Grade: 5 Subject: Mathematics	Unit 2: Perimeter and Area
Big Idea/Rationale	• This unit explores perimeter and area of rectangles, parallelograms, and triangles. Students derive the formulas for parallelograms and right triangles. A big idea for this unit is that perimeter and area are two different measurements of the same shape and that each has its own kind of unit of measurement: linear units for perimeter and square units for area.
Enduring Understanding (Mastery Objective)	Students will understand that: • Formulas exist for finding the perimeter and area of some polygons. • Measurements can be used to describe, compare and make sense of phenomena. • What we measure affects how we measure it.
Essential Questions (Instructional Objective)	• How can you find the distance around a polygon? • How can a formula be used to find area? • How can finding the area of a rectangle help find the area of a parallelogram? How can there are of a parallelogram help determine the area of a triangle? • How can measurements be used to solve problems?
Content (Subject Matter)	• Define and relate common metric units of areas. • Select the appropriate metric unit for measuring a particular object. • Construct rectangles of given widths and lengths. • Distinguish between the area and the perimeter of a rectangle. • Classify angles by size and classify triangles by the size of their angles. • Derive formulas for areas of parallelograms and right triangles. • Find the area of any triangle. • Identify the height of any triangle. • Recognize that the area of a triangle is always one half the area of a parallelogram with the same height and base. • Select or infer the dimensions needed to find the area and perimeter of triangles and parallelograms. • Find the perimeter and area of complex geometric figures composed of multiple smaller shapes. • Calculate perimeter and area in customary units. • Estimate distance using benchmarks. • Estimate and measure perimeter and area in customary units. • Solve a variety of problems using mathematical concepts and skills.
Skills/ Benchmarks (CCSS Standards)	• **5.MD.A.1:** Convert among different-sized standard measurement units within a given measure system (e.g., convert 5 cm to 0.05 m) and use these conversions in solving multi-step, real world problems.

	• **Mathematical Practices**
Materials and Resources	• Math Expressions, Student Journals, Manipulatives, Math themed literature, BrainPop, IXL Mathematics