LEGO® Education

Build A Shape

Explore different ways to make a shapes



ENGAGE

Facilitate a quick discussion about shapes. Ask questions, like:

- Who can give me an example of a shape?
- How many corners does that shape have?
- Does that shape have any curved lines?
- Is that shape a 2D shape or a 3D shape?
- What's the difference between 2D and 3D shapes?

(Repeat this line of questioning with another shape)

EXPLORE

Provide students with their LEGO bricks Ask them to create a shape using their bricks. Their goal is to make the shape look as accurate as possible (i.e., corners, edges, equal sides, etc.).

EXPLAIN

When the students have finished building their shapes, ask questions like:

- What shape did you build?
- Did you have to make changes to your shape?
- What changes did you make (if any)?
- What was challenging about building this shape?
- Why might certain shapes be more difficult to build than others?

ELABORATE

For an extra challenge, have students build a shape again—but this time, they must build the shape (however they choose) **AND** then they must build the same exact shape next to it, but this shape must have all of the LEGO bricks/elements fully connected (i.e., there can be no loose bricks or pieces just sitting next to each other).

EXTEND

Challenge students to build a shape, but place constraints on their LEGO builds:

- Build a square using only red bricks.
- Build a triangle using only 5 bricks/elements.
- Build a rectangle using a color pattern (i.e., red, blue, red, blue).
- Build a shape of your choice using exactly 10 bricks/elements.
- Build a shape of your choice but you cannot use any green bricks/elements.

