

## $4^{\text {th }}$ Grade



# OPERATIONS 

Created By:
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Whole ciass Lessons and Guided Math Groups Active ensagement 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 $\quad 4^{\text {th }}$ Grade Math align with TEXAS TEKS!

2 2nd $^{\text {Grade Math }}$ Lesson Plans Lesson Plans
$3{ }^{\text {rd }}$ Grade Math Lesson Plans

## $5^{\text {th }}$ 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
(P)
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All Operations

| Nome | 1 | 2 |  | 3 |  |  | 5 | 6 | 7 |  |  | 9 |
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| LT | Statement | 1 | 2 | 3 | 4 | Evidence |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| I | I can add and subtract whole numbers to <br> the millions place using the standard <br> algorithm. |  |  |  |  |  |
| 2 | I can add and subtract decimals to the <br> hundredths place using the standard <br> algorithm. |  |  |  |  |  |
| 3 | I can solve with fluency one- and two-step <br> problems involving multiplication |  |  |  |  |  |
| 4 | I can solve with fluency one- and two-step <br> problems involving division, including <br> interpreting remainders. |  |  |  |  |  |


| I | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: |
| I have no idea how to <br> do this. | I can do this with <br> some help. | I can do this by <br> myself | I can teach someone <br> to do this. ${ }^{7}$ |

$\qquad$

| LT | Statement | 1 | 2 | 3 | 4 | Evidence |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 6 | I can represent multi-step problems <br> involving the division with whole numbers <br> using strip diagrams and equations with a <br> letter standing for the unknown quantity. |  |  |  |  |  |
|  | I can represent problems using an input- <br> output table and numerical expressions to <br> generate a number pattern that follows a <br> given rule representing the relationship of <br> the values in the resulting sequence and <br> their position in the sequence. |  |  |  |  |  |
| 8 | I can distinguish between fixed and variable <br> expenses. |  |  |  |  |  |
| 9 | I can calculate profit in a given situation. |  |  |  |  |  |


| I | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: |
| I have no idea how to <br> do this. | I can do this with <br> some help. | I can do this by <br> myself | I can teach someone <br> to do this. ${ }^{8}$ |


| 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? |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 1 \\ 4.4 А \end{gathered}$ | Add and subtract whole numbers to the millions place using the standard algorithm. | Connection between place value and the standard algorithm Standard algorithm | Recognize addition presented in a realworld problem situation <br> DRecognize <br> subtraction presented in a realworld problem situation Junderstand how to add multi-digit numbers involving regrouping Uunderstand how to subtract multi-digit number involving regrouping over multiple zeros Solve a two-step problem involving addition and subtraction | - Estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, multiplication, or division. |
| $\begin{gathered} 2 \\ 4.4 \mathrm{~A} \end{gathered}$ | Add and subtract decimals to the hundredths place using the standard algorithm. | $\square$ Relate addition and subtraction of decimals to the hundredths place using concrete $\square$ objects and pictorial models to the standard algorithm for adding and subtracting decimals. Trailing zeros - a sequence of zeros in the decimal part of a number that follow the last non-zero digit, and whether recorded or deleted, does not change the value of the number ©iPohly INC Standard algorithm | Q Recognize addition presented in a realworld problem situation Recognize subtraction presented in a realworld problem situation Understand how to represent a whole number as a decimal to the hundredths place Understand how to add decimal numbers involving regrouping Understand how to subtract decimal numbers involving regrouping over multiple zeros Solve a two-step problem involving addition and subtraction | - Estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, multiplication, or division. |


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| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 3 \\ 4.4 \mathrm{H} \end{gathered}$ | Solve with fluency oneand two-step problems involving multiplication | $\square$ One-step problems <br> $\square$ Recognition of multiplication in mathematical and real-world problem situations <br> - Two-step problems must have one-step in the problem that involves multiplication; however, the other step in the problem can involve addition and/or subtraction | $\square$ Recognize <br> multiplication presented in a real-world problem situation <br> [. Understand how multiply a twodigit number by a two-digit number <br> [ Solve a two-step problem involving multiplication and division | - Solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm. |
| $\begin{gathered} 4 \\ \text { ५.५Н } \end{gathered}$ | Solve with fluency oneand two-step problems involving division, including interpreting remainders. | Various ways to record remainder Ignore the remainder Add one to the quotient Remainder is the answer Remainder recorded as a fraction | $\square$ Recognize division <br> presented in a <br> real-world <br> problem situation <br> $\square$ Understand how <br> to divide a four- <br> digit number by a <br> one-digit number <br> - Understand how <br> to interpret a <br> remainder based <br> on the problem <br> situation and <br> question being <br> asked <br> - Solve a problem involving division, <br> including <br> interpreting the remainder | Solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm. |


| 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? |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 5 \\ 4.5 \mathrm{~A} \end{gathered}$ | Represent multi-step problems involving multiplication with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity. | Relationship <br> between multiplication and addition <br> - Representations of an unknown quantity in an equation <br> - Representation of problem situations with strip diagrams and equations <br> Multiplicative structures <br> - Multiplication product unknown <br> - Multiplication factor unknown | - Understand the relationship between the description of a problem situation and the symbols represented in an equation <br> - Represent a twostep problem using an equation. <br> - Understand how a strip diagram can be used to represent multiplication | $\square$ Represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity. |
| $\begin{gathered} 6 \\ 4.5 \mathrm{~A} \end{gathered}$ | Represent multi-step problems involving the division with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity. | - Representations of an unknown quantity in an equation <br> - Recognition of division in mathematical and real-world problem situations <br> - Representation of problem situations with strip diagrams and equations <br> Division Structures <br> $\square$ Partitive Division <br> $\square$ Quotative Division | - Understand the relationship between the description of a problem situation and the symbols represented in an equation <br> - Understand how a strip diagram can be used to represent division | $\square$ Represent and solve multi-step problems involving the four operations with whole numbers using 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? |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 7 \\ \hline 4.5 B \end{gathered}$ | Represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence. | Data sets of whole numbers Sets may or may not begin with I <br> $\square$ Sets may or may not be listed in sequential order <br> Relationship between input-output tables and number patterns <br> - When the input is the position in the sequence, then the output is the value in the sequence. <br> - When the input is the value in the sequence, then the output is the position in the sequence. <br> Relationship between values in a number pattern Additive numerical pattern Multiplicative numerical pattern Relationship between numerical expressions and rules to create input-output tables representing the relationship between each position in the sequence and the value in the sequence ©iPohly INC | - Understand how to represent the position of a number in a sequence and the value of the number as a number pair [] Understand how to identify a numerical relationship between pairs of numbers in an input-output table <br> - Understand how to represent a numerical relationship between pairs of numbers in an input-output table when given a rule <br> - Represent a number pattern using an input-output table, including the relationship between the pairs of numbers | Generate a numerical pattern when given a rule in the form $y=a x$ or $y=x+a$ and graph. Recognize the difference between additive and multiplicative numerical patterns given in a table or graph. |


| 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? |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 8 \\ 4.1 O A \end{gathered}$ | Distinguish between fixed and variable expenses. | Relationship between <br> fixed and variable expenses <br> - Some expenses do not change from month to month and some expenses do change each month <br> $\square$ Some expenses that may be fixed for one person may be variable for others depending on the situation | - Understand the difference between fixed expenses and variable expenses <br> - Understand that a similar expense can be fixed for some people but variable for others <br> - Identify whether a real-world expense is fixed or variable | D. Define income tax, payroll tax, sales tax, and property tax. |
| $\begin{gathered} \hline 9 \\ 4.10 B \end{gathered}$ | Calculate profit in a given situation. | $\square$ Determining profit from a single source for income and/or expenses Determining profit from multiple sources for incomes and/or expenses <br> $\square$ Relationship between income, expenses, and profit <br> o When income is greater than expenses there is a profit. <br> - When income is less than expenses, there is no profit or the costs exceed the income. | $\square$ Understand that the cost for preparing snacks represents the expenses <br> $\square$ Understand that the amount received from the sale of the snacks represents the income <br> $\square$ Understand that profit is the amount earned after expenses are subtracted from income <br> $\square$ Solve a problem involving calculating profit | Use multiple sources of income and expenses to the billions place |


| $\begin{aligned} & \text { Day I } \\ & 4.4 \mathrm{~A} \end{aligned}$ | $\begin{aligned} & \text { Day } 2 \\ & \text { 4.4Н } \end{aligned}$ | $\begin{gathered} \text { Day } 3 \\ 4.5 \mathrm{~A} \end{gathered}$ | $\begin{gathered} \text { Day } 4 \\ \text { 4.4А, } 4.4 Н, ~ 4.5 \mathrm{~A} \end{gathered}$ | $\begin{gathered} \text { Day } 5 \\ \text { Ч.ЧА, Ч.ЧН, Ч.5А } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Math Huddle LT I-2 <br> Addition and Subtraction | Math Huddle LT 3-4 Multiplication and Division | Math Huddle <br> LT 5-6 <br> Strip Diagram <br> Equation | Game <br> LT I-6 <br> All Operations | Independent <br> Practice <br> LT I-6 <br> All Operations |
| Guided Math | Guided Math | Guided Math | Guided Math | Guided Math |
| Reteach <br> Division | LT I-2 | LT 3-4 | LT 5-6 | LT I-6 |
| $\begin{gathered} \text { Day } 6 \\ 4.10 \mathrm{~A} \end{gathered}$ | $\begin{aligned} & \text { Day } 7 \\ & \text { 4.IOA } \end{aligned}$ | $\begin{aligned} & \text { Day } 8 \\ & \text { 4.IOB } \end{aligned}$ | $\begin{aligned} & \text { Day } 9 \\ & \text { 4.IOB } \end{aligned}$ | $\begin{gathered} \text { Day } 10 \\ 4.5 B \end{gathered}$ |
| Mini Lesson LT 8 <br> Fixed \& Variable <br> Expenses | Math Huddle <br> LT 8 <br> Fixed \& Variable <br> Expenses | Mini Lesson LT 9 <br> Calculate Profit | Independent <br> Practice <br> LT $q$ <br> Calculate Profit | Math Huddle LT 7 <br> Input Output Tables |
| Guided Math | Guided Math | Guided Math | Guided Math | Guided Math |
| LT 8 | LT 8 | LT 9 | LT 9 | LT 7 |
| $\begin{gathered} \text { Day II } \\ 4.5 B \end{gathered}$ | $\begin{gathered} \text { Day } 12 \\ 4.5 B \end{gathered}$ | $\begin{gathered} \text { Day } 13 \\ 4.5 B \end{gathered}$ | $\begin{gathered} \text { Day } 14 \\ 4.5 B \end{gathered}$ |  |
| Mini Lesson LT 7 <br> Input Output Tables | Mini Lesson LT 7 <br> Input Output Tables | Game <br> LT 7 <br> Input Output <br> Tables | Independent <br> Practice <br> LT 7 <br> Input Output <br> Tables |  |
| Guided Math | Guided Math | Guided Math | Guided Math | $\bigcirc$ |
| LT 7 | LT 7 | LT 7 <br> ©iPohly INC | LT 7 | $\square$ |

## EPRAlly Fqu.

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