## What's it Take to Fill Me Up?

## Sketch and solve.

1. A moving box has a side length of 3 feet, a width of 2 feet and a height of 4 feet. What is the volume of the box?

2. A cube has a side length of 8 cm. What is the volume of the cube?

3. If a cube has a total volume of 1000cm³, what is the side length of the cube? Explain your reasoning.

- 4. If a rectangular prism has a side length of 5 cm and a width of 6 cm, and an overall volume of 90 cm³, what is the height of the prism?
- 5. On the back of this page, sketch a rectangular prism and a cube that have the same volume. Your volume must be at least 100 units<sup>3</sup>.