



Extended Learning for Educators

SHAPE SANDWICHES



Purpose To practice shape construction and deconstruction

Learning Goals Use visual-spatial and analytical skills to:

- Combine shapes to make a new shape
- Separate shapes into component shapes
- Predict the result of constructing and deconstructing shapes

What You Need

- Sandwich bread
- Kitchen knife (for adult use only)

Step 1 Prepare by cutting several slices of bread into shapes. Make sure to include two triangles, four small squares, and four small triangles. (NOTE: If you choose, you can do this activity with fully made sandwiches!)

Step 2 In the RelationShapes™ app, play some of the level 5 items together. Practice constructing and deconstructing squares from triangles.

Step 3 Have children construct new shapes using the cutout shape sandwiches. Start by making a square from two triangles. Model constructing other shapes, such as a square from four smaller squares, a big triangle from two smaller triangles, or a rectangle from two squares. Try making a rhombus (i.e., a kite) or a parallelogram. Encourage children to create as many new shape sandwiches as they can!

Step 4 Next use the shape sandwiches to practice deconstructing shapes. Start by making a square from two triangles. Have children separate the square into its component shapes. Repeat with a variety of shapes.

Step 5 As you play, ask children to name the constructed shape and its component shapes (e.g., a square made of two triangles).

SHOW WHAT YOU KNOW!

- Ask children to predict what will happen when you construct or deconstruct the shape sandwiches. Then combine or separate the shapes to check children's responses. Here are some examples to try:
 - ◆ With two triangles – *"If we put these two triangles together, what shape will we have?"*
 - ◆ With a square comprised of two triangles – *"What shapes do you think are in this square?"*
 - ◆ With two squares – *"If we put these squares together, what shape will we have?"*
 - ◆ With a bigger triangle comprised of two small triangles – *"What shapes do you think are in the big triangle?"*
- Have children create objects with the shape sandwiches. For example, can they make a house? A building? A car or truck? An animal? A kite? Encourage children to get creative and find out what the shapes can make!