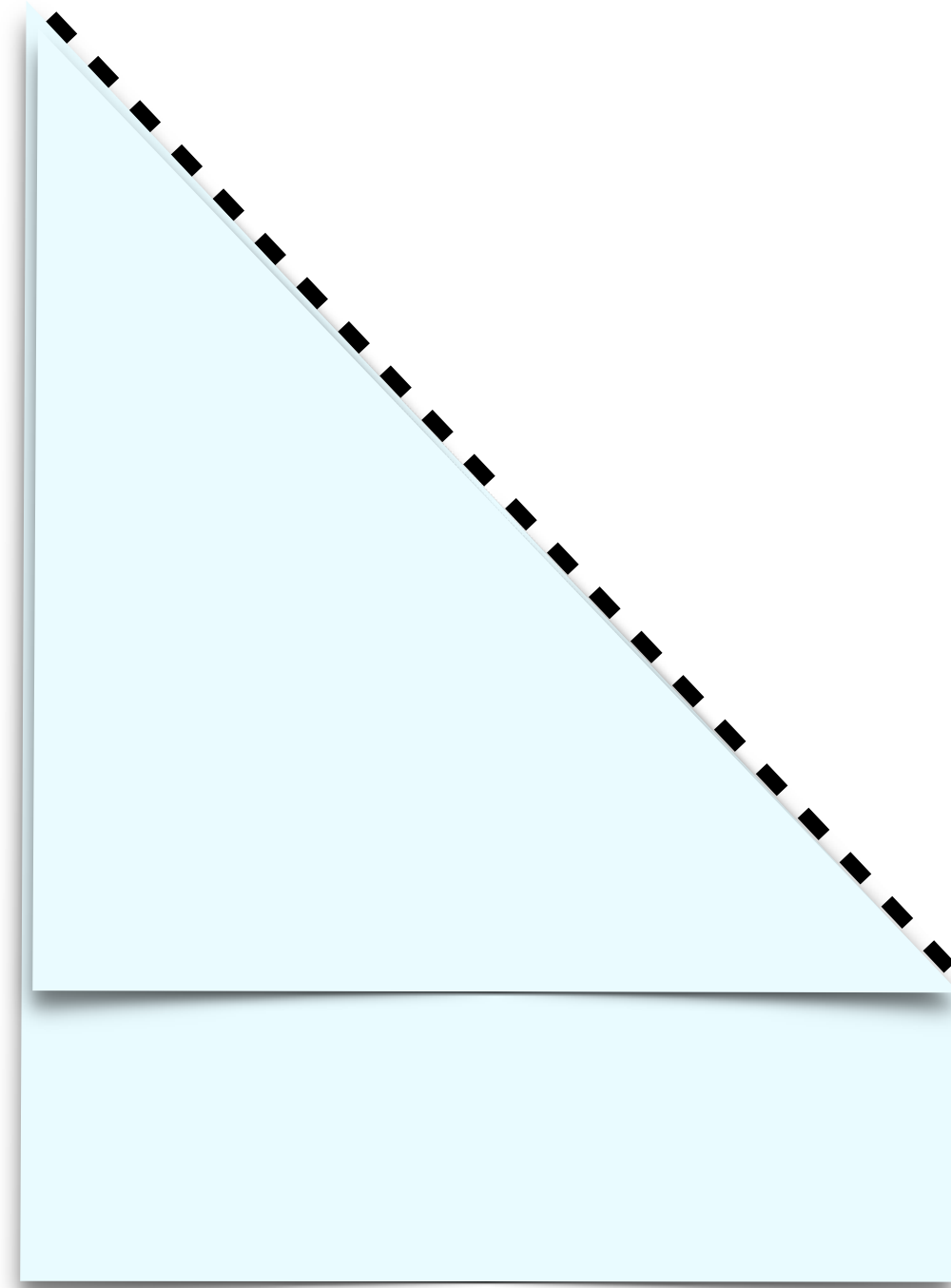
What can you make with tangrams?

