Pittsburgh City Regional Catholic Elementary Schools (PCRCES)
Mathematics Curriculum Map
Fifth Grade

Month	Skills/Core Body of Knowledge
September	● Identify place value up to one billion ○ Write in expanded form ○ Write in word form ○ Write in standard form ● Use whole number exponents to denote powers of 10 ● Use patterns to multiply and divide by powers of 10 ● Use addition properties and subtraction rules to add and subtract multi-digit numbers ○ Commutative property ○ Associative property ○ Identity property ● Apply front end and rounding to estimate sums and differences of multi-digit numbers ● Demonstrate fluency with basic addition and subtraction combinations to 20
October	● Read and write decimals to thousandths using numerals, words, and expanded form ● Compare two decimals to thousandths based on the meanings of the digits in each place ● Use inequality symbols to compare ● Use place-value understanding to round decimals ● Use front-end estimation and rounding to estimate sums and differences of decimals ● Continue to demonstrate fluency with basic addition and subtraction combinations to 20 ● Demonstrate fluency with basic multiplication combinations to 100
November	● Use multiplication properties to compare and evaluate expressions ● Use patterns to multiply whole numbers by multiples of 10, 100, and 1000 ● Estimate products of whole numbers ● Multiply multi-digit numbers by 1-digit factors ● Multiply a whole number by a 2-digit multiplier ● Use the guess and test strategy to solve problems

	● Multiply a whole number by a 3-digit multiplier ● Multiply multi-digit whole numbers with zeros in the multiplier ● Continue to demonstrate fluency with basic multiplication combinations to 100 ● Demonstrate fluency with basic division combinations to 100
December	● Use patterns to divide whole numbers by multiples of 10, 100, and 1000 ● Use compatible numbers to estimate quotients ● Find quotients of whole numbers with 4-digit dividends and 1-digit divisors ● Divide by one-digit divisors to find quotients with zeros ● Use divisibility rules to mentally determine one-digit factors ● Use arrays and area models to illustrate the process of division ● Divide numbers up to 4 digits by 2 digits ● Work backward to solve problems ● Evaluate expressions using the order of operations ● Write, evaluate, and compare numerical expressions ● Demonstrate fluency with basic multiplication and division combinations to 100 ● Independently complete 30 or more problems/minute
January	● Find the prime factorization of a number ● List the common factors and find the greatest common factor (GCF) of two or more numbers ● Determine if a fraction is closer to 0, ½, or 1. Find equivalent fractions ● Find the least common denominator of a set of fractions ● Solve problems by making tables ● Rename improper fractions as a whole or mixed number ● Compare and order fractions and mixed numbers ● Interpret a fraction as division, and solve word problems involving fractions and mixed numbers ● Add/subtract fractions with unlike denominators ● Estimate addition and subtraction with fractions ● Add/subtract mixed numbers without/with regrouping ● Estimate sums and differences of mixed numbers

February	● Multiply fractions by fractions ● Multiply fractions and whole numbers ● Understand how the value of 1 factor affects the size of the product ● Divide common factors before multiplying ● Estimate products with mixed numbers ● Multiply fractions and mixed numbers ● Multiply mixed numbers by mixed numbers ● Find the area of a rectangle with fractional sides ● Divide whole numbers by unit fractions ● Determine reciprocals of fractions and whole numbers ● Divide a whole number by a fraction ● Divide unit fractions by whole numbers ● Divide a fraction by a whole number ● Solve word problems involving fractions ● Demonstrate fluency with basic multiplications and division combinations to 100
March	● Use models to add/subtract decimals ● Estimate decimal sums and differences ● Add/subtract decimals through hundredths/thousandths ● Use decimals to add and subtract money
April	● Multiply/divide decimals by powers of 10 ● Multiply/divide decimals by whole numbers ● Estimate decimal products/quotients ● Multiply/divide with money ● Multiply/divide decimals by decimals ● Zeros in the product/quotient ● Demonstrate fluency with basic multiplication and division combinations to 100
May/June	● Convert customary units of length, capacity, & weight ● Convert metric units of length, capacity, & weight ● Understand and use attributes of polygons, triangles, and quadrilaterals ● Classify quadrilaterals in a hierarchy based on their properties ● Make and use line plots with whole numbers and decimals ● Plot and name ordered pairs on the coordinate plane ● Interpret coordinate graphs