## Grade 4

## High Impact <br> Standards



Program Overview and Sample Lessons

Teachers are the most important factor in student learning.

That's why every Standards Plus Lesson is directly taught by a teacher.

## The High Impact Standards Program includes:



- Standards Plus Online Digital Platform
- Access to an Intervention Program -

Printable Tier 2 \& 3 Intervention Lessons

- Printed Teacher Edition \& Student Editions


## Standards Plus Works in Any Setting:




## Distance <br> Learning

- Teachers directly teach lessons to the students in-class or in a virtual setting.
- Students complete the lessons in the Standards Plus Digital Platform or printed student edition.


## How Standards Plus Increases Student Achievement

『
DIRECT INSTRUCTION lessons are proven to foster the most significant gains in student achievement．

## MULTIPLE EXPOSURES TO EACH STANDARD／SKILL

Skills are presented in four to eight lessons，providing students multiple opportunities to practice and retain information．

IMMEDIATE FEEDBACK after every lesson provides the most powerful single modification that enhances student achievement．

FORMATIVE ASSESSMENTS are proven to be highly effective in providing information that leads to increased student achievement．

## IMMEDIATE INTERVENTION

Provides scaffolded instruction to assist students in mastering the standards．

## BUILT ON RESEARCH AND BACKED BY EVIDENCE

All Standards Plus lessons are designed according to educational research and meet ESSA evidence－based guidelines．

## High Impact Standards Includes:

## High Impact Grade Level Lessons and Assessments <br> 56 Lessons and 34 Assessments (DOK 1-2)

Students learn essential grade level skills with targeted 15-20 minute lessons.
Brief formative assessments are provided to monitor student progress.


## Tier 2 \& Tier 3 Intervention Lessons 50+ Lessons (DOK 1-2)

Students learn prerequisite skills that scaffold below grade-level.
These lessons are for students that need more support and are available to print in the Standards Plus Digital Platform. Printed student editions can be purchased separately.


## Performance Lessons 5+ Lessons (DOK 3)

Performance lessons require students to apply the skills they learned in previous Standards Plus lessons. These lessons provide students the opportunity to incorporate technology, text analysis, reflection and research.

## Teach a Grade Level Concept with Four Concise Lessons



Lessons can be completed online in the Standards Plus Digital Platform or in the printed student edition.

Standards Plus lessons are grouped in sets that teach a grade-level concept.

| TEACH | TEACH | TEACH | TEACH | ASSESS |
| :---: | :---: | :---: | :---: | :---: |
| Lesson | Lesson | Lesson | Lesson | Assessment |
| 1 | 2 | 3 | 4 | 1 |

A Standards Plus lesson set includes 4 lessons and 1 assessment.

## Assessments

Use the assessments to identify student's understanding of the concepts taught in the lesson set and identify students for Standards Plus Intervention.


Digital Assessment


Print Assessment

Assessments can be completed online in the Standards Plus Digital Platform or in the student edition

When students take the assessment online, the platform will create groups of students that scored below 60\% and recommend intervention lessons.

## Tier 2 \& Tier 3 Intervention

These lessons are for students that need more support and are available to print in the Standards Plus Digital Platform.

## How the Intervention Lessons Work



Our scaffolded intervention lessons teach the prerequisite skills necessary to master grade-level standards.

## Performance Lessons (DOK 3)

# These lessons require students to apply what they have learned using reasoning, planning, and knowledge gained from the prior lessons. 

Many standards are assessed at this level of rigor on state assessments.
2. Add the fractions below; write the answer as a fraction in hundredths, and then change it to a decimal.

$$
\frac{7}{10}+\frac{3}{100}=
$$

$\qquad$ $=$
3. Convert $\frac{37}{100}$ to a decimal; then show its value on a number line to justify your answer.

$$
\frac{37}{100}=
$$

4. Compare the decimals below using the symbols $>,=$, or $<$. Justify the comparison with words. Create a place value chart and a number line to prove your answer.
87.17 $\qquad$ 87.71

Domain: Number and Operations - Fractions Gr. Level: 4 Performance Lesson \#14
Adding fractions with 10 and 100 in their denominators:

- Create the common denominator 100.
- Add the numerators
- Keep the denominator 100.

Converting fractions with tenths and hundredths to decimal form:

- Read the number
- Refer to the place value chart.
- Write the correct decimal or fraction.

