



5<sup>th</sup> Grade

Created By:  
*Misty Pohly*

# DECIMAL MULTIPLICATION AND DIVISION



**Whole Class Lessons and Guided Math Groups**  
**Active Engagement and Games**  
**Intervention and Enrichment**  
**EXIT TICKETS**



# I Plan ~ You Teach

Helping you live your life  
AND

be the math teacher that gets results

## Are you Ready For Help?

Click the links for Lesson Plans that align with TEXAS TEKS!



[2<sup>nd</sup> Grade Math Lesson Plans](#)

[3<sup>rd</sup> Grade Math Lesson Plans](#)

[4<sup>th</sup> Grade Math Lesson Plans](#)

[5<sup>th</sup> Grade Math Lesson Plans](#)

I SEE YOU~

- struggling each week to write lesson plans that meet the rigor of the TEKS.
- searching endlessly for resources that will help kids learn math while being challenged and engaged.
- staying late everyday after school working on plans and creating everything from scratch.

You are exhausted from working with students all day, and still have to prep, write and create.

I SEE YOU~

SACRIFICING your time with your family and friends

to ensure success for ALL of OUR Children.



Want to know when sales are happening? Click links to follow





Name \_\_\_\_\_

## Decimal Multiplication And Division

LT	Statement	1	2	3	4	Evidence
1	I can estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, or multiplication.					
2	I can estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, or division					
3	I can represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models.					
4	I can solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings.					
5	I can solve for products of decimals to the hundredths, including situations involving money, using strategies based on properties of operations					

1	2	3	4
I have no idea how to do this.	I can do this with some help.	I can do this by myself	I can teach someone to do this.

Name \_\_\_\_\_

## Decimal Multiplication And Division

LT	Statement	1	2	3	4	Evidence
6	I can solve for products of decimals to the hundredths, including situations involving money, using strategies based on the relationship to the multiplication of whole numbers.					
7	I can represent quotients of decimals to the Hundredths, up to four-digit dividends and two digit whole number divisors, using objects and pictorial models, including area models.					
8	I can solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm.					
9	I can simplify numerical expressions that do not involve exponents, including up to two levels of grouping.					

1	2	3	4
I have no idea how to do this.	I can do this with some help.	I can do this by myself	I can teach someone to do this.

Learning Target	What do we want students to learn?	How will we know if they learned it?	What will we do if they don't?	What will we do if they already know it?
1 5.3A	Estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, or multiplication.	<input type="checkbox"/> Multiply tenths by tenths <input type="checkbox"/> Multiply tenths by hundredths or vice versa <input type="checkbox"/> Multiply tenths by thousandths or vice versa <input type="checkbox"/> Multiply whole numbers by tenths, hundredths, and thousandths or vice versa	<input type="checkbox"/> Recognize division presented in a real-world problem situation <input type="checkbox"/> Understand the phrase "times as long as" as a verbal description indicating a multiplicative relationship <input type="checkbox"/> Understand the relationship between multiplication and division within a multiplicative relationship	
2 5.3A	Estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, or division.	<input type="checkbox"/> Dividend to the tenths and whole number divisor <input type="checkbox"/> Dividend to the hundredths and whole number divisor <input type="checkbox"/> Whole number dividends and whole number divisors that yield decimal quotients to the hundredths	<input type="checkbox"/> Understand how to use rounding or compatible numbers to estimate a solution <input type="checkbox"/> Understand how to determine the reasonableness of an estimation <input type="checkbox"/> Determine a reasonable estimate of the solution to a problem involving division and represent the solution using verbal descriptions.	
3 5.3D	Represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models.	<input type="checkbox"/> Base-10 place value system <input type="checkbox"/> Place value relationships to determine products <input type="checkbox"/> Recognition of multiplication in mathematical and real-world problem situations Objects and pictorial models <input type="checkbox"/> Area models <input type="checkbox"/> Decimal grids <input type="checkbox"/> Number lines <input type="checkbox"/> Ratio tables	<input type="checkbox"/> Understand multiplication is the joining of equal groups <input type="checkbox"/> Understand how whole numbers and decimals can be represented using a pictorial base-10 model <input type="checkbox"/> Understand how multiplication of decimals can be represented using a pictorial base-10 model <input type="checkbox"/> Represent multiplication of a whole numbers and decimal using a base-10 model	<input type="checkbox"/> Multiply and divide positive rational numbers fluently.

