

Name: Class:

Volume of cubes and rectangular prisms: word problems

Mary's lunch box is 24cm long, 15 cm wide and 4 cm thick. What is the volume of the lunch box ?



Lucy and her parents went to the beach. Lucy built a sand castle shaped like a cube. Lucy's sand castle look like a square with a side of 12 meters. What is the volume of Lucy's sand castle ?

Mr. James needs a new gas cooker for his baking classes. His wife bought him a brand new beautiful gas cooker as a present. The gas cooker is 3 feet long, 2 feet wide, and 3 feet tall. What is the volume of the gass cooker ?



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Mary's lunch box is 24cm long, 15 cm wide and 4 cm thick. What is the volume of the lunch box ?

Formula for the volume of a rectangular prism is:

Volume = length x width x height.

Find the volume of the lunch box by substituting the values,

Length = 24 cm, width = 15 cm, height = 4 cm into the formula

Volume = $24 \times 15 \times 4 = 1,440$ cubic centimeters



So, the volume of the lunch box is 1,440 cubic centimeters.

Lucy and her parents went to the beach. Lucy built a sand castle shaped like a cube. Lucy's sand castle look like a square with a side of 12 meters. What is the volume of Lucy's sand castle ?

Formula for the volume of a cube is

Volume = $(\text{length})^3$

Now, find the volume of the sand castle by substituting the value of length = 12 meters, into the formula

Volume = $12 \times 12 \times 12 = 1,728$ cubic meters

So, the volume of the sand castle is 1,728 cubic meters.

Mr. James needs a new gas cooker for his baking classes. His wife bought him a brand new beautiful gas cooker as a present. The gas cooker is 3 feet long, 2 feet wide, and 3 feet tall. What is the volume of the gas cooker ?

Formula for the volume of a rectangular prism is

Volume = length x width x height.

Now, find the volume of the gas cooker by substituting the values,

Length = 3 feet, width = 2 feet, height = 3 feet into the formula

Volume = $3 \times 2 \times 3 = 18$ cubic feet

So, the volume of the gas cooker is 18 cubic feet