5. Why is it sometimes unnecessary to compare every digit? Explain

| Hundreds | Tens | Ones | . | Tenths | Hundredths |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 0 | . | 2 |  |
|  |  |  | . |  |  |

6. Compare the decimals below and fractions using the symbols $>,=$, or $<$
a. 56.3 $\qquad$ 53.6
b. 68.71 $\qquad$ 68.17

How to represent decimals on a number line:

- Convert the fraction to a decimal
- Determine what two numbers the decimal is between.
- Draw an arrow that shows where the number should be placed on the number line.
c. $8 / 10$ $\qquad$ 80/100
d. 73.11 $\qquad$ 72.11

Which number above is the largest? You may draw a number line to help you find the answer. $\qquad$
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Directions: Read each problem below and answer the questions.

1. Write the fraction $\frac{6}{10}$ as a decimal and then change the fraction to hundredths.
$\frac{6}{10}=$ $\qquad$ $=$ $\qquad$
Draw a number line to show where $\frac{6}{10}$ is on the number line

Explain how all your answers are equal: $\qquad$

## Pacing Options

## 14-Week Implementation <br> Teach one lesson per day.

## 7-Week Implementation <br> Teach two lessons per day.

## Intensive / Bootcamp Implementation

Catch up on the high impact standards in three weeks.
Teach four lessons per day.

## Grade 4 Mathematics - High Impact Standards Lesson Index

| Domain | Lesson | Focus | Standard(s) | TE Pg | St. Ed. Pg |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $z$ | 13 | Add Multi-digit Whole Numbers | 4.NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm. | 14 | 3 |
|  | 14 | Add Multi-digit Whole Numbers |  | 16 | 4 |
|  | 15 | Subtract Multi-digit Whole Numbers |  | 18 | 5 |
|  | 16 | Subtract Multi-digit Whole Numbers |  | 20 | 6 |
|  | A4 | Assessment - Add and Subtract Multi-digit Whole Numbers |  | 22 | 7 |
|  | 17 | Multiplication of Whole Numbers | 4.NBT.5: Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | 24 | 9 |
|  | 18 | Multiplication of Whole Numbers |  | 26 | 10 |
|  | 19 | Multiplication of Whole Numbers |  | 28 | 11 |
|  | 20 | Multiplication of Whole Numbers |  | 30 | 12 |
|  | A5 | Assessment - Multiplication of Whole Numbers |  | 32 | 13 |
|  | 21 | Dividing Whole Numbers | 4.NBT.6: Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | 34 | 15 |
|  | 22 | Dividing Whole Numbers |  | 36 | 16 |
|  | 23 | Dividing Whole Numbers |  | 38 | 17 |
|  | 24 | Dividing Whole Numbers |  | 40 | 18 |
|  | A6 | Assessment - Dividing Whole Numbers |  | 42 | 19 |
|  | P2 | Performance Lesson \#2 - Working with Operations |  | 44 | 21-24 |
|  | 1 | Commutative Property of Multiplication | 4.OA.2: See below. | 50 | 25 |
|  | 2 | Represent Verbal Statements as Equations | 4.OA.1: Interpret a multiplication equation as a comparison, e.g., interpret $35=5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5 . Represent verbal statements of multiplicative comparisons as multiplication equations. | 52 | 26 |
|  | 3 | Represent Verbal Statements as Equations |  | 54 | 27 |
|  | 4 | Represent Verbal Statements as Equations |  | 56 | 28 |
|  | A1 | Assessment - Multiplicative Comparison | 4.OA.1, 4.0A. 2 | 58 | 29 |
|  | 9 | Multiplicative Comparison Problems | 4.OA.2: Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. | 60 | 31 |
|  | 10 | Multiplicative Comparison Problems |  | 62 | 32 |
|  | 11 | Multistep Word Problems | 4.OA.3: See below. | 64 | 33 |
|  | 12 | Multistep Word Problems |  | 66 | 34 |
|  | A3 | Assessment-Word Problems | 4.OA.2, 4.OA. 3 | 68 | 35 |
|  | 13 | Multistep Addition \& Subtraction Word Problems | 4.OA.3: Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | 70 | 37 |
|  | 14 | Multistep Multiplication Word Problems |  | 72 | 38 |
|  | 15 | Multistep Word Problems |  | 74 | 39 |
|  | 16 | Multistep Word Problems |  | 76 | 40 |
|  | A4 | Assessment - Multistep Word Problems |  | 78 | 41 |

