

 PRINCETON <small>INDEPENDENT SCHOOL DISTRICT</small>		Campus: Harper/Lacy/Smith/Godwin/Lowe	
Author(s): Eaton, Warren, Stovall, Garlington, Venters, Elsbury		Date Created / Revised: July 30 2020	
Six Weeks Period: 1 st		Grade Level & Course: 5 th grade math	
Timeline: 5 days		Unit Title: Decimal Place Value	Week 2
Stated Objectives: TEK # and SE	<p style="text-align: center;">Problem Solving</p> <p>5.1A apply mathematics to problems arising in everyday life, society, and the workplace;</p> <p>5.1B 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>5.1C 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>5.1D communicate mathematical ideas, reasoning, 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>5.1F analyze mathematical relationships to connect and communicate mathematical ideas.</p> <p>5.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communications</p> <p style="text-align: center;">Skills</p> <p>5.3B multiply with fluency a three-digit number by a two-digit number using the standard algorithm.</p> <p>5.7A solve problems by calculating conversions within a measurement system, customary or metric.</p> <p style="text-align: center;">Review</p> <p>4.2B represent the value of the digit in the whole numbers through the 1,000,000,000 and decimals to the hundredths using expanded notation and numerals.</p> <p style="text-align: center;">Concept</p> <p>5.2A represent the value of the digit in decimals through the thousandths using expanded notation and numerals.</p> <p>ELPS: http://www.teksresourcesystem.net/module/standards/Tools/Browse?StandardId=118094 </p>		
See Instructional Focus Document (IFD) for TEK Specificity			
Key Understandings	<p>The base-10 place value system is based on multiples of 10 where each place represents a relationship of 10 times the value of the place to its right and one-tenth of the value of the place to its left (<i>decimals to the thousandths</i>).</p> <p>A digit's position within a number determines its value</p> <p>A number can vary in representation as long as the total value of each representation remains unchanged</p> <p>When comparing two numbers, the relationship between the numbers can be that of equality, meaning the two numbers are equal, or inequality, meaning one number is greater than or less than the other number</p> <p>Rounding numbers is an estimation strategy based on place value relationships and the relative size of numbers</p>		

Misconceptions	<ul style="list-style-type: none"> Some students may think placing zeros at the end of a decimal number always affects the value of the number rather than being used as a place-holder (e.g., In 0.400, the zeros do not affect the value, but in 0.04, the zero in the tenths place does affect the value.). Some students may think you can only round certain numbers to a specific place value rather than being able to round to any given place value (e.g., The decimal number 34.25 can be rounded to the nearest tenths place, ones place, tens place, hundreds place, etc.). Some students may use the digit in the tenths place to determine how many boxes to shade in on a hundredths grid (e.g., shading in 8 of the 100 boxes for 0.8) rather than determining the value of the number written as hundredths (e.g., shading in 80 of the 100 boxes of 0.80). Some students may order decimals incorrectly by trying to relate whole number understandings to decimal understandings (e.g., 0.29 is greater than 0.6 because 29 is greater than 6) rather than using decimal place value understandings (e.g. 0.29 is less than 0.60). Some students may order decimals based on the number of digits in the number rather than determining its value (e.g. 0.123 is greater than 0.45 because 0.123 has three digits and 0.45 only has two digits.). 	
Key Vocabulary	Value, place value, decimals place value, tenths, hundredths, thousandths, equivalency, numerals, expanded notation, digit	
Suggested Day 5E Model	Instructional Procedures (Engage, Explore, Explain, Extend/Elaborate, Evaluate)	Materials, Resources, Notes
Day 1- Engage/ Explore	Warm-Up (2 problem solving problems) S-Use the problems from Skills 1 to teach multiplying by 10s. Model a place value chart for students to put into journal Discuss writing numbers in standard, word, and expanded notation. R-review 1 Activity 1-Review tenths *TEK 3B-low on STAAR Reinforce	From Sharon Wells Curriculum <ul style="list-style-type: none"> Problems solving 1A 1B Skills 1 Place Value Chart Review 1
Day 2 – Explain/ Extend	Warm-Up (2 problem solving problems) Use the problems from Skills 2 to teach multiplying by 100s. Review 2-writing numbers in number and expanded form. Activity 2-Review Hundredths	From Sharon Wells Curriculum <ul style="list-style-type: none"> Skills 2 Review 2 Activity 2
Day 3 - Extend	Warm-Up (2 problem solving problems) S-Have student complete problems from Skills 3 to practice measuring using inches. R- Review 3 writing numbers Activity 3-Introduce thousandths	From Sharon Wells Curriculum <ul style="list-style-type: none"> Skills 3 Review 3 Activity 3

Day 4 –Extend	<p>Warm-Up (2 problem solving problems) S-Have student complete problems from Skills 4 to practice measuring using cm. R- complete review 4</p> <p>Activity 4</p>	<p>From Sharon Wells Curriculum</p> <ul style="list-style-type: none"> ● Skills 4 ● Review 4 ● Activity 4
Day 5-Evaluation	<p>Give students a two-minute multiplication drill over 2s. Go over Week 1 Test Taking Skills as a class. Students will complete Week 1 Assessment.</p>	<p>From Sharon Wells</p> <ul style="list-style-type: none"> ● Week 1 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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