G5 Playlist: Volume of Composite Solid Figures

Aligns with *CCSS.MATH.CONTENT.5.MD.C.5.c*: Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

Related Standards

- *CCSS.MATH.CONTENT.5.MD.C.5.a:* Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.

- *CCSS.MATH.CONTENT.5.MD.C.5.b:* Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.

Objectives

In this module, you will learn and practice the following skills:

- Understand that volumes of solid figures can be added together to find the total volume of composite solid figures.
- Break apart composite solid figures into rectangular prisms.
- Solve problems, including real world problems, about the volume of composite solid figures that are composed of more than 1 rectangular prism.

Let's get started!

Key Terms

- **Volume** is the amount of space inside a solid figure, measured in cubic units.
- A **rectangular prism** is a solid figure that has 6 rectangular faces, with opposite faces that are equal and parallel.
- A **composite solid figure** is composed of more than 1 solid figure.