Tangrams: A puzzle made up of seven polygons (5 triangles, 1 square, and 1 parallelogram) that are often used to form other shapes.
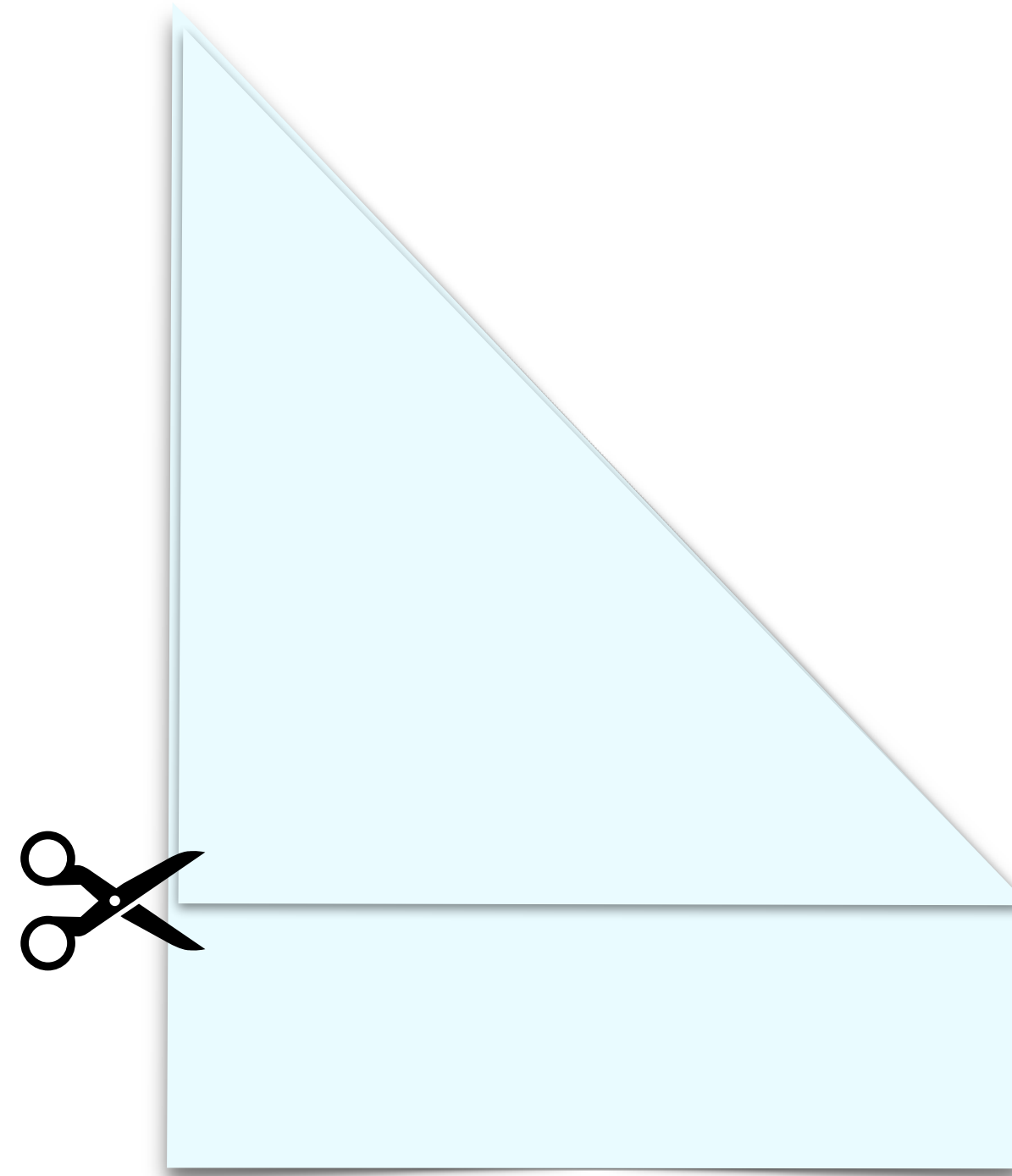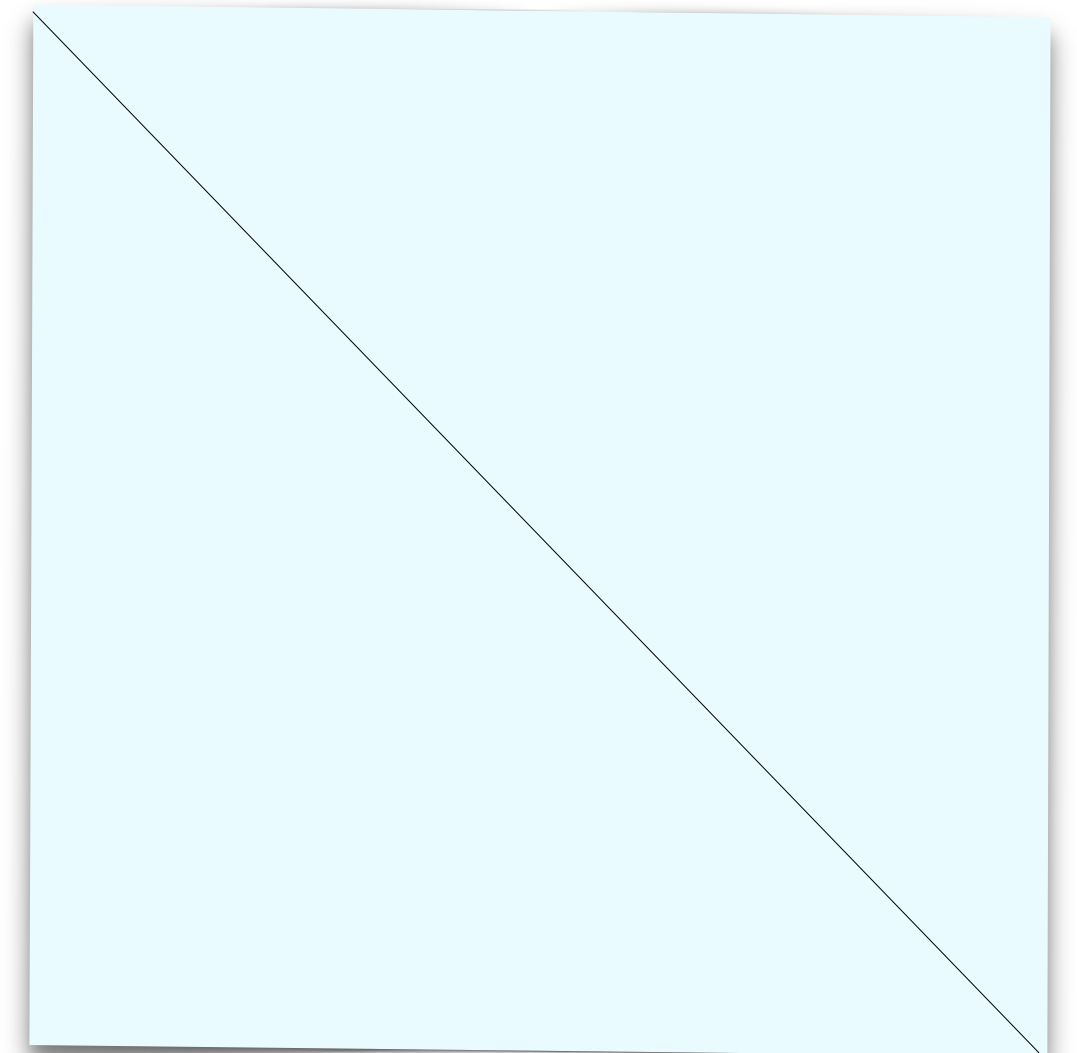