## $3^{\text {rd }}$ Grade Unit 7:

Connecting Length, Area, and Perimeter


## Overview:

In this unit, students will use a ruler to measure length to the nearest half or quarter of an inch. Students also measure side lengths of polygons to determine the perimeter and extend their understanding of area measurement by explaining that the area of a rectangle can be determined by multiplying the side lengths.

## Learning Targets:

In Unit 7, students will:

- use the distributive property to decompose rectangles into smaller factors.
- move students beyond counting and additive strategies towards thinking multiplicatively.
- relate measurement with rulers to fractions on a number line.
- estimate length (inches, feet, yards, miles)
- record and compare measurements with graphical representations.
- explore how rectangles can have the same perimeter but different areas or the same area but different perimeters.
- explain that the perimeter represents the distance around a polygon.
- use computation strategies to determine the unknown side lengths of rectangles and polygons.

Key Vocabulary: (linked to GA DOE Interactive Glossary)

| Area | Feet | Half Inch | Inch |
| :--- | :--- | :--- | :--- |
| Perimeter | Quarter Inch | Square Units | Tiling |
| Yard | Estimate | Unknown | Number Line |

## Supporting Resources:

http://ctlslearn.cobbkl2.org/
https://gavirtual.instructure.com/courses/34724\#modules
https://toytheater.com/area-perimeter-explorer/
https://toytheater.com/inch-worm/
https://www.geogebra.org/m/pvjijawmc\#material/QAvaqhWU
https://phet.colorado.edu/en/simulations/area-model-introduction

