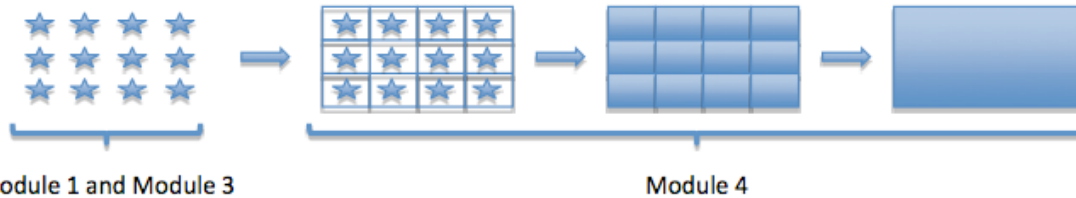


Vocabulary for Unit 4: Multiplication and Area

- ▶ Area (the amount of two-dimensional space in a bounded region)
- ▶ Area model (a model for multiplication that relates rectangular arrays to area)



- ▶ Array (a set of numbers or objects that follow a specific pattern, a matrix)
- ▶ Commutative Property: a mathematical property using addition or multiplication where “ $a + b = b + a$ ” or “ $a \times b = b \times a$ ”; e.g., rotate a rectangular array 90 degrees to demonstrate that factors in a multiplication sentence can switch places; $2 + 3 = 3 + 2$; $2 \times 3 = 3 \times 2$
- ▶ Distribute (e.g., $2 \times (3 + 4) = 2 \times 3 + 2 \times 4$)
- ▶ Geometric shape (a two-dimensional object with a specific outline or form)
- ▶ Length (the straight-line distance between two points)
- ▶ Rows and columns (e.g., in reference to rectangular arrays)
- ▶ Square unit (a unit of area—specifically square centimeters, inches, feet, and meters)
- ▶ Tile (to cover a region without gaps or overlaps)
- ▶ Unit square (e.g., given a length unit, it is a 1 unit by 1 unit square)
- ▶ Whole number (a number without fractions)