## Learning Outcome

## DLM Essential Element

M.EE.7.G. 4 Determine the perimeter of a rectangle by adding the measures of the sides.

## Grade-Level Standard

M.7.G.4 Know the formulas for the area and circumference of a circle, and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.

## Linkage Level Descriptions

| Initial Precursor | Distal Precursor | Proximal Precursor | Target | Successor |
| :---: | :---: | :---: | :---: | :---: |
| Recognize attributes or characteristics of an object, such as color, orientation, length, width, and weight. | Recognize and explain measurable (e.g., height, depth, diameter, weight) and non-measurable (e.g., color or orientation) attribute values. | Communicate understanding that length is the measure along a side of a shape or object and perimeter is the measure around a shape or object, beginning and ending at the same point, and without any overlap. | Calculate the perimeter of a shape by adding the measures of all the sides. Calculate the perimeter of a rectangle drawn on a grid paper by counting the unit squares contained within the boundary of the shape. | Determine the perimeter of a square or rectangle drawn on a graph paper using the $x$ and $y$-coordinates of the vertices. |

## Initial Precursor and Distal Precursor Linkage Level Relationships to the Target

## How is the Initial Precursor related to the Target?

In order to calculate perimeter, students begin by learning to notice what is new. The educator draws the students' attention to new objects or stimuli, labels them (e.g., "these are two long cubes and short cubes," or "you have two fidgets; one is big and one is small but they are both fidgets"), and the student observes, feels, or otherwise interacts with it. Educators encourage students to begin placing like objects together, drawing attention to the characteristics that make an item the same or different.

## How is the Distal Precursor related to the Target?

As students develop their attention to objects and notice the difference between objects, they will begin working on recognizing and describing measurable attributes. Students need lots of experience making direct comparisons between objects. Educators should use the comparison words (e.g., $\mathrm{big} / \mathrm{small}$, tall/short, longer/shorter). While students do not need to say them, they do need to learn their meaning.

## 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

M.EE.7.G.4 Determine the perimeter of a rectangle by adding the measures of the sides.


| Map Key |  |
| :--- | :--- |
| IP | Initial Precursor |
| DP | Distal Precursor |
| PP | Proximal Precursor |
| T | Target |
| S | Successor |
| UN | Untested |
| Boxes indicate tested |  |
| nodes |  |

