



**SAMPLES OF STANDARDS STUDENTS ARE LEARNING THIS NINE WEEKS:**

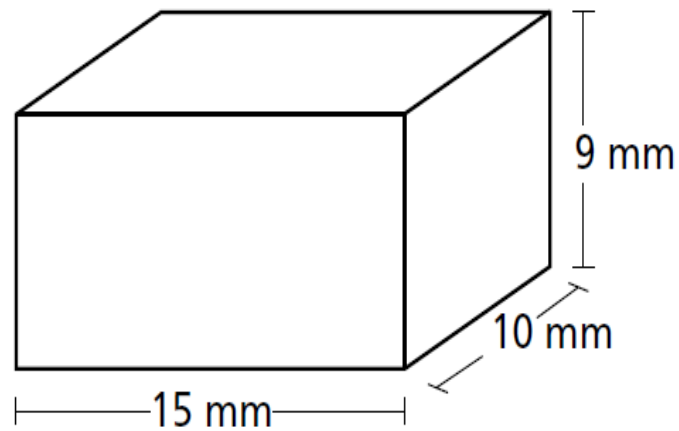
**5<sup>th</sup> Grade Math**

**STANDARDS: 5.NF.7b, 5.MD.1, 5.MD.3, 5.MD.5a**

**5.MD.5a:**

**Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. 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.**

A rectangular prism is shown below.



[not drawn to scale]

**Part A**

Which **three** expressions can be used to find the greatest number of 1-millimeter unit cubes that could be packed into the prism?

- A**  $150 \times 9$
- B**  $135 \times 10$
- C**  $100 \times 19$
- D**  $90 \times 15$
- E**  $19 \times 15$

**Answers A, B, and D are correct.**

**Part B**

What is the volume of the prism?

- A** 225 mm<sup>3</sup>
- B** 285 mm<sup>3</sup>
- C** 1,350 mm<sup>3</sup>
- D** 1,500 mm<sup>3</sup>

Answer C is correct.

**5.NF.7b: Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for  $4 \div (1/5)$ , and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that  $4 \div (1/5) = 20$  because  $20 \times (1/5) = 4$ .**

Which situation can be modeled by the expression  $4 \div \frac{1}{3}$ ?

- A** Beni separates 4 quarts of paint into 3 equal jars.
- B** Beni puts  $\frac{1}{3}$  quart of paint in each of 4 jars.
- C** Beni has 4 quarts of paint and puts  $\frac{1}{3}$  quart into a jar.
- D** Beni fills as many  $\frac{1}{3}$ -quart jars as he can with 4 quarts of paint.

**Answer D is correct.**

**5.MD.1: Convert among different-sized standard measurement units within a given measurement system (customary and metric) (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.**

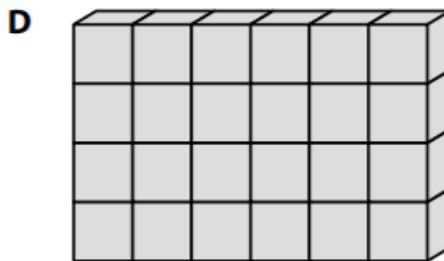
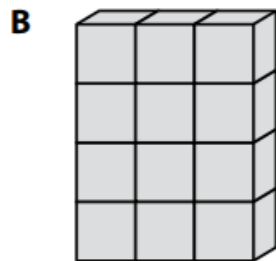
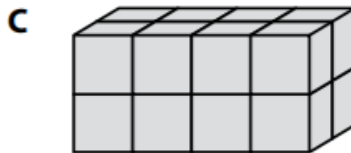
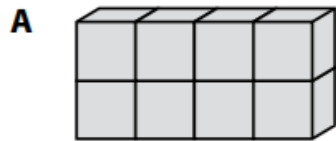
There are 1,000 meters in 1 kilometer. How many kilometers are in 3,600 meters?

- A** 3.6 kilometers
- B** 36 kilometers
- C** 360,000 kilometers
- D** 3,600,000 kilometers

**Answer A is correct.**

**5.MD.3: Recognize volume as an attribute of solid figures and understand concepts of volume measurement.**

John builds a rectangular prism that has a volume of 12 cubic units. Which rectangular prism could be John's prism?



**Answer B is correct.**