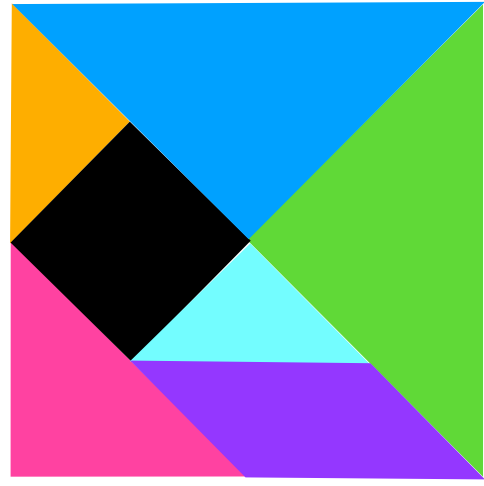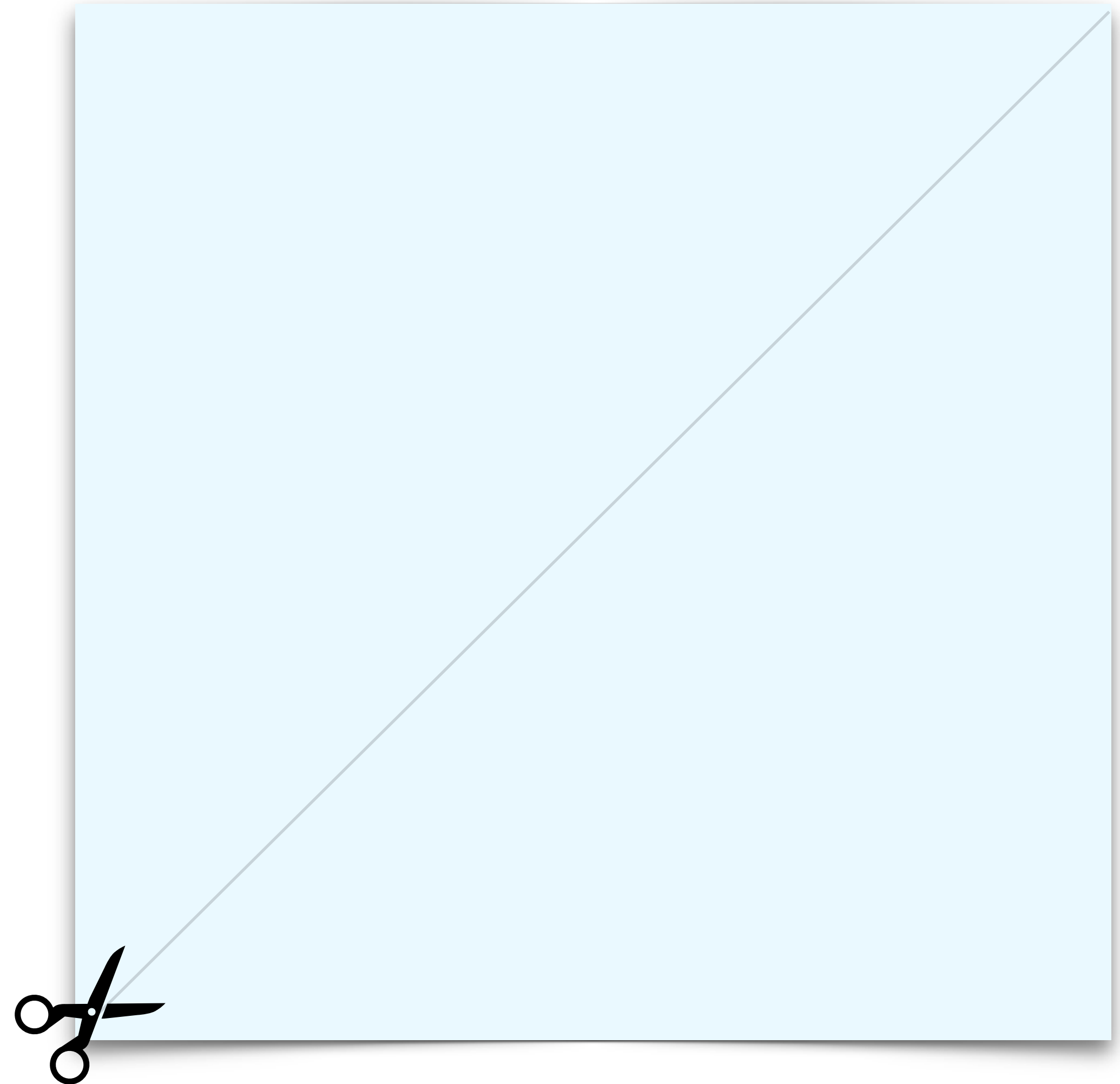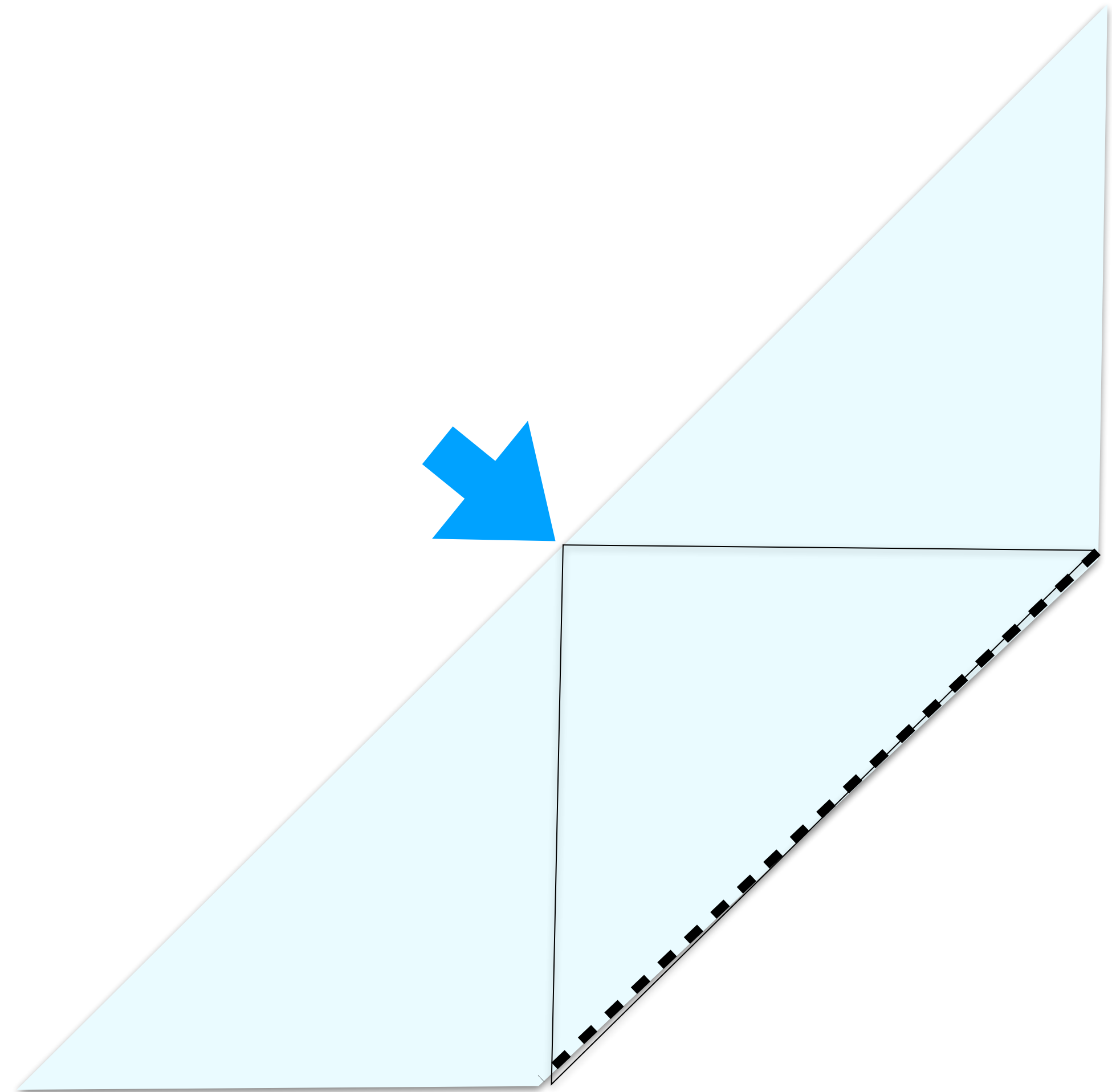
Make a Square
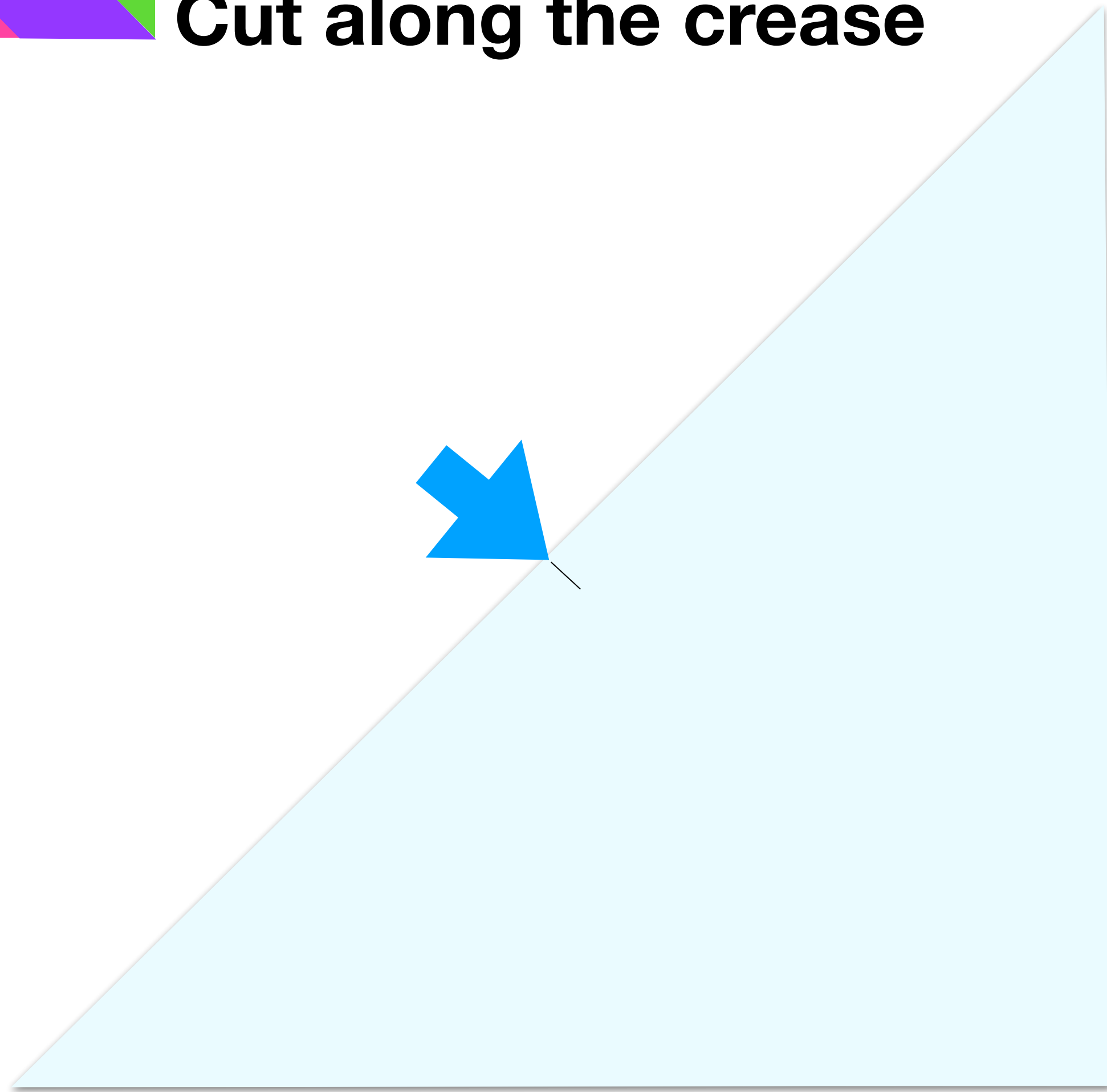## Fold
Cut