## Grade 4 Mathematics - High Impact Standards Lesson Index

| Domain | Lesson | Focus | Standard(s) | TE Pg | St. Ed. Pg |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 | Division Word Problems with Remainders | 4.OA. 3 | 80 | 43 |
|  | 18 | Division Word Problems with Remainders |  | 82 | 44 |
|  | 19 | Division Word Problems with Remainders |  | 84 | 45 |
|  | 20 | Division Word Problems with Remainders |  | 86 | 46 |
|  | A5 | Assessment - Solving Division Word Problems with Remainders |  | 88 | 47 |
| Number and Operations - Fractions | 1 | Equivalent Fractions | 4.NF.1: Explain why a fraction $a / b$ is equivalent to a fraction $(n \times a) /(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. | 92 | 49 |
|  | 2 | Equivalent Fractions |  | 94 | 50 |
|  | 3 | Comparing Fractions | 4.NF. 2 Compare two fractions with different numerators and different denominators. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions. | 96 | 51 |
|  | 4 | Comparing Fractions |  | 98 | 52 |
|  | A1 | Assessment - Equivalent Fractions and Comparing Fractions | 4.NF.1, 4.NF. 2 | 100 | 53 |
|  | 9 | Add and Subtract Like Fractions | 4.NF.3a: Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. | 102 | 55 |
|  | 10 | Decomposing and Composing Fractions | 4.NF.3b: Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $3 / 8=1 / 8+1 / 8+1 / 8 ; 3 / 8=1 / 8+2 / 8 ; 21 / 8=1+1+1 / 8=8 / 8$ $+8 / 8+1 / 8$. | 104 | 56 |
|  | 11 | Decomposing Fractions |  | 106 | 57 |
|  | 12 | Decomposing Mixed Numbers |  | 108 | 58 |
|  | A3 | Assessment - Composing and Decomposing Fractions | 4.NF.3a, 4.NF.3b | 110 | 59 |
|  | P11 | Performance Lesson \#11-All About Fractions |  | 112-113 | 61-63 |
|  | 13 | Adding Mixed Numbers | 4.NF.3c: Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. | 118 | 64 |
|  | 14 | Adding Mixed Numbers |  | 120 | 65 |
|  | 15 | Subtracting Mixed Numbers |  | 122 | 66 |
|  | 16 | Subtracting Mixed Numbers |  | 124 | 67 |
|  | A4 | Assessment - Add and Subtract Mixed Numbers |  | 126 | 68 |
|  | 17 | Add Fractions to Solve Word Problems | 4.NF.3d: Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. | 128 | 70 |
|  | 18 | Subtract Fractions to Solve Word Problems |  | 130 | 71 |
|  | 19 | Add/Subtract Fractions to Solve Word Problems |  | 132 | 72 |
|  | 20 | Add/Subtract Fractions to Solve Word Problems |  | 134 | 73 |
|  | A5 | Assessment - Word Problems - Adding/ Subtracting Fractions |  | 136 | 74 |
|  | P12 | Performance Lesson \#12 - Adding and Subtracting Fractions |  | 138 | 76-77 |
|  | 21 | Multiply Fractions by Whole Numbers | 4.NF.4a: Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. Understand a fraction $\mathrm{a} / \mathrm{b}$ as a multiple of $1 / \mathrm{b}$. | 142 | 78 |
|  | 22 | Multiplying Fractions by Whole Numbers |  | 144 | 79 |
|  | 23 | Multiplying Fractions by Whole Numbers | 4.NF.4b: Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. Understand a fraction $\mathrm{a} / \mathrm{b}$ as a multiple of $1 / \mathrm{b}$, and use this understanding to multiply a fraction by a whole number. | 146 | 80 |
|  | 24 | Multiplying Fractions by Whole Numbers |  | 148 | 81 |
|  | A6 | Assessment - Multiplying Fractions by Whole Numbers | 4.NF.4a, 4.NF.4b | 150 | 82 |
|  | P13 | Performance Lesson \#13-Multiplying Fractions |  | 152 | 84-85 |

