Grade 5 Math Unit 2 Canterbury Public Schools

Subject	Math	
Grade Level	5	
Unit Title	Fractions as Quotients and Fraction Multiplication	
Unit Goals	Students develop an understanding of fractions as the division of the numerator by the denominator, and solve problems that involve the multiplication of a whole-number and a fraction including fractions greater than 1. Develop a comprehensive understanding of fraction concepts, including addition, subtraction, multiplication and division. Section A Fractions as Quotients Interpret and represent contexts relating division and fractions in a way that makes sense. Students will represent and explain the relationship between division and fractions Students will solve problems involving division of whole numbers leading to answers that are fractions Section B Fractions of Whole Numbers Explore the relationship between multiplication and division Connect division to multiplication of a whole number by a non-unit fraction Connect division to multiplication of a whole number by a unit fraction Explore the relationship between multiplication and division Section C.Area and Fractional Side Lengths Area and Fractional Side Lengths Find the area of a rectangle when one side length is a whole number and the other side length is a fraction or mixed number Represent and solve problems involving the multiplication of a whole number by a fraction or mixed number. Write, interpret, and evaluate numerical expressions that represent multiplication of a whole number by a fraction or mixed number	
Pacing (# of weeks)	3 - 4 weeks	
Standards	5.NF.B.3,5. NF.A.!, 5.NF.B.4, a,b,c,d, 5.NF.B.7, 5.OA.A, 5.OA.A.1, 5.OA.2	
Content/Conceptual Knowledge (know)	Understand the relationship between numerators and denominators Recognize equivalent fractions The process for finding area when sides are of unequal length Diagrams can help with problem solving	

	The distributive and associative properties	
Skills (be able to do)	Solve problems by applying fraction operations to real-world situations Recognize equivalent fractions Find the area of a rectangle when one side length Multiply fractions and whole numbers Divide unit fractions by whole numbers and whole numbers by unit fractions Use the associative property of multiplication	
Essential Questions	How can fractions represent real world situations? What strategies can we use to add, subtract, multiply and divide fractions? How can fractions help us find areas?	
Enduring Understandings	Fractions are another way to represent division and parts of wholes. Understanding fraction operations is essential for solving real-world problems.	
Vocabulary	Numerator , denominator, equivalent fractions, improper fractions, mixed numbers, unit fraction, area model, area	
Common Learning Experiences	 PLC: Lesson 3, Activity 2, Interpret Expressions PLC: Lesson 7, Activity 1, How Far Did They Run? PLC: Lesson 11, Activity 1, Greater than One Daily Lessons and activities Hands-on activities using fraction strips and visual models Group work and discussions to solve fraction -related problems Fraction Centers, real-world fraction projects, utilize apps and online platforms, Collaborative problem solving Math talks Warm ups and cool downs 	
Assessments	Formative assessments, unit tests, white board for showing work, Think-Pair-Share Represent and explain the relationship between division and fractions	
Resources	Fraction strips, manipulatives, fraction games and activities SplashLearn math app Khan Academy, concrete materials,	
Strategies	Use of visual aids and manipulatives to represent fractions Peer conversations Practice with visual models Notice and Wonder conversations Use area models and group discussions Group work	