

Discovering Volume Formulas

- 1. Pick a two-dimensional shape and make 5 copies of it.
- 2. Stack your shapes and calculate the volume of this new three-dimensional object. Based on your example, think of a general formula for the volume of the shape formed.

- 3. Share your shape and volume formula with the rest of the class.
- 4. Look at this model where the cube is split into three equal shapes so that each has a full side of the cube. Find the volume of each one shape.

5. How would the volume formula change if instead of having a square base the pyramid had a rectangular base? Come up with a general formula for a pyramid with any shape base. Use your formula to find the volume of a cone.