Rectangle

Fold

Cut

Open
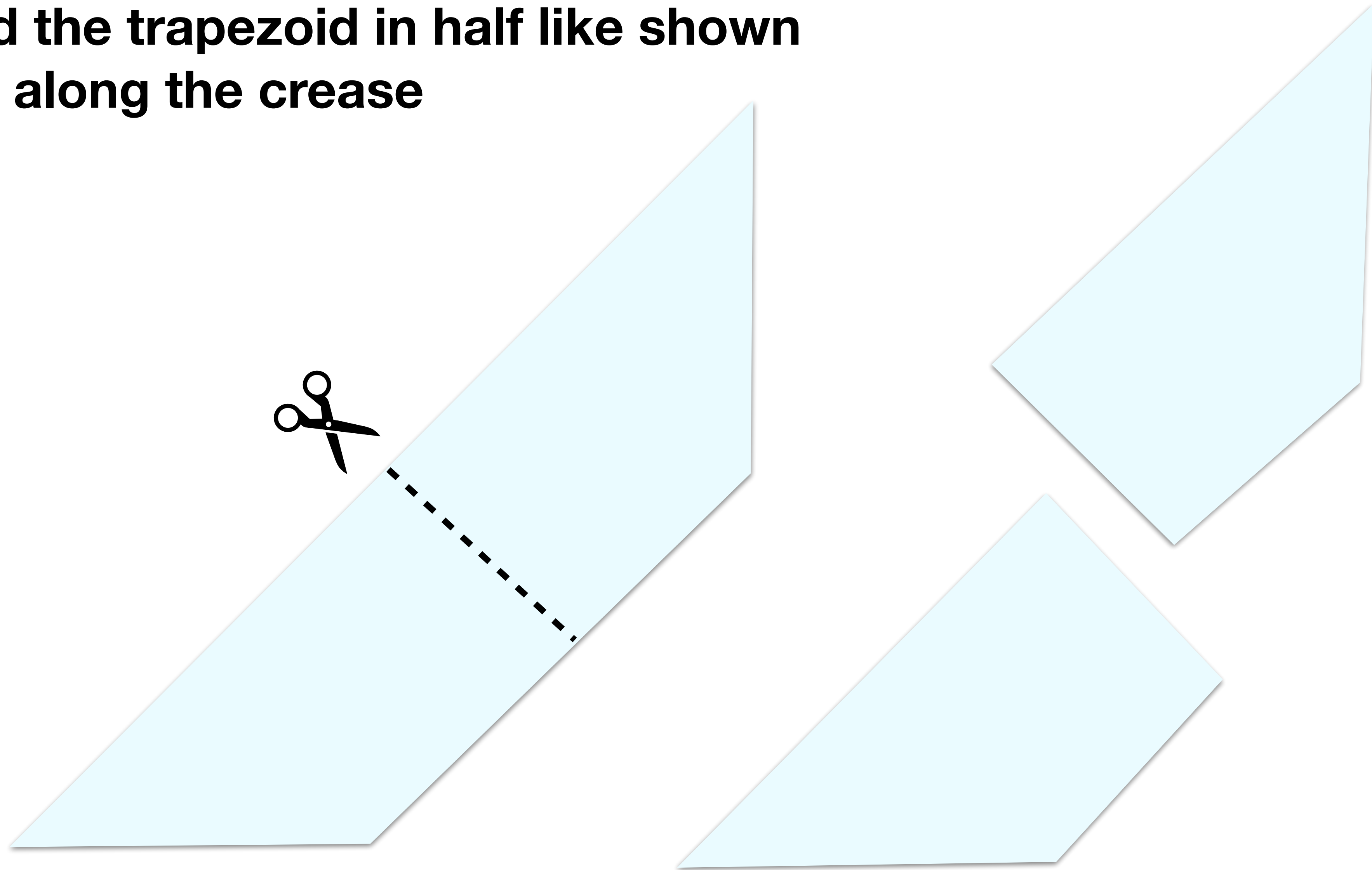
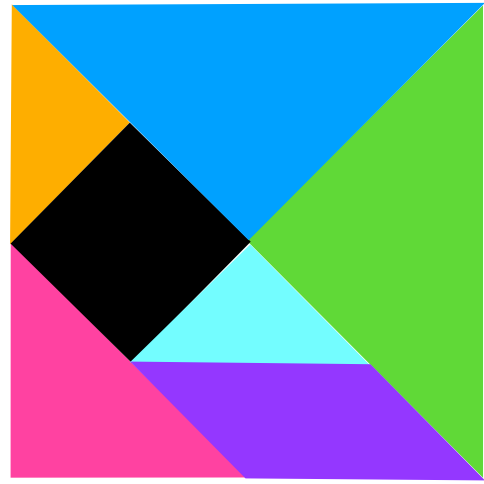# Cut along the fold
Set one triangle aside

