

Grade 5
Math Unit 8
Canterbury Public Schools

Subject	Math
Grade Level	5
Unit Title	Putting it All Together
Unit Goals	<p>Apply their understanding of coordinate geometry, algebra, and geometric properties to solve complex problems Demonstrate the ability to combine different concepts from earlier units to solve multi-step problems Consolidate and solidify their understanding of various concepts and skills related to the major work of the grade.</p> <p>Section A Multiply and Divide Whole Numbers Deepens the understanding of the standard algorithm for multiplication and practice using it to find the value of products Revisit algorithms that use partial quotients and practice using it to find the value of products Divide multi-digit whole numbers using place value strategies and the properties of operations Fluently multiply multi digit whole numbers using the standard algorithm</p> <p>Section B Apply Volume concepts Solve real-world problems about volume and have opportunities to model with mathematics</p> <p>Section C Fraction and Decimal Operations Focuses on operation with decimals and fractions Play a variety of games that involve adding and subtracting fractions and in which the goal is to find the largest or smallest sum or difference Add fractions with unlike denominators</p> <p>Section D Creation and Design Review the major work of the grade by creating designing instructional routines</p>
Pacing (# of weeks)	4 - 6 weeks
Standards	5.G.B.3, 5.G.B.4, 5.NBT.B.5, 5.NBT.B.6, 5.MD.C, 5.MD.C.5, 5.NBT.B.5, 5.NBT.B.6 , 5.NF,5.NF.A.1, 5.NF.B.3, 5.OA
Content/Conceptual Knowledge (know)	How geometric transformations affect shapes on the coordinate plane How to apply algebraic concepts to geometric situations

Skills (be able to do)	Solve problems that require both geometric reasoning and algebraic techniques
Essential Questions	How can we use algebraic methods to solve geometric problems? How do different concepts from geometry and algebra come together to help solve real-world problems?
Enduring Understandings	Geometry and algebra are interconnected and can be used together to solve real-world problems Mathematical reasoning allows us to make sense of complex situations and draw conclusions based on data
Vocabulary	structure, linear equation Geometric reasoning Coordinate geometry
Common Learning Experiences	Review of transformations Applying algebraic techniques to solve problems related to geometric shapes on the coordinate plane Work on real-world problems involving maps, design, or architecture that require the use of coordinate geometry Solve multi-step activities PLC: Lesson 1, Activity 1, Talk about it PLC: Lesson 6, Warm-up, Estimation Exploration: Sugar Cubes PLC: Lesson 13, Activity 2, Fraction Multiplication Compare Round 2 PLC: Lesson 16, Warm-Up, Number Talk: Division Warm-ups and Cool Downs Activities Decimal Game Day
Assessments	Tasks: Students will solve a real-world problem that involves graphing a geometric figure on the coordinate plane and applying algebraic reasoning to find the unknown quantity. Quizzes, hands-on project (create complex coordinate geometry problem and present it to the class)
Resources	Tools for creating a display Chart paper Markers, pens, crayons,
Strategies	Notice and Wonder, True or False, Decimal Race, Which One Doesn't Belong?