Mini-Map for M.EE.6.G.1

Subject: Mathematics
Geometry (G)
Grade: 6

Learning Outcome

DLM Essential Element	Grade-Level Standard
M.EE.6.G.1 Solve real-world and mathematical problems about area using unit squares.	**M.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.

Linkage Level Descriptions

Initial Precursor	Distal Precursor	Proximal Precursor	Target	Successor
Communicate understanding of "separateness" by recognizing objects that are not joined together. Communicate generic understanding of "some" as a certain amount or a number of people or things.	Communicate understanding that a unit square is a square with edge lengths of 1 unit and area of 1 square unit. Communicate understanding of area as the measure of space contained within the outline or boundary of a two-dimensional object or figure.	Calculate the area of a square or rectangle by filling a figure with unit squares or tiles and counting the total number of unit squares or tiles. Calculate the area of a square or rectangle by counting the number of square units drawn to cover the area.	Find the unknown quantity in the word problem by determining the area of a rectangle.	Communicate understanding that length and width measures of a rectangle can be used to find the number of unit tiles needed to fill the rectangle and that the number of tiles equals the product of the length and width. Calculate area of a rectangle using the area formula (area = length x width).

Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

How is the Initial Precursor related to the Target?

In order to solve problems using unit squares, students at this level start with learning to recognize that two or more sets or groups of items exist. Work on this skill using a variety of sets with 1-4 items. Help students recognize when items are grouped together into a set or separated out. The educator presents a set, labels it, and then counts the items (e.g., two balls, 1, 2) and encourages students to use numerals to label and count the separate sets. Begin working on the quantifier "some" as students are developing an understanding of the quantities 1-4, using the students' communication system to demonstrate the use of the word "some".

How is the Distal Precursor related to the Target?

As students continue to develop their understandings of number and sets, they can also work on covering small rectangles with unit squares and counting each one as it is placed. Core vocabulary can be used to demonstrate the language associated with these concepts (e.g., all, all on, put on, it here, unit squares are to be placed on a rectangle side by side if one is on the diagonal the word turn can be used, finished).

Instructional Resources

Released Testlets
See the Guide to Practice Activities and Released Testlets.
Using Untested (UN) Nodes
See the document Using Mini-Maps to Plan Instruction.

Link to Text-Only Map

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