Gently fold side to side to find the middle
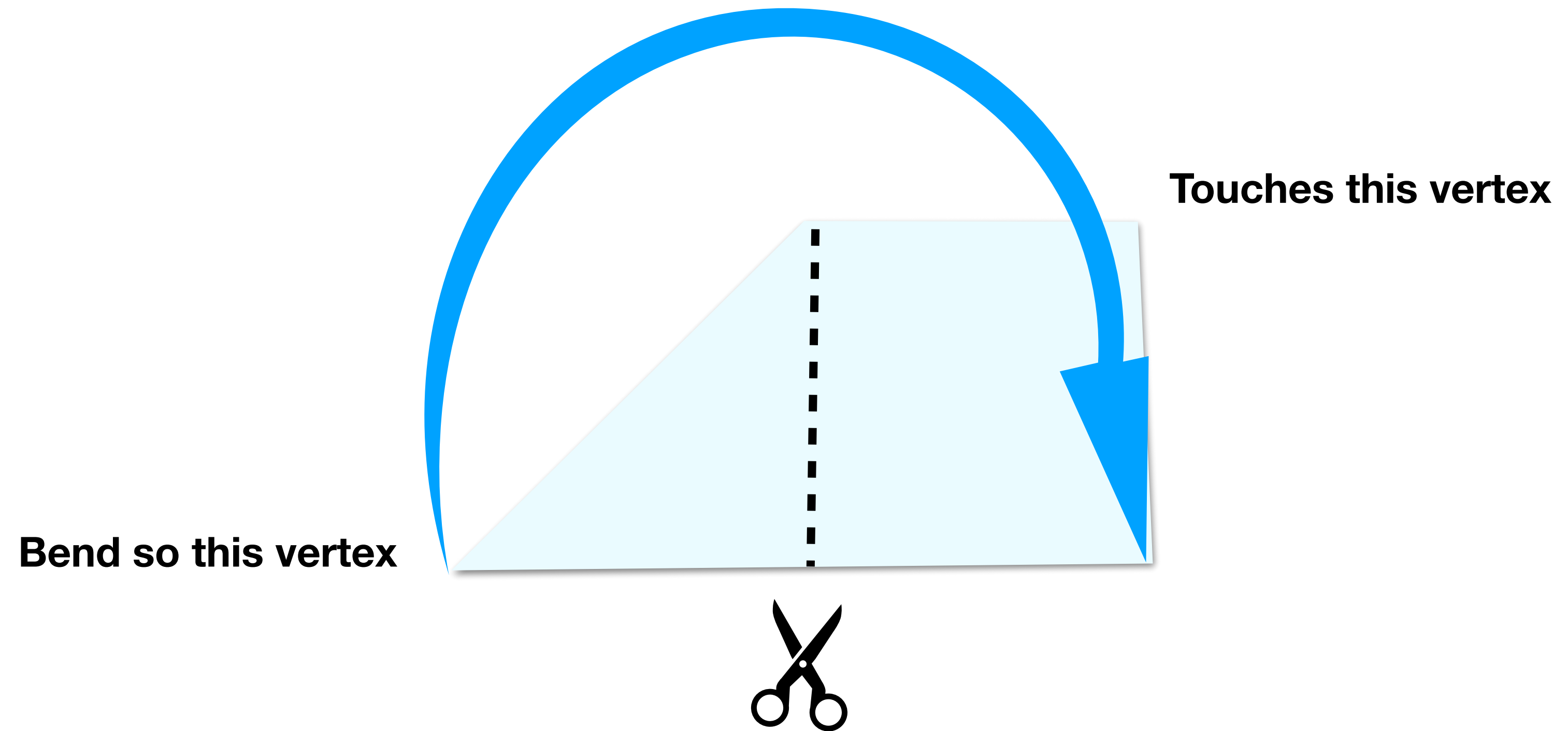**Bend and fold the corner**
Cut along the crease

