

Looking Back

Grade 4 Common Core Standards

4.MD.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.

Topic 14
Measurement Units and Conversions

4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

Topic 14
Measurement Units and Conversions

4.MD.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

Topic 15
Solving Measurement Problems

Grade 5 Common Core Standards

5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.

Topic 3
Multiplying Whole Numbers


DOMAIN Measurement and Data

Grade 5 Topic 12

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

12-1 Solids

5.MD.3.a A cube with a side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.

12-2 Views of Solids**12-4 Models and Volume**

5.MD.3.b A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.

12-4 Models and Volume

5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.

12-7 PS: Use Objects and Reasoning

5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.

12-3 PS: Use Objects and Solve a Simpler Problem

5.MD.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.

12-5 Volume

5.MD.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.

12-5 Volume

5.MD.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.

12-6 Combining Volumes

Looking Ahead

Grade 5 Common Core Standards

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

Topic 13
Units of Measure

5.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of the category.

Topic 15
Classifying Plane Figures

5.G.4 Classify two-dimensional figures in a hierarchy based on properties.

Topic 15
Classifying Plane Figures

Grade 6 Common Core Standards

6.G.1 Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

Topic 11
Properties of Two-Dimensional Figures