Volume of Rectangular Prisms

Today's Standard

5.MD.C5a - 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.

Real-World Applications for this Standard

Calculating the volume of a storage box; Determining the amount of soil needed to fill a garden bed; Finding the capacity of a fish tank; Estimating the space required for shipping containers

Today I Learned

Today, we learned how to find the volume of a box by using small cubes or by multiplying the length, width, and height.

Common Stumbling Blocks

Sometimes kids think they should add the sides to find the volume, but they need to multiply them. Also, they might mix up the area of the base with the volume of the whole box.

Quiz Me

- What is volume?
- How do you find the volume of a box?
- What is a rectangular prism?
- What do you use to measure volume?
- Why do you multiply the sides to find volume?

Help Me

Volume tells us how much space is inside a box. We can find it by using small cubes to fill the box or by multiplying the length, width, and height. For example, if you have a box that is 2 cubes long, 3 cubes wide, and 4 cubes high, you multiply 2, 3, and 4 to get 24 cubes. This helps us know how much stuff we can fit inside!