Fold the trapezoid in half like shown
Cut along the crease

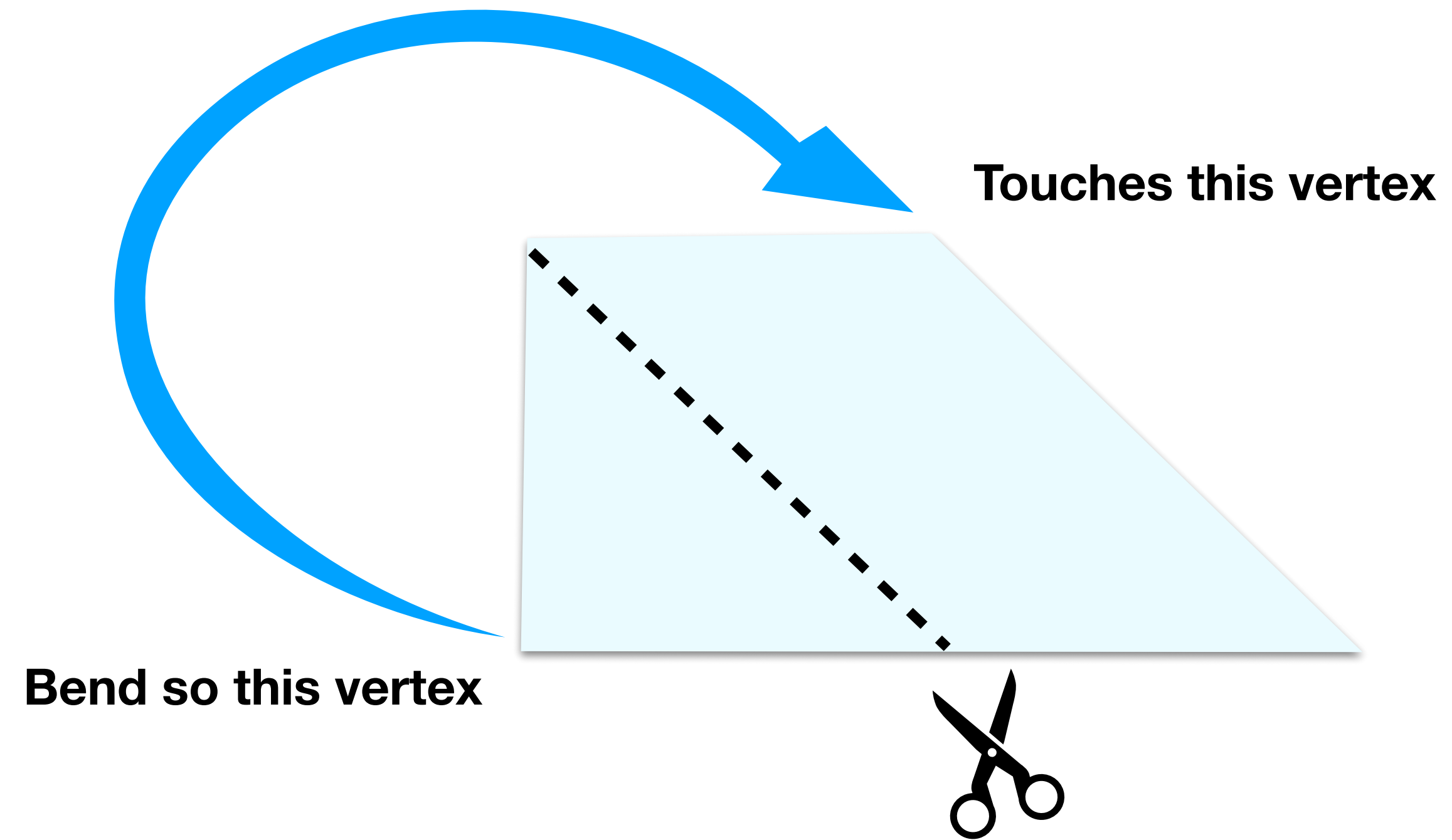**Fold the trapezoid so it creates a triangle and a square**
Cut along the crease

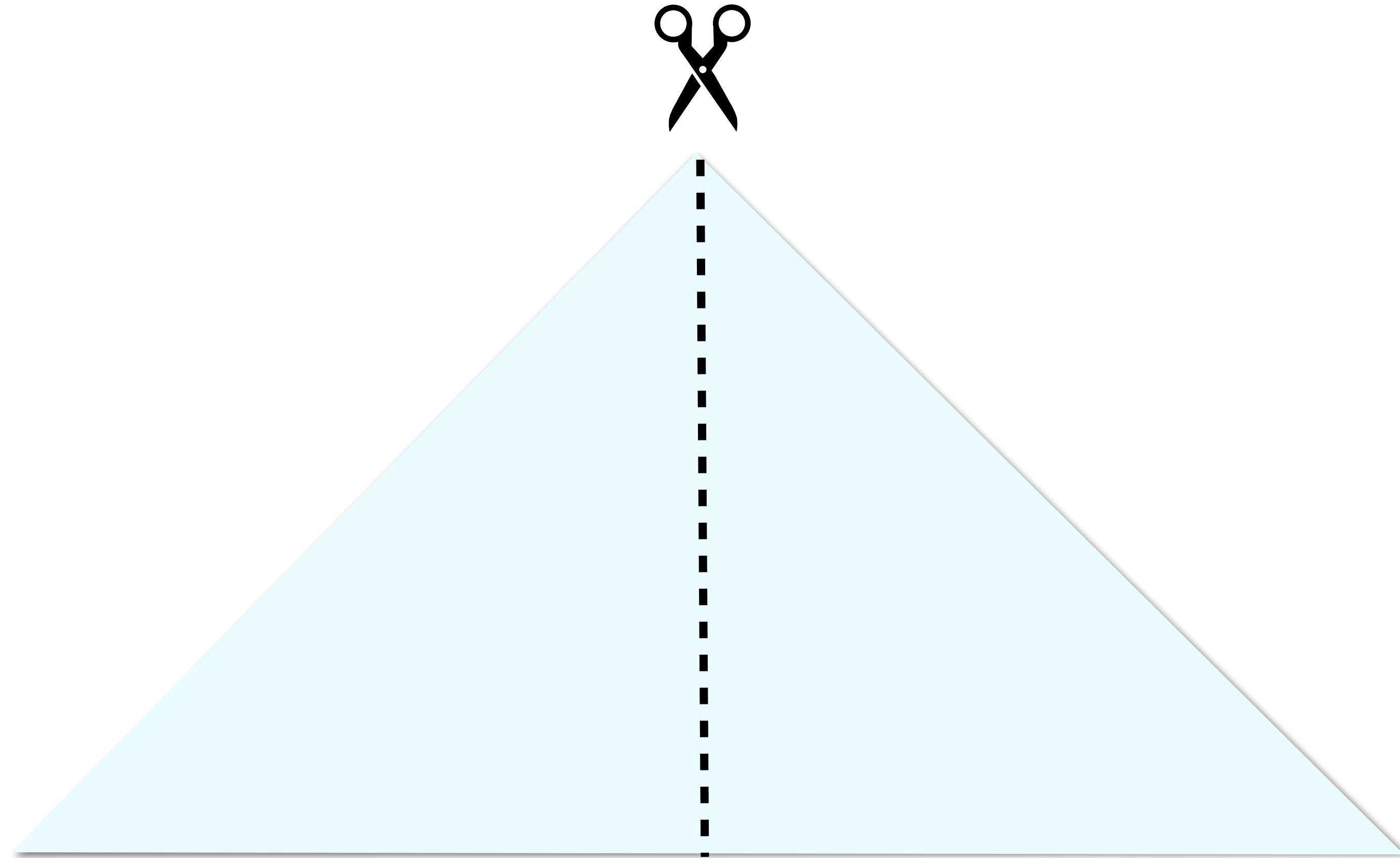Touches this vertex

Bend so this vertex

Fold the trapezoid so it creates a triangle and a parallelogram
Cut along the crease

