Division 1

	Kindergarten	Grade 1	Grade 2	Grade 3
Essential Foundations: What 3-4 essential foundations will your grade double down on all year long? What will set them up for success next year and for years to come?	- Part - part whole number relationships (For example 2 and 3 makes 5, 4 and 1 makes 5, and 0 and 5 makes 5) - Number representations (to 10) - One-to-one correspondence (to 10) - Identify, create, and extend repeating patterns	➢ Place value- tens and ones ➢ Basic addition and subtraction facts ➢ Number patterns (skip counting) ➢ Identifying numbers to 100 (1 more/ 1 less)	➢ Place value for numerals to 1000 ➢ Personal strategies for addition and subtraction up to 100 ➢ Analyze data to solve problems ➢ Build math vocabulary	● **Place value for numerals to 100,000 tied into patterns** ● Mental Math (fluency with comprehension) tied into patterns ● Data Analysis tied into patterns ● **VOCABULARY**
Wish List: What 3-4 essential foundations do you want students coming to you already knowing?	- Exposure to numbers 1-10 - Counting objects in their natural environment - Making sets of objects up to 5	➢ Identify and represent numbers 1 to 10 (extending to 20 for those who are ready) ➢ Identify, create, and extend repeating patterns (understanding that a pattern is something that repeats) ➢ Math vocabulary when comparing numbers (less/more/forward/backward)	➢ Recall basic facts up to 10 ➢ Concretely and pictorially represent numbers ➢ 1 more/1 less ➢ Fact families, skip counting	● Understanding of Place Value ● Basic Facts strategies (doubles/make 10) ● Skip Counting from various starting points /Patterns ● Vocabulary ● Subtraction
Resources - Please use this to link resources that you use or would recommend. (optional)	Link to resource document			

Division 2

	Grade 4	Grade 5	Grade 6
Essential Foundations: What 3-4 essential foundations will your grade double down on all year long? What will set them up for success next year and for years to come?	➜ Understanding of Place Value (up to 10 000) ➜ Strong understanding of basic facts 　◆ Fact families 　◆ Understand what addition, subtraction multiplication and division mean/are/represent ➜ Understanding regrouping and borrowing ➜ Understanding a fraction is a part of a whole or a set 　◆ Represents concretely and pictorially a fraction accurately	- Multiplication/division fluency basic facts to 10 (facts and understanding of what multiplication and division ARE and that they are inverse operations) - Subtraction and addition from the millions to the thousandths place with regrouping and borrowing with emphasis on the 3 forms of place value - Multidigit (2-digit by 1-digit) addition and long division (3-digit by 1-digit) - Equivalent Fractions and relation to decimals	- Place Value (decimal) - Fractions (relating ratio, decimal, percent, improper, mixed, equivalent) - Multiples and Factors (LCM, GCF) - multiplication and division of decimals - Order of operations
Wish List: What 3-4 essential foundations do you want students coming to you already knowing?	➜ Strong understanding of basic facts (all number operations) ➜ Data Analysis ➜ Skip counting (to help with multiplication and division)	- What is addition, subtraction, multiplication and division - how are they related (inverse operations) and correct terminology (addend, sum, etc.) - Understanding of decimals (the value gets progressively smaller) - Number sense with fractions: pushing fractions beyond "how many are red out of 8?" and moving from a surface level of understanding to a deeper understanding - 3 forms of place value - double down on correct word form (and represents a decimal) - Teach CUBES as a word problem strategy	- Basic facts (including skip counting, add/sub, long division!!) - Problem Solving - Place Value - Math vocabulary (eg. numerator, denominator, sum, product, horizontal, vertical, etc.)
Resources - Please use this to link resources that you use or would recommend. (optional)	Link to document		

Division 3

Math 7/8/9 Essential Vocab	Grade 7	Grade 8	Grade 9
Essential Foundations: What 3-4 essential foundations will your grade double down on all year long? What will set them up for success next year and for years to come?	Adding and subtracting fractions - LCD Adding and subtracting integers Solving Equations ● conceptually understanding the why behind the algebraic steps Decimals - Fractions - Percents Decimal operations	Order of operations ● Fractions ● Integers Fraction division ● multiply by the reciprocal Understanding the why for steps in solving equations Square Roots and Squares ● Understanding perfect squares and non-perfect ● Understanding the operation of square root	Order of operations ● Working with rationals (fractions, negatives) Operations with Polynomials Exponent Laws Algebraically solving equations
Strategies to incorporate Essential Foundations throughout the year…	- Retrieval questions on summative unit exams - Use of vocabulary through the year - Do Nows, Exit slips, Challenge questions, Retrieval stations (at least once a week on noncurrent units)		
Wish List: What 3-4 essential foundations do you want students coming to you already knowing?	Understanding factors ● To be able to get common denominators for fractions, reducing and simplifying ● Knowing basic facts up to 12 x 12 to help determine common factors Understanding multiplication and division of decimal Fractions ● improper and mixed number, equivalent ● Representing in multiple ways (estimate / awareness of the fraction without being given the item split into all sections)	Adding and subtracting fractions - LCD Adding and subtracting integers Knowing factors Algebraic solving of equations	Order of operations ● Fractions ● Integers Algebraic solving equations Square Roots and Squares ● Understanding perfect squares and non-perfect ● Understanding the operation of square root
Resources - Please use this to link resources that you use or would recommend. (optional)	Math Resource Links - 7/8/9/		