

Welcome, LEGO Master Builder!

Today, we're going on a geometry adventure using your favorite building blocks – LEGOs! We'll learn about shapes, how much space they cover, and the distance around them.

Activity 1: Shape Hunt & Build (15 mins)

1. **Shape Talk:** Let's talk about flat shapes (2D shapes). Can you name some? (Guide towards square, rectangle, triangle). What makes a square a square? (4 equal sides, 4 corners). What about a rectangle? (4 sides, 4 corners, opposite sides are equal).
2. **LEGO Shapes:** Your first mission! Use your LEGO bricks to build a square on the table or baseplate. Now build a rectangle. Can you try building a triangle? (This might be tricky with standard bricks, discuss why).
3. **Corners & Sides:** Point to the corners (vertices) and sides of your LEGO shapes. How many corners and sides does your square have? Your rectangle?

Activity 2: LEGO Area Adventure (15 mins)

1. **What is Area?** Imagine you want to cover the floor of a LEGO house. The amount of space you cover on the inside is called the 'area'. We can measure area using LEGO studs!
2. **Build a Rectangle:** Build a simple, solid rectangle using LEGO bricks (e.g., a 4x6 stud rectangle).
3. **Count the Studs:** How many studs are inside your rectangle? Count them! That number represents the *area* of your LEGO rectangle in 'stud units'.
4. **Experiment:** Build another rectangle of a different size. Count its area (studs). Which rectangle has a bigger area?

Activity 3: Perimeter Path (15 mins)

1. **What is Perimeter?** Now imagine you want to build a fence around your LEGO garden. The length of the fence going all the way around the outside is the 'perimeter'.
2. **Outline Your Shape:** Take one of your LEGO rectangles (like the 4x6 one). Let's trace the outside edge. Place single LEGO bricks (or just count the studs) along the *very edge* of the shape.
3. **Count the Edge Studs:** How many studs long is the path around the outside of your shape? Count them carefully. That number is the *perimeter* of your LEGO shape in 'stud units'.
4. **Compare:** Does the shape with the bigger area always have the bigger perimeter? Let's build some different shapes and compare their area (studs inside) and perimeter (studs around the edge).

Wrap-up & Challenge (5-10 mins)

- **Review:** What did we learn today? What is area? What is perimeter? How did we use LEGOs to explore these ideas?
- **Creative Build:** Can you build a small LEGO creation (like a mini house or car) and tell me about the shapes you used? Can you estimate the area of its base or the perimeter of one of its sides using studs?

Great building and learning today!