



3rd Grade  
ALGEBRAIC  
REASONING-  
ALL OPERATIONS



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



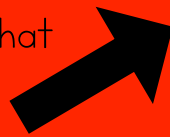
# I Plan ~ You Teach

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!



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[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.



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Name \_\_\_\_\_

## Algebraic Reasoning--All Operations

LT	Statement	1	2	3	4	Evidence
1	I can solve with fluency one-step and two-step problems involving addition and subtraction within 1,000					
2	I can use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number					
3	I can solve one-step and two-step problems involving multiplication and division within 100					
4	I can represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000					
5	I can represent and solve one- and two-step multiplication and division problems within 100					

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 \_\_\_\_\_

Algebraic Reasoning--All Operations

LT	Statement	1	2	3	4	Evidence
6	I can determine the unknown whole number in a multiplication or division equation					
7	I can represent real-world relationships using number pairs in a table and verbal descriptions.					
8	I can decompose composite figures to determine the area of the original figure using the additive property of area.					
9	I can summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals.					
10	I can solve one- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals.					

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 3.4A	Solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction.	Solve with fluency one-step and two-step problems involving addition and subtraction within 1,000	<ul style="list-style-type: none"> <li>• Recognize addition presented in a real-world problem situation</li> <li>• Recognize subtraction presented in a real-world problem situation</li> <li>• Understand how to add three-digit numbers involving regrouping</li> <li>• Understand how to subtract three-digit numbers involving regrouping</li> <li>• Solve a two-step problem involving addition and subtraction</li> </ul>	Add and subtract whole numbers using the standard algorithm.
2 3.4G	Use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties.	Use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number.	<ul style="list-style-type: none"> <li>• Recognize multiplication presented in a real-world problem situation</li> <li>• Understand how to multiply a two-digit number by a one-digit number involving regrouping</li> <li>• Solve a one-step problem involving multiplication</li> </ul>	Represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 by 15

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?
3 3.4K	Solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts.	Solve one-step and two-step problems involving multiplication and division within 100	<ul style="list-style-type: none"> <li>• Recognize addition, subtraction, multiplication and division presented in a real-world problem situation</li> <li>• Understand how to multiply a two-digit number by a one-digit number involving regrouping</li> <li>• Understand how to add 2 two-digit numbers involving regrouping</li> <li>• Understand how to divide a two-digit number by a one-digit</li> <li>• Solve a two-step problem</li> </ul>	Introduce the standard algorithm for division. Represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations.

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 3.5A	Represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations.	Represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000	<ul style="list-style-type: none"> <li>• Recognize addition and subtraction presented in a real-world problem situation</li> <li>• Understand the relationship between the description of a problem situation and the symbols represented in an equation/number sentence</li> <li>• Represent a two-step problem involving addition and subtraction using an equation/number sentence</li> <li>• Understand how to interpret a diagram to identify the minuend, the subtrahend, and the difference in a subtraction situation</li> <li>• Represent a problem involving addition or subtraction on a number line</li> </ul>	Represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity



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?
5 3.5B	Represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations.	Represent and solve one- and two-step multiplication and division problems within 100	<ul style="list-style-type: none"> <li>• Recognize multiplication and division presented in a real-world problem situation</li> <li>• Understand how to interpret a strip diagram to identify the dividend, the divisor, and the quotient in a division situation</li> <li>• Represent a problem involving division using a strip diagram</li> <li>• Understand the relationship between the description of a problem situation and the symbols represented in an equation/number sentence</li> <li>• Represent a two-step problem involving multiplication and division using an equation</li> <li>• Understand how an array can be used to represent a multiplication situation</li> <li>• Represent a problem involving multiplication or division using an array</li> </ul>	Represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity

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?
6 3.5D	Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product.	Determine the unknown whole number in a multiplication or division equation	<ul style="list-style-type: none"> <li>• Understand the relationship between a multiplication fact and its related division fact</li> <li>• Determine the unknown in a multiplication equation relating three whole numbers when the unknown is a missing factor</li> <li>• Understand how to determine the unknown in a division equation relating three whole numbers when the unknown is a missing dividend</li> <li>• Understand how to determine the dividend in division by using the relationship to multiplication</li> <li>• Determine the unknown dividend in an equation</li> </ul>	Represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity

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 3.5E	Represent real-world relationships using number pairs in a table and verbal descriptions.	Represent real-world relationships using number pairs in a table Represent real-world relationships using verbal descriptions.	<ul style="list-style-type: none"> <li>• Recognize additive or multiplicative relationship.</li> <li>• Determine whether the relationship between the number pairs is additive or multiplicative.</li> <li>• Represent a multiplicative relationship between number pairs in a table.</li> <li>• Explain an additive or multiplicative relationship between pairs of numbers using a verbal description.</li> </ul>	Represent problems using an input output table and numerical expressions to generate a number pattern that follows a given rule.

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 3.6D	Decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area.	Decompose composite figures to determine the area of the original figure using the additive property of area.	<ul style="list-style-type: none"> <li>• Recognize the dimensions of a figure presented in a diagram</li> <li>• Understand the meaning of the key defining each square as 1 square foot</li> <li>• Understand how to decompose a composite figure into non-overlapping rectangles</li> <li>• Understand how to determine area of a rectangle by multiplying the number of rows times the number of square units in each row</li> <li>• Understand how to determine the area of a composite figure by adding the areas of each decomposed part</li> <li>• Determine the area of a composite figure presented in a pictorial mode</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?
9 3.8A	Summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals.	Read a given graph and summarize the data into another graph. Read and Match	<p>Dot Plot</p> <ul style="list-style-type: none"> <li>Understand that the number of dots above each category in a dot plot represents the value or frequency of the data for the category</li> <li>Understand that numbers may be the category names for categorical data</li> </ul> <p>Bar Graph</p> <ul style="list-style-type: none"> <li>Understand that the end of a bar in a bar graph represents the value or frequency of the data for the category</li> <li>Understand how to read the scale of the intervals on a bar graph</li> <li>Understand how to read the value of a bar in a bar graph when the end of the bar falls between marked intervals</li> </ul> <p>Pictograph</p> <ul style="list-style-type: none"> <li>Understand the meaning of the key defining the quantity of each symbol in a pictograph</li> <li>Understand how to use the key to interpret the value represented by a partial symbol</li> <li>Understand how to read data values in a pictograph based on the provided key</li> </ul> <p>Frequency Table</p> <ul style="list-style-type: none"> <li>Understand how to read the tally marks or values of the data represented in a frequency table</li> </ul>	Represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers

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?
10 3.8B	Solve one- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals.	Solve one- and two-step problems using categorical data using information from a table or graph.	<ul style="list-style-type: none"> <li>• Recognize addition or subtraction presented in a real-world problem situation</li> <li>• Understand the meaning of the key or scale</li> <li>• Understand how to read data values in a frequency table, dot plot, pictograph, or bar graph with scaled intervals based on the provided key</li> <li>• Solve a problem involving addition or subtraction regarding data presented in a frequency table, dot plot, pictograph, or bar graph with scaled intervals.</li> </ul>	Solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot

Day 1	Day 2	Day 3	Day 4	Day 5
Mini Lesson Additive Tables LT 7	Mini Lesson Multiplicative Tables LT 7	2 Truths and a Lie LT 7	Independent Practice LT 7	Math Huddle Area LT 8
Guided Math	Guided Math	Guided Math	Guided Math	Guided Math
Reteach Unit 8	LT 7	LT 7	LT 7	LT 8
Day 6	Day 7	Day 8	Day 9	Day 10
Area Scavenger Hunt Area LT 8	Review Graphs LT 9	Mini Lesson Problem Solving Graphs LT 10	Independent Practice Graphs LT 9, 10	Math Huddle All Operations LT 1-6
Guided Math	Guided Math	Guided Math	Guided Math	Guided Math
LT 8	LT 9	LT 10	LT 10	LT 1-6 Number Lines Equations
Day 11	Day 12	Day 13	<h1>Algebraic Reasoning- All Operations</h1>	
Math Huddle All Operations LT 1-6	Independent Practice All Operations LT 1-6	Digital Breakout All Operations LT 1-10		
Guided Math	Guided Math	Guided Math		
LT 1-6 Strip Diagrams Equations	LT 1-6 Models Equations	Reteach		



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download!

I hope this helps your  
students!



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