## Grade 4 Mathematics - High Impact Standards Lesson Index

| 29 | Converting Fractions - 10ths to 100ths | 4.NF.5: Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100 . | 156 | 86 |
| :---: | :---: | :---: | :---: | :---: |
| 30 | Add Fractions |  | 158 | 87 |
| 31 | Convert Fractions to Decimals | 4.NF.6: Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62 / 100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram. | 160 | 88 |
| 32 | Decimals on a Number Line |  | 162 | 89 |
| A8 | Assessment - Converting Fractions | 4.NF.5, 4.NF.6 | 164 | 90 |
| 33 | Compare Decimals | 4.NF.7: Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model. | 166 | 92 |
| 34 | Compare Decimals |  | 168 | 93 |
| 35 | Compare Decimals |  | 170 | 94 |
| 36 | Compare Decimals |  | 172 | 95 |
| A9 | Assessment - Compare Decimals |  | 174 | 96 |
| P14 | Performance Lesson \#14-Fractions and Decimals |  | 176-184 | 98-100 |

## High Impact Standards

## Sample Lessons




# Sample Teacher Lesson Plan 

## Teacher Lesson Plan

| Standards Plus ${ }^{\circledR}$ - Mathematics - Grade 4 |  |  |
| :--- | :--- | :---: |
| Domain: Number and Operations in Base Ten $\quad$ Focus: Add Multi-Digit Whole Numbers Lesson: \#13 |  |  |
| Standard: 4.NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm. |  |  |

Lesson Objective: The students will add multi-digit whole numbers up to 10,000 with regrouping.

Introduction: "Today we will add whole numbers using regrouping."
Instruction: "To add whole numbers, first we align the numbers vertically in columns. Then we begin by adding the number in the ones column and regrouping if necessary. We continue to add each column from right to left until we find the sum."

Guided Practice: Direct students' attention to Example A at the top of the page. "Look at the rules for adding multi-digit numbers and read them with me. Now look at the place value chart. The place value chart can help you line up the numbers in a problem correctly. Remember to regroup the next column if the sum in any place value is 10 or more. Let's follow the steps to solve Example A."

- Step 1: Write the numbers vertically so that the place values are aligned correctly. (The problem in Example A is already in a place value chart.)
- Step 2: Add the numbers in the ones column first $(2+8=10)$. Write the 0 in the ones column. Regroup the 1 into the top of the tens column.
- Step 3: Repeat the process for each column by working from right to left. Continue to solve the problem with students. Regrouping is necessary for the ones, tens, hundreds, and thousands in this problem $(10,610)$. Follow these steps to model Example B. Remember to model how to line up the numbers in place value columns before solving the problem $(8,216)$.

Independent Practice: "Complete problems 1-6 independently. Remember to work from right to left as you complete the problems."

Review: Review problems 1-6 with students. Discuss the steps used to arrive at the answer.

Closure: "Today we used regrouping when we added numbers. Let's review the steps again (refer students to the steps at the top of the student page)."

Answers:

| 1. 2,110 | 4. 9,792 |
| :--- | :--- |
| 2. 5,615 | 5. 4,024 |
| 3. 14,181 | 6. 12,341 |

[^0]
## Sample Student Lesson

Student Page

## Standards Plus ${ }^{\circledR}$ - Mathematics - Grade 4

Domain: Number and Operations in Base Ten Focus: Add Multi-Digit Whole Numbers Lesson: \#13
Standard: 4.NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm.

Step 1: Align numbers in vertical columns.
Step 2: Add the ones column first. Regroup if the sum is greater than 9.
Step 3: Repeat process for each column, moving from right to left.

Example:
A. 9,842

| $+\quad 768$ |
| :--- |


| TTh | Th | H | T | O |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 1 |  |
|  | 9 | 8 | 4 | 2 |
| + |  | 7 | 6 | 8 |
|  |  |  |  |  |

B. $4,621+3,595=$
an easy to
follow
student
page.
Directions: Find the sum.

1. 1,271
2. 8,133
$+1,659$
3. $3,642+1,973=$
4. $3,495+529=$
5. $6,573+7,608=$
6. 5,293
$+7,048$

## Sample Digital Teacher Lesson Plan (3rd Grade Math Sample)



## Guided Practice

"Let's look at some problems involving groups of objects. Listen as I read the problem for Example 2. Juan has three groups of glass marbles. Each group has five marbles. What is Juan's total number of glass marbles? Now we will draw the problem to show each group of marbles. As I draw each group of marbles, you draw each group on your sheet. We will record the number of marbles in each group on the lines to show repeated addition of the number of objects in each group. The first group has 5 marbles so we will write a 5 in the blank. (Continue recording the number 5 in each blank: $5+5+5=3 \times 5=15$. Next we will show that the two factors, or numbers, are multiplied. We will use an $x$ to show it is multiplication in the blank."

