


5th Grade Math Curriculum Bundle # 3

Title		Suggested Dates
Multiplication and Division		October 5- October 23 (14 days)

Big Idea/Enduring Understanding	Guiding Questions
Patterns can be used to join, separate and compare numbers using a variety of methods.	<p>How does multiplication relate to division?</p> <p>When would multiplication or division be used to solve a problem?</p> <p>What strategy was used to solve this problem / equation?</p>

The resources included here provide teaching examples and/or meaningful learning experiences to address the District Curriculum. In order to address the TEKS to the proper depth and complexity, teachers are encouraged to use resources to the degree that they are congruent with the TEKS and research-based best practices. Teaching using only the suggested resources does not guarantee student mastery of all standards. Teachers must use professional judgment to select among these and/or other resources to teach the district curriculum.

Knowledge & Skills with Student Expectations	District Specificity/Examples	Suggested Resources (See note above) Teachers will use Math Investigations as the main instructional resource. District resources are listed and categorized to indicate suggested uses. Any additional resources must be aligned with the TEKS.	
<p>5.3 The student adds, subtracts, multiplies, and divides to solve meaningful problems.</p> <p>5.3B Use multiplication to solve problems involving whole numbers (no more than three digits time’s two digits without technology).</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • demonstrate multiplication problem solving methods such as area model, lattice model, traditional method, and expanded notation • apply multiplication (up to and including 3 digits by 2 digits) to problem situations • extract necessary information needed to solve multi-step problems (ignoring extraneous information) 	<p><u>Math Investigations</u></p> <p><u>Number Puzzles and Multiple Towers</u> Unit 1</p> <p>Investigation 2 Sessions 1 – 7 pages 70 – 107</p> <p><u>How Many People? How Many Teams?</u> Unit 7</p> <p>Investigation 1 Sessions 1.1-1.3 pages 26-40</p>	<p><u>Whole Group Lessons</u></p> <p><u>Envisions</u> Topic 4 Lessons 1, 2, 4, 5, 7</p> <p><u>Fifth Sense</u> Objective 1 Lesson 5.3 B</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R</u> Concentrate on Multiplication # 57 It’s A Team Effort # 58 Spinning go Numbers # 59 Hit the Target # 60</p>

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		<p><u>How Many People? How Many Teams?</u> Unit 7</p> <p>Investigation 2 Sessions 2.1-2.3 pages 48-61</p>	<p><u>Kamico</u> Multiplication Mania page 87</p>
<p>5.3 The student adds, subtracts, multiplies, and divides to solve meaningful problems.</p> <p>5.3C Use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit dividends without technology) including interpreting the remainder within a given context.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • understands that division represents sharing equally or forming equal groups with and without remainders • extract necessary information needed to solve the problem (ignoring extraneous information) and recognizes the operation(s) needed to solve and checks for reasonableness • use various strategies to solve problems involving division:(two-digit divisor and three digit dividends) <ul style="list-style-type: none"> ○ Partition division ○ Hangman division ○ Partial Quotient • interpret the remainder dependent upon the contextual situation such as remainders can be written as a fraction or decimal (Ex: dividing money among 4 people), a quotient is always rounded up regardless size of remainder (Ex: number of cars needed to transport people), or remainder dropped and the quotient remains the same (Ex: sharing footballs among 6 people) 	<p><u>Math Investigations</u></p> <p><u>Number Puzzles and Multiple Towers</u> Unit 1</p> <p>Investigation 3 Sessions 3.1-3.4 pages 114-135</p> <p><u>How Many People? How Many Teams?</u> Investigation 3 Sessions 3.1-3.7 pages 68-98</p> <p><u>Thousands of Miles</u> <u>Thousands of Seats</u> Investigation 3 Sessions 3.1 pages 88-92</p>	<p><u>Whole Group Lessons</u></p> <p><u>Envisions</u> Topic 5 Lessons 1, 3, 4, 5, 6</p> <p><u>Fifth Sense</u> Objective 1, Lessons 5.3 C and D</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R.</u> How Does Multiplication Relate to Division, #65 What Do I Do with the Leftovers, #67 Bubble Me In, #68</p> <p><u>Kamico</u> Paying Dividends page 92</p> <p><u>Region IV Prep</u> Division Lesson pages 72 – 79</p>
<p>5.4 The student estimates to determine reasonable results.</p> <p>5.4A Use strategies including rounding and compatible numbers to estimate solutions to multiplication, division, addition and subtraction problems</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • emphasize estimating before solving problem situations • relate answers to a range of numbers or a number less than or greater than a given value • use various strategies to estimate solutions to multiplication and division problems • estimate solutions by using rounding in multiplication and division such as rounding to the largest place value for each number (do not 	<p><u>Math Investigations</u></p> <p><u>How Many People? How Many Teams?</u> Unit 7</p> <p>Investigation 2 Session 2.4 pages 62-64</p>	<p><u>Whole Group Lessons</u></p> <p><u>Envisions</u> Topic 4 Lessons 3</p> <p><u>Envision</u> Topic 5 Lessons 5.2</p>

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	<p>round single digit numbers) or benchmarking the numbers (10's, 100's, 1000's)</p> <ul style="list-style-type: none"> ○ Ex: $56 \times 82 = 60 \times 80$ ○ Ex: $84 \times 7 = 80 \times 7$ ○ Ex: $362 \div 8 = 400 \div 8$ <ul style="list-style-type: none"> ● estimate solutions by using compatible numbers in multiplication and division such as numbers that are easy to compute mentally (do not always end in 0) <ul style="list-style-type: none"> ○ Ex. 92×12 could be 92×10 or 90×10 or 90×12 ○ Ex. $429 \div 8$ could be $400 \div 8$ or $400 \div 10$ 		<p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R.</u> Reasonable Whole Number Products, #84 Making Compatible Pairs, #85</p>
<p>5.14 The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school.</p> <p>5.14B Solve problems that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> ● extract necessary information needed to solve multi-step problems (missing or extra information) 		<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 4 Lessons 6 and 8</p> <p><u>Envision</u> Topic 5 Lessons 7</p>
<p>5.15 The student communicates about Grade 5 mathematics using informal language.</p> <p>5.15B Relate informal language to mathematical language and symbols.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> ● Process skill to be addressed with relevant content. 		<p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R.</u> Watch Your Language, #189 What's the Next Step? #190</p>