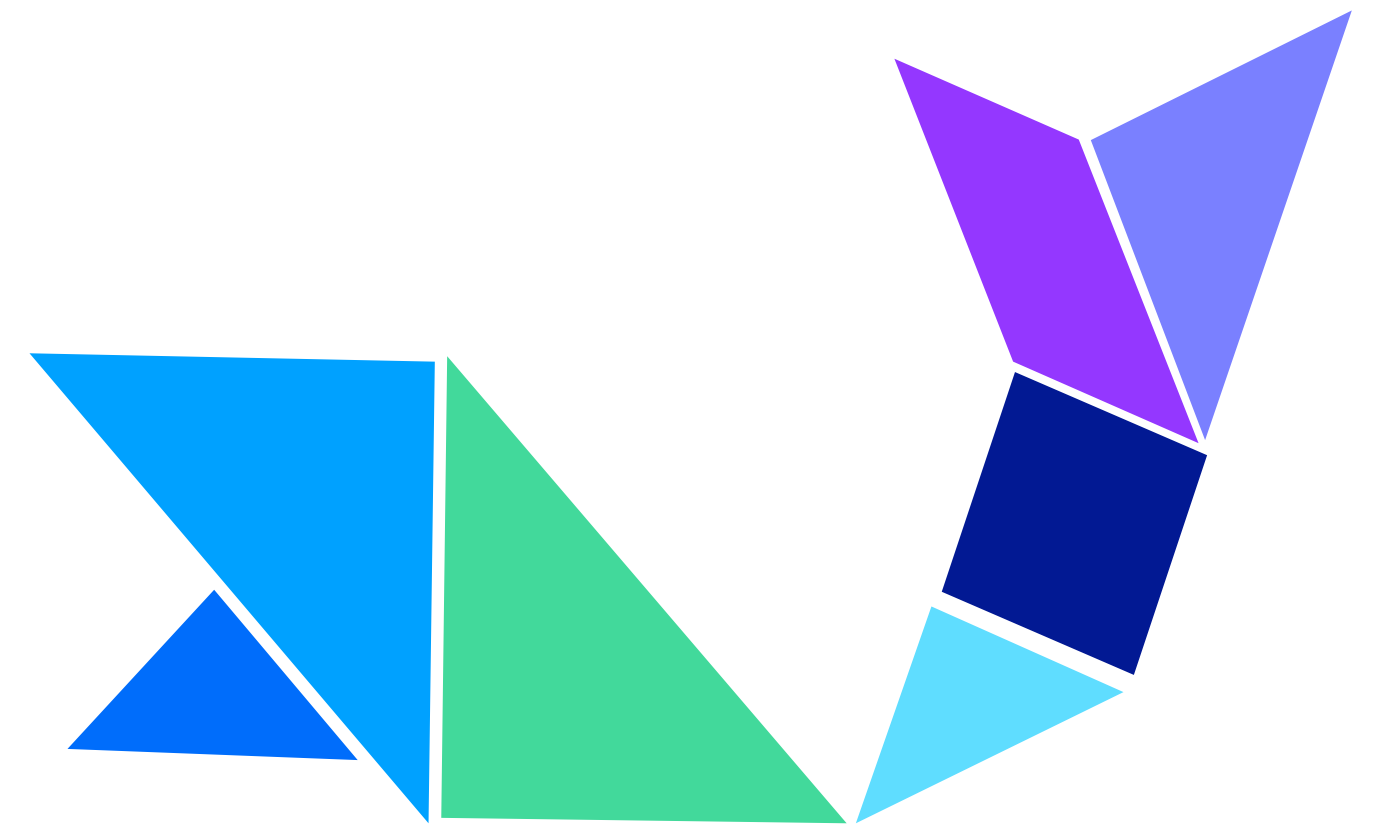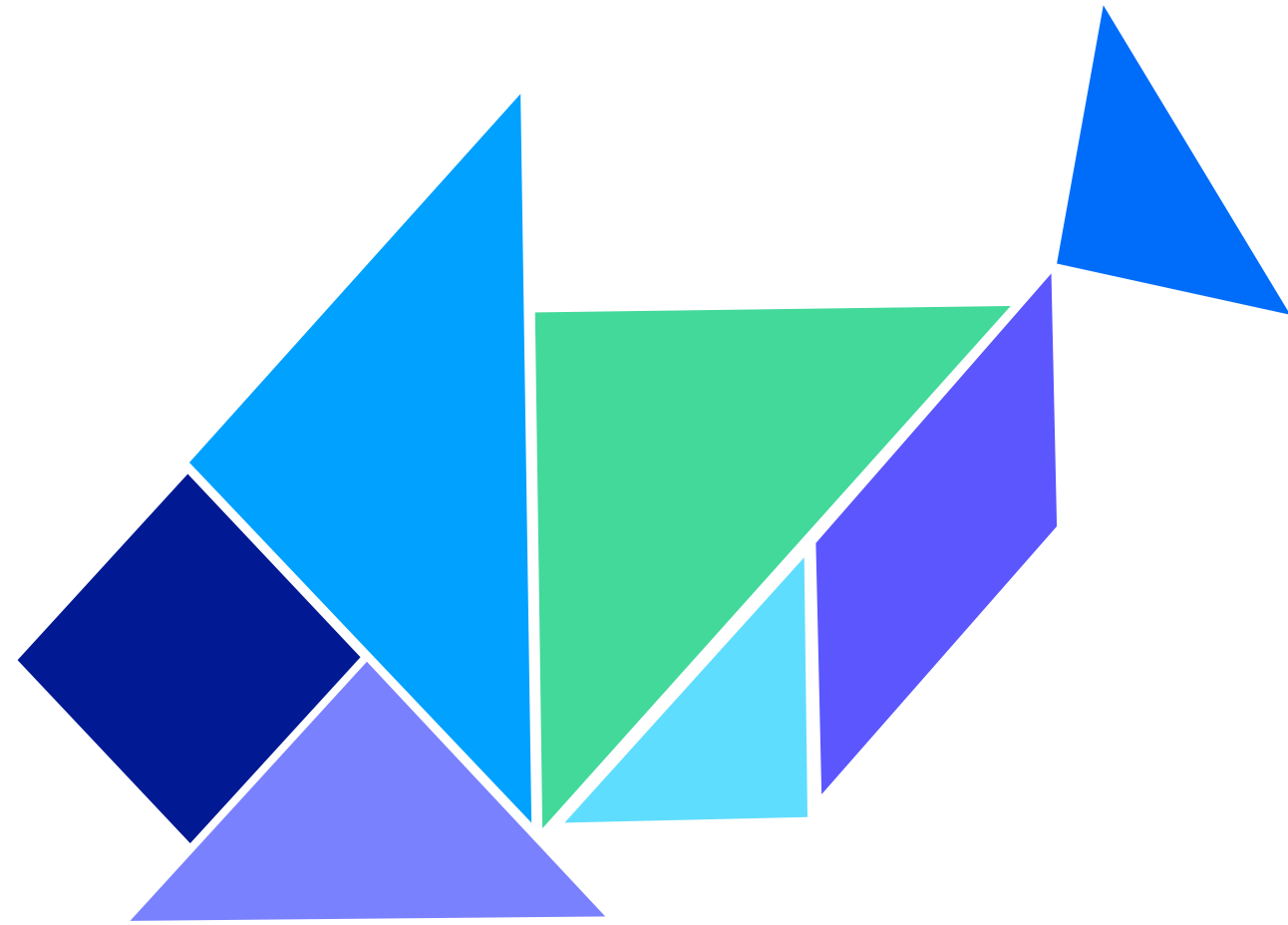Touches this vertex

Bend so this vertex
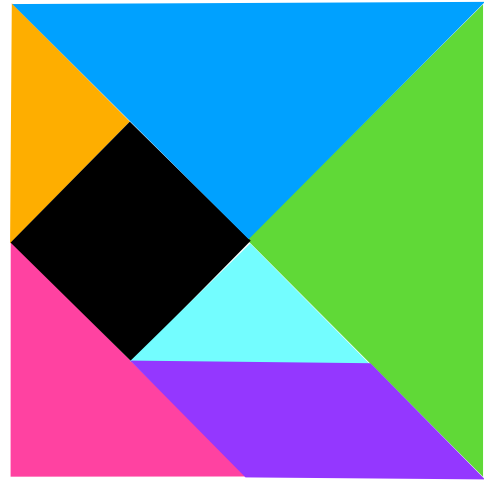
Fold the large remaining triangle in half
Cut along the crease
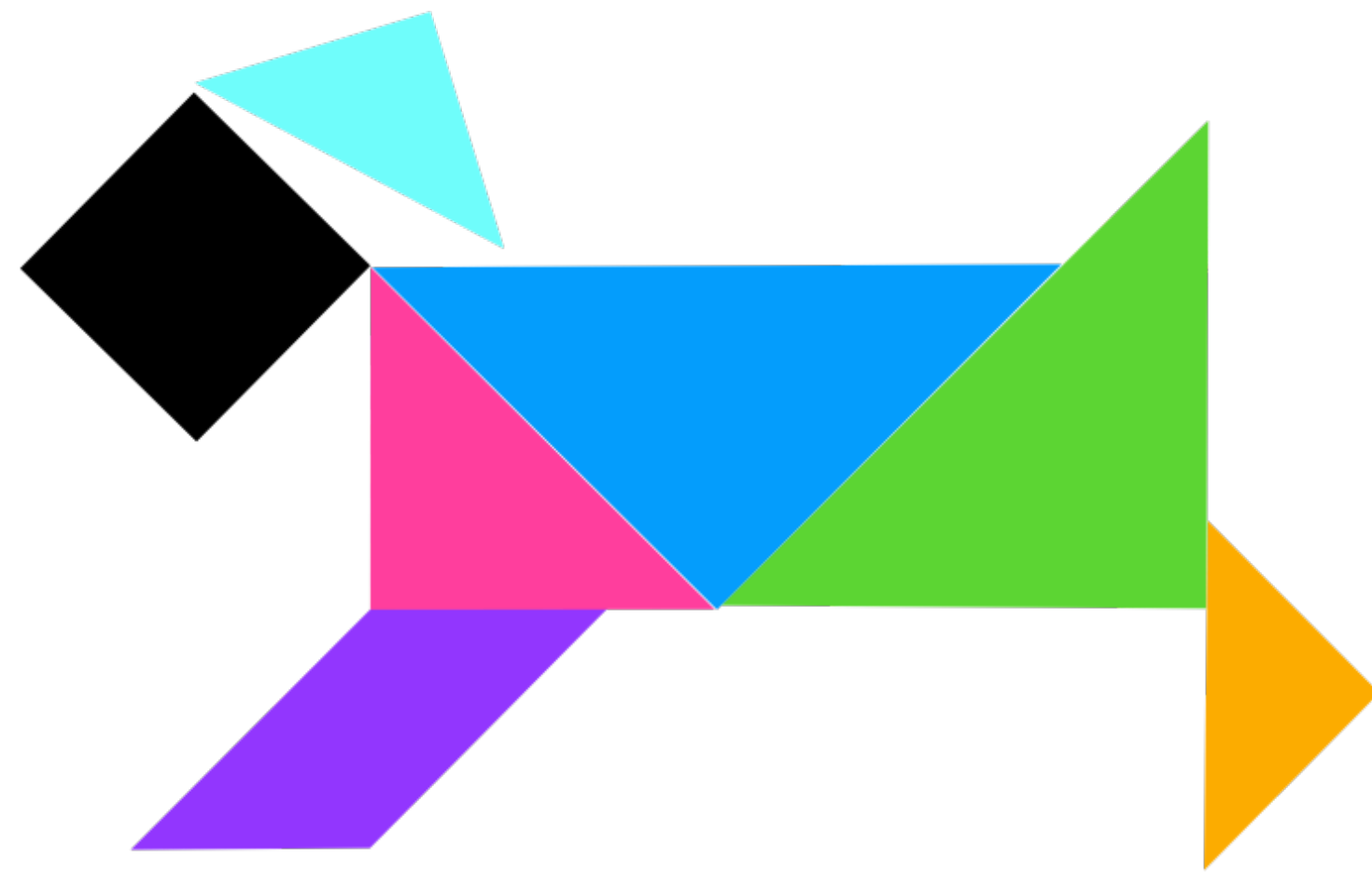
Try one of these designs
Make a design of your own
Share your creation: https://bit.ly/3qJdCpI

Make a design of your own
Share your creation: https://bit.ly/3qJdCpl

To think about:
Would you try this with children? What ages?
What math did we use?

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Challenges for later:
Explore shapes you can make with tangrams
Reconstruct the square
Visit www.earlymathca.org/tangrams