

Build Three-Dimensional Shapes

Name _____

Learning Target: Build three-dimensional figures and find the numbers of unit cubes in three-dimensional figures.

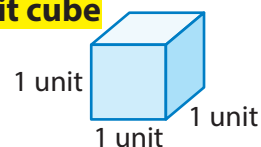
Success Criteria:

- I can build a three-dimensional figure using unit cubes.
- I can find the number of unit cubes in a three-dimensional figure.

Explore and Grow

Just like any three-dimensional figure, a **unit cube** has length, width, and height. You can build three-dimensional figures using unit cubes.

unit cube



Use unit cubes to build each three-dimensional figure.

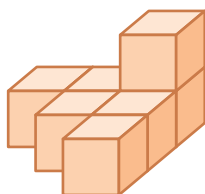


Figure 1

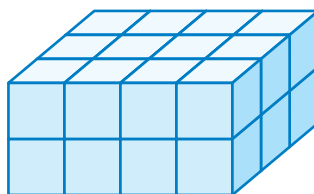


Figure 2

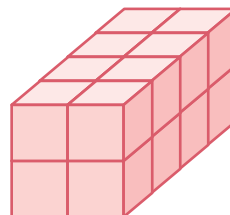
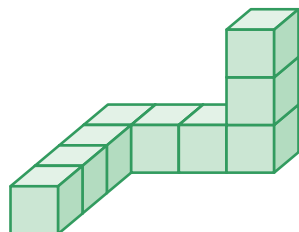
Be sure to include any hidden unit cubes.



How many unit cubes make up each figure? Describe how you found your answers.



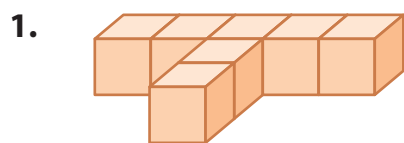
Precision Find the number of unit cubes that make up each figure. Explain your reasoning.



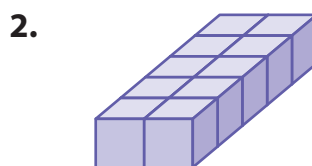
Practice

Name _____

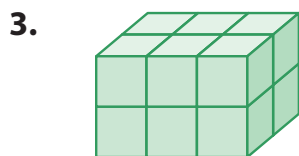
Find the number of unit cubes that make up each figure.



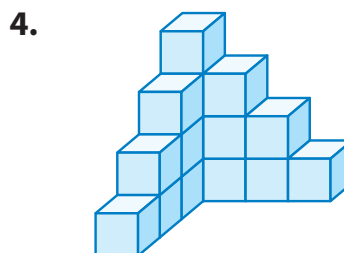
_____ unit cubes



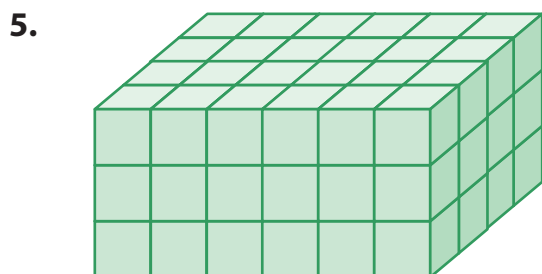
_____ unit cubes



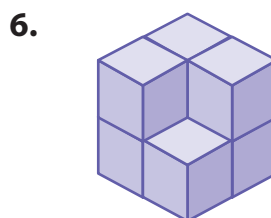
_____ unit cubes



_____ unit cubes



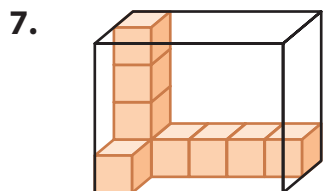
_____ unit cubes



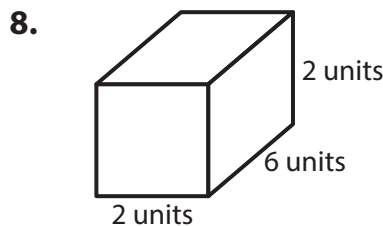
_____ unit cubes

DIG DEEPER!

Find the number of unit cubes it takes to pack one half of the prism.



_____ unit cubes



_____ unit cubes

9. **MP Reasoning** You add another layer of unit cubes on top of the prism in Exercise 5. How many unit cubes make up the new prism?

10. **Open-Ended** You have 12 unit cubes. Describe four different rectangular prisms you can build using all of the unit cubes.