

NWEA Assessment Item Illustrating 3.MD.C.6

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Domain: Measurement and Data

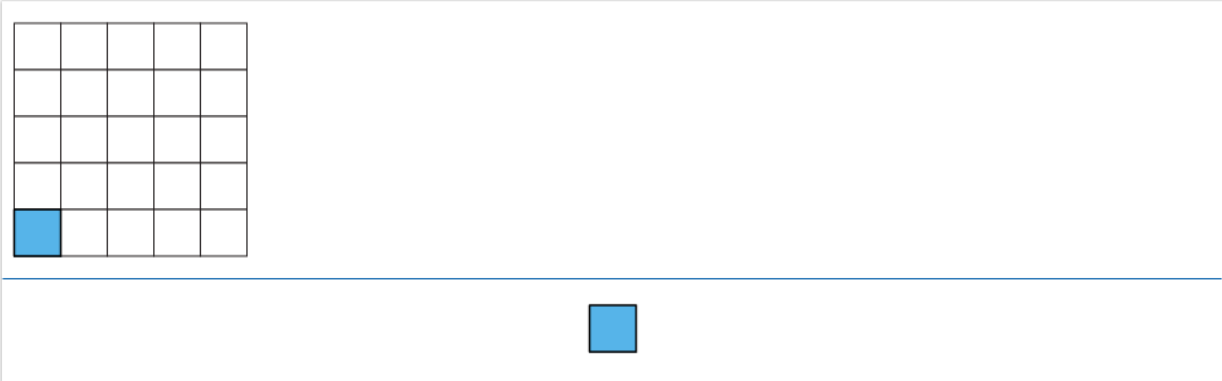
3.MD.C: Geometric measurement: understand concepts of area and relate area to multiplication and to addition.

Calculator Availability: No

Use the information to complete the task.

Mia wants to make a rectangle that has a total area of 12 square units. She places one shaded square on the grid. Each shaded square has an area of 1 square unit.

Move more shaded squares to the grid to make a rectangle that has an area of 12 square units.



The task interface shows a 5x5 grid. The bottom-left square (row 5, column 1) is shaded blue. Below the grid is a separate area containing one shaded blue square. The grid is intended for the student to place additional shaded squares to form a rectangle with a total area of 12 square units.

Alignment: 3.MD.C.6: Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).

This item assesses foundational understandings about area. Before students learn to multiply side lengths to find the area of a rectangle, they must understand what area is. Students apply the understanding that area is the two-dimensional space taken up by a figure and that it is typically measured in units that are square.

Coherence: Area concepts are an extension of the linear measurement work that students started in grade 2^{2.MD.A.1} when they learned to measure using standard units and tools, such as rulers. Learning area measurement in grade 3 provides a basis for the work that students will do in grade 5 when they learn about volume.^{5.MD.C}

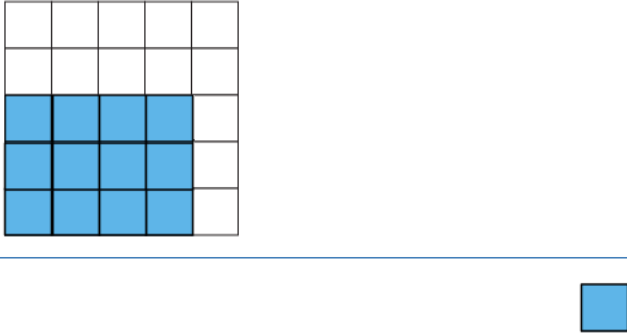
Rigor: This item attends to conceptual understanding of area.

Answer Key: This item has more than one acceptable correct response. One response is shown here.

Use the information to complete the task.

Mia wants to make a rectangle that has a total area of 12 square units. She places one shaded square on the grid. Each shaded square has an area of 1 square unit.

Move more shaded squares to the grid to make a rectangle that has an area of 12 square units.



The image shows a 5x5 grid. The first three rows and the first four columns are shaded blue, forming a 3x4 rectangle with an area of 12 square units. Below the grid, there is a single blue square, representing the one shaded square mentioned in the text.

Learn More

Learn more with the [Math Assessment Item Alignment Professional Development Modules](#).

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