Learning Target	What do we want students to learn?	How will we know if they learned it?	What will we do if they don't?	What will we do if they already know it?
4 5.3E	Solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings	<input type="checkbox"/> Base-10 place value system	<input type="checkbox"/> Recognize multiplication of decimal numbers presented in a real-world problem situation <input type="checkbox"/> Understand how to multiply two decimal numbers <input type="checkbox"/> Solve a problem involving multiplication of decimal numbers	<input type="checkbox"/> Multiply and divide positive rational numbers fluently.
5 5.3E	Solve for products of decimals to the hundredths, including situations involving money, using strategies based on properties of operations	<input type="checkbox"/> Commutative property of multiplication <input type="checkbox"/> Associative property of multiplication <input type="checkbox"/> Distributive property of multiplication		<input type="checkbox"/> Multiply and divide positive rational numbers fluently.
6 5.3E	Solve for products of decimals to the hundredths, including situations involving money, using strategies based on the relationship to the multiplication of whole numbers.	<input type="checkbox"/> Strategies for multiplication <input type="checkbox"/> Distributive property for partial products <input type="checkbox"/> Doubling and halving <input type="checkbox"/> Relate multiplication (associative property) to numerical notation <input type="checkbox"/> Ratio tables <input type="checkbox"/> Equation(s) to reflect solution process	<input type="checkbox"/> Recognize multiplication of decimal numbers presented in a real-world problem situation <input type="checkbox"/> Understand how to multiply two decimal numbers <input type="checkbox"/> Solve a problem involving multiplication of decimal numbers	<input type="checkbox"/> Multiply and divide positive rational numbers fluently.

Learning Target	What do we want students to learn?	How will we know if they learned it?	What will we do if they don't?	What will we do if they already know it?
7 5.3F	Represent quotients of decimals to the hundredths, up to four-digit dividends and two digit whole number divisors, using objects and pictorial models, including area models.	<ul style="list-style-type: none"> <li><input type="checkbox"/> Relationships between multiplication and division to help in solution process</li> <li><input type="checkbox"/> Connections between division of whole numbers and division with decimals</li> <li><input type="checkbox"/> Base-10 place value system</li> <li><input type="checkbox"/> Place value relationships to determine quotients</li> <li><input type="checkbox"/> Recognition of division in mathematical and real-world problem situations</li> <li><input type="checkbox"/> Expression(s) to represent problem situation</li> <li><input type="checkbox"/> Equation(s) to reflect solution process</li> </ul> <p>Objects and pictorial models</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Base-10 blocks</li> <li><input type="checkbox"/> Area models</li> <li><input type="checkbox"/> Decimal grids</li> <li><input type="checkbox"/> Number lines</li> <li><input type="checkbox"/> Ratio tables</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Recognize division of a decimal value by a whole number presented in a real-world problem situation</li> <li><input type="checkbox"/> Understand the relationship between known values and the operation in a real-world problem situation</li> <li><input type="checkbox"/> Represent division of a decimal divided by a whole number using an expression</li> <li><input type="checkbox"/> Understand how to interpret a base-10 model demonstrating a decimal value divided by a whole number</li> <li><input type="checkbox"/> Represent division of a decimal divided by a whole number using a base-10 model</li> <li><input type="checkbox"/> Understand how to interpret a hundredths model demonstrating a decimal value divided by a whole number</li> <li><input type="checkbox"/> Understand the relationship between decimal multiplication and decimal division represented in a hundredths model</li> <li><input type="checkbox"/> Understand that there are 100 squares in a hundredths model and that one square represents one-hundredth and ten squares represent a tenth</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Multiply and divide positive rational numbers fluently.</li> </ul>



Learning Target	What do we want students to learn?	How will we know if they learned it?	What will we do if they don't?	What will we do if they already know it?
8 5.3G	Solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm.	<input type="checkbox"/> Base-10 place value system <input type="checkbox"/> Place value relationships to determine quotients <input type="checkbox"/> Recognition of division in mathematical and real-world problem situations Division structures <input type="checkbox"/> Partitive division Total amount known Number of groups known Size or measure of each group unknown <input type="checkbox"/> Quotative division (also known as Measurement division) Total amount known Size or measure of each group known Number of groups unknown <input type="checkbox"/> Decomposing division problems into partial quotients <input type="checkbox"/> Standard algorithm using the distributive method <input type="checkbox"/> Record steps that relate to the algorithm used including distributing the value in the quotient according to place value. <input type="checkbox"/> Standard algorithm <input type="checkbox"/> Remainder dependent upon the mathematical and real-world problem situation Various ways to record remainder <input type="checkbox"/> Ignore the remainder <input type="checkbox"/> Add one to the quotient <input type="checkbox"/> Remainder is written as a decimal <input type="checkbox"/> Remainder is the answer <input type="checkbox"/> Conversion of remainder into smaller units	<input type="checkbox"/> Recognize division of a decimal value by a whole number presented in a real-world problem situation <input type="checkbox"/> Understand how to divide a decimal to the hundredths by a one-digit whole number <input type="checkbox"/> Solve a problem involving division of a decimal by a whole number	<input type="checkbox"/> Multiply and divide decimals fluently.

Learning Target	What do we want students to learn?	How will we know if they learned it?	What will we do if they don't?	What will we do if they already know it?
9 5.4F	Simplify numerical expressions that do not involve exponents, including up to two levels of grouping.	<input type="checkbox"/> Order of operations - the rules of which calculations are performed first when simplifying an expression	<input type="checkbox"/> Understand the order of operations <input type="checkbox"/> Understand that parentheses are grouping symbols that indicate the part of the expression that should be simplified first <input type="checkbox"/> Understand that parentheses without an operation symbol indicate multiplication; $a(b)$ means a multiplied by $b$ <input type="checkbox"/> Represent a problem situation involving multiplication and subtraction using an expression <input type="checkbox"/> Understand that parentheses and brackets are grouping symbols that indicate the part of the expression that should be simplified first <input type="checkbox"/> Understand that when an expression contains a set of grouping symbols within another set of grouping symbols, the innermost set of grouping symbols should be simplified first <input type="checkbox"/> Simplify an expression using order of operations	<input type="checkbox"/> Simplify numerical expressions that may include a division bar instead of the division symbol. <input type="checkbox"/> Generate equivalent numerical expressions using order of operations, including whole number exponents and prime factorization.

Day 1	Day 2	Day 3	Day 4	Day 5
Math Huddle LT 1 Estimation Compatible Numbers	Mini Lesson LT 3 Model Decimal Multiplication	Mini Lesson LT 3 Model Decimal Multiplication	Independent Practice LT 3 Model Decimal Multiplication	Mini Lesson LT 4, 5, 6 Solve Decimal Multiplication
Guided Math	Guided Math	Guided Math	Guided Math	Guided Math
Reteach Unit 4	LT 1	LT 3	LT 3	LT 4, 5, 6
Day 6	Day 7	Day 8	Day 9	Day 10
Independent Practice LT 4, 5, 6, 9	Mini Lesson LT 9 Order of Operations Decimal x	Mini Lesson LT 7 Model Decimal Division	Mini Lesson LT 7 Model Decimal Division	Mini Lesson LT 7 Model Decimal Division
Guided Math	Guided Math	Guided Math	Guided Math	Guided Math
LT 9	LT 9	LT 7	LT 7	LT 8
Day 11	Day 12	Day 13	Day 14	<h2>Decimal Multiplication And Division</h2>
Mini Lesson LT 8 Solve Decimal Division	Independent Practice LT 4, 5, 6, 7, 9	Game LT 9 Order of Operations	Independent Practice LT 4, 5, 6, 7, 9	
Guided Math	Guided Math	Guided Math	Guided Math	
LT 9	LT 9	LT 4, 5, 6, 7, 9	LT 4, 5, 6, 7, 9	



Thank you for your  
download!

I hope this helps your  
students!



A portion of the materials contained in this publication were created with the use of 1,2,3 Math  
Fonts. And Math Clipart

Graphics by



Copyright © iPohly INC. All rights reserved by author. This product is to be used by the original downloader only. Copying for more than one teacher, classroom, department, school, or school system is prohibited. This product may not be distributed or displayed digitally for public view. Failure to comply is a copyright infringement and a violation of the Digital Millennium Copyright Act (DMCA). Clipart and elements found in this PDF are copyrighted and cannot be extracted and used outside of this file without permission or license. Intended for classroom and personal use ONLY.



**Whole Class Lessons and Guided Math Groups**  
**Active Engagement and Games**  
**Intervention and Enrichment**  
**Exit Tickets**