

 PRINCETON <small>INDEPENDENT SCHOOL DISTRICT</small>		Campus: Harper/Smith/Lacy/Godwin	
Author(s): Stovall, Warren, Venters, Elsbury, Garlington, Eaton		Date Created / Revised: July 30, 2020	
Six Weeks Period: 3rd		Grade Level & Course: 5 th grade math	
Timeline: 5 days		Unit Title: Division with 2 digit divisors (Unit 12)	Week 2
Stated Objectives: TEK # and SE	<p style="text-align: center;">Problem Solving/Processing Standards</p> <p>5.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace;</p> <p>5.1(B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;</p> <p>5.1(C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;</p> <p>5.1(D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;</p> <p>5.1(E) create and use representations to organize, record, and communicate mathematical ideas;</p> <p>5.1(F) analyze mathematical relationships to connect and communicate mathematical ideas; and</p> <p>5.1(G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.</p> <p>5.4(F) Simplify numerical expressions that do not involve exponents, including up to two levels of grouping</p> <p>5.4 (B) Represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity</p> <p style="text-align: center;">Skills</p> <p>5.4(C) Generate a numerical pattern when given a rule in the form $y=ax$ or $y=x+a$ and the graph</p> <p style="text-align: center;">Review</p> <p>5.3(B) Multiply with fluency a three-digit number by a two-digit number using the standard algorithm.</p> <p>5.3(C) Solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm.</p> <p>5.3(K) add and subtract positive rational numbers fluently</p> <p style="text-align: center;">Concept</p> <p>5.3(C) Solve with proficiency for quotients of up to four-digit dividend by a two-digit divisor using strategies and the stand algorithm</p> <p style="text-align: center;">ELPS</p> <p style="text-align: center;">http://ritter.tea.state.tx.us/rules/tac/chapter074/ch074a.html#74.4</p>		
See Instructional Focus Document (IFD) for TEK Specificity			
Key Understandings	<p>**There is a specific order of operations to simplify numerical expressions in problem situations.</p> <p>** Verbal expressions can be translated into mathematical expressions and evaluated for given values of the variables.</p>		

	<p>**When dividing two counting numbers greater than one, where the dividend is greater than the divisor, the quotient will always be smaller than the dividend.</p> <p>**When dividing two counting numbers greater than one, where the dividend is greater than the divisor, the quotient will always be greater than one.</p>	
Misconceptions	<ul style="list-style-type: none"> Some students may think of the area model simply as another procedure for solving multiplication or division problems rather than as a geometric representation of the distributive property. Some students may think that area models are not related to the standard algorithms for multiplication or division, rather than realizing that area models are a visual representation of multiplication and division and can be used to show the partial products or quotients produced through standard algorithms. Some students may think that the most efficient way to break up an area model into chunks (distributive property) is to break it up by place value, rather than thinking about the numbers and then determining the most efficient way to solve from a variety of strategies. Some students may think that the standard algorithm is always the most efficient way to solve a multiplication or division problem, rather than thinking about the numbers and then determining the most efficient way to solve from a variety of strategies. Some students may oversimplify dividing by 10 to mean “move the decimal point to the left”, rather than understand the multiplicative nature of 10s in the place value system or the magnitude of making a number 10 times smaller. Some students may think the dividend always goes on the left side of a division sentence, rather than understanding where to place the dividend and divisor based on the symbol being used in long division. Some students may think that rounding is the only way to make an estimate, rather than understanding that there are multiple ways to determine an estimate. Some students may think that rounding and estimating are the same skill, rather than rounding as one way to make the numbers friendly in order to compute and determine a reasonable estimate. 	
Key Vocabulary	Divide, Dividend, Divisor, Divisible, Quotient, Remainder (R), Groups, Equal, In each group, Decrease, Sharing, Algorithm, Digit, Place Value	
Suggested Day 5E Model	Instructional Procedures (Engage, Explore, Explain, Extend/Elaborate, Evaluate)	Materials, Resources, Notes
<i>Day 1- Engage/ Explore</i>	<p>Warm-Up (2 problem solving problems) Skills: Numerical Relationships/Patterns Patterns Review: Computation Practice Concept: Introducing 2 digit Divisors</p>	<p>From Sharon Wells Curriculum</p> <ul style="list-style-type: none"> Skills 5 Review 5 Activity 1
<i>Day 2 – Explain/ Extend</i>	<p>Warm-Up (2 problem solving problems) Skills: numerical relationships practice Review: Computation Mixed Practice Concept: 2-digit divided by 2-digit, 1-digit quotient</p>	<p>From Sharon Wells Curriculum</p> <ul style="list-style-type: none"> Skills 6 Review 6 Activity 2

Day 3 - Extend	Warm-Up (2 problem solving problems) Skills: Numerical relationships Review: Computation practice Concept: : 3-digit and 4-digit Dividends divided by 1-digit and 2-digit quotients	From Sharon Wells Curriculum <ul style="list-style-type: none"> ● Skills 7 ● Review 7 ● Activity 3
Day 4 –Extend	Warm-Up (2 problem solving problems) Skills: numerical relationships practice Review: Computation Mixed Practice Concept: Division Practice	From Sharon Wells Curriculum <ul style="list-style-type: none"> ● Skills 8 ● Review 8 ● Activity 4
Day 5 - Evaluate	The teacher and students will go over the Week Two test taking skills questions with students and answer any student's questions. The students will then be given an assessment to complete independently to check their mastery of the skills taught throughout the week.	<ul style="list-style-type: none"> ● Week 2 Assessment

Accommodations for Special Populations	Accommodations for instruction will be provided as stated on each student's (IEP) Individual Education Plan for special education, 504, at risk, and ESL/Bilingual.
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