Unit 7, Lesson 6

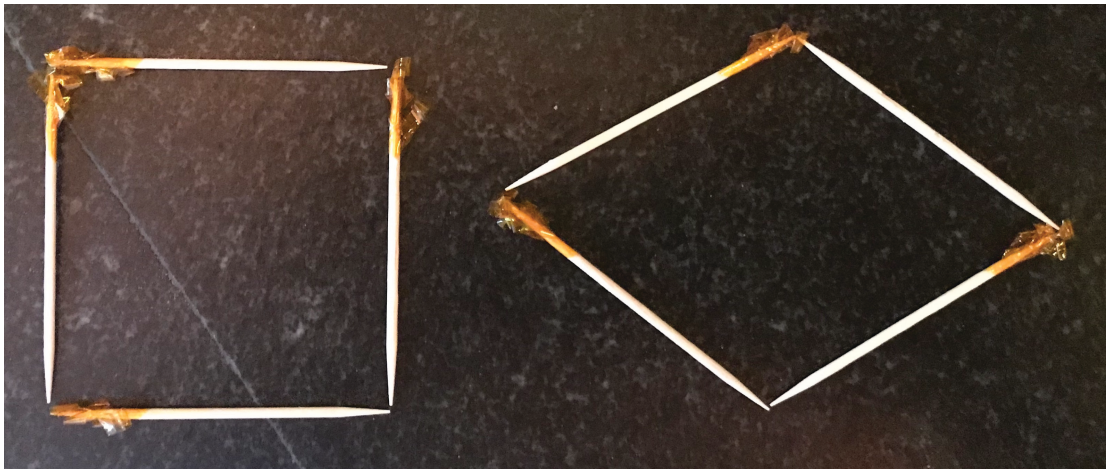
Hierarchy of Quadrilaterals

Let's explore the hierarchy of quadrilaterals.

Warm-up

Notice and Wonder: Squares and Rhombuses

What do you notice? What do you wonder?

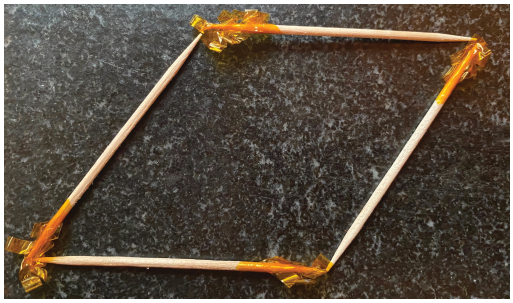


Activity 1

Shapes with Toothpicks

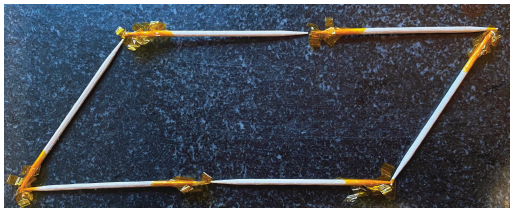
1. Build a square with 4 toothpicks. How do you know it is a square?

2. Use the same 4 toothpicks to build this shape. What stayed the same? What changed?



3. Build a rectangle with 6 toothpicks. How do you know it is a rectangle?

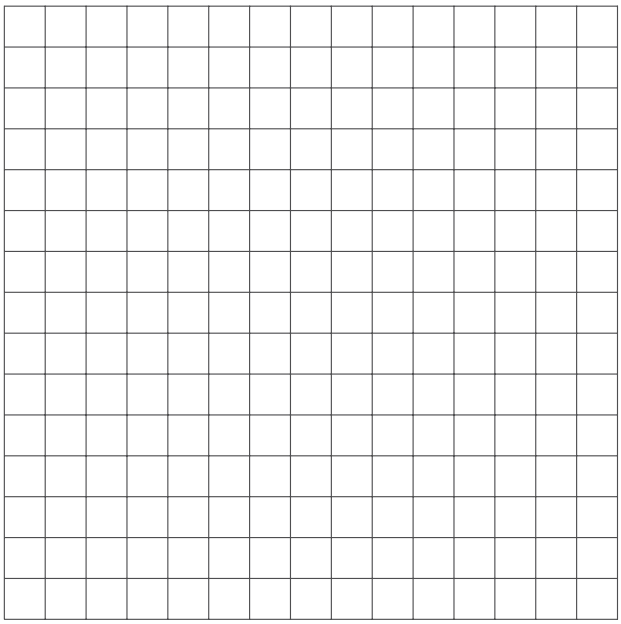
4. Use the same 6 toothpicks to build this shape. What stayed the same? What changed?



Activity 2

Three Quadrilaterals

1. Draw 3 different quadrilaterals on the grid. At least 1 of them must be a parallelogram.



2. For each of your quadrilaterals determine if it is a:
   - Square
   - Rhombus
   - Rectangle
   - Parallelogram

   Explain or show your reasoning.

3. Draw a rhombus that is *not* a square. Explain or show how you know it is a rhombus but *not* a square.

4. Draw a rhombus that is a square. Explain or show how you know it is a rhombus and a square.

5. Diego says that it is impossible to draw a square that is *not* a rhombus. Do you agree with him? Explain or show your reasoning.