> Each section of the digital lesson plan is expandable.

## Sample Digital Student Lesson (3rd Grade Math Sample)



Students respond online in the digital lessons. In this example students draw marbles to show repeated additon and type below.

## Sample Teacher Lesson Plan

Each lesson
plan includes
the following direct instruction components:

Introduction
Instruction
Guided Practice

Independent
Practice
Review
Closure

## Teacher Lesson Plan

## Standards Plus ${ }^{\circledR}$ - Mathematics - Grade 4

Domain: Number and Operations in Base Ten Focus: Subtract Multi-Digit Whole Numbers Lesson: \#15
Standard: 4.NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm.
Lesson Objective: The students will subtract multi-digit whole numbers up to 100,000 with regrouping.

Introduction: "Today we will learn how to subtract whole numbers using regrouping."
Instruction: "To subtract whole numbers, first we align the numbers in vertical columns. Then we begin by subtracting the numbers in the ones column and regrouping if necessary. We continue to subtract each column from right to left until we find the difference."

Guided Practice: Direct students' attention to Example A at the top of the page. "Look at the rules for subtracting multi-digit numbers and read them with me. Now look at the place value chart. The place value chart can help you line up the numbers in a problem correctly. Remember to regroup if the top digit is less than the bottom digit. Let's follow the steps to solve the problem in Example A.

- Step 1: Write the numbers vertically so that the place values are aligned correctly. (The problem in Example A is already in a place value chart.)
- Step 2: Subtract the numbers in the ones column first $(7-1=6)$. Write 6 in the ones column.
- Step 3: Now subtract the numbers in the tens column (3-4 = $\qquad$ ). 4 is greater than 3 , so regroup 1 ten from the hundreds column as 10 ones and add to the tens column. Change the 1 in the hundreds column to a 0 . Now subtract $13-4$ $=9$. Write the difference in the tens column."

Repeat the process for each column by working from right to left. Continue to solve the problem with students. Regrouping is necessary for the tens, hundreds, and thousands in this problem $(18,896)$. Follow the steps to model Example B.
Remember to model how to line up the numbers correctly before solving the problem $(30,738)$.

Independent Practice: "Complete problems 1-6 independently. Remember to work the problem from right to left and cross out and rename the digit when you regroup."

Review: Review problems 1-6 with students by solving each problem. Discuss.
Closure: "Today we reviewed how to use regrouping when we subtract numbers. Let's review the steps again (refer students to the steps at the top of the student page)."

Answers:

1. 3,299
2. 2,841
3. 65,391
4. 3,208
5. 29,459
6. 50,694
[^1]
## Sample Student Lesson

## Student Page

## Standards Plus ${ }^{\circledR}$ - Mathematics - Grade 4

Domain: Number and Operations in Base Ten Focus: Subtract Multi-Digit Whole Numbers Lesson: \#15 Standard: 4.NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm.

Step 1: Align numbers vertically.
Step 2: Subtract beginning with the ones column. Regroup if the top digit is less than the bottom digit.
Step 3: Repeat process for each column moving to the left.

Each student page includes examples for
Guided
Practice.
.and
items to be completed
in
Independent Practice.

## Example:

A. 28,137

- 9,241

| TTh | Th | H | T | O |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| 2 | 8 | 1 | 3 | 7 |
| - | 9 | 2 | 4 | 1 |
|  |  |  |  |  |

B. $42,176-11,438=$

Directions: Find the difference.

1. 8,366
2. $5,381-2,173=$
3. 4,674

- 1,833

5. 35,295
$\begin{array}{r}-\quad 5,836 \\ \hline\end{array}$
6. $75,239-9,848=$
7. 97,488

- 46,794


# Sample Teacher Lesson Plan 

## Teacher Lesson Plan

## Standards Plus ${ }^{\circledR}$ - Mathematics - Grade 4

Domain: Number and Operations in Base Ten Focus: Subtract Multi-Digit Whole Numbers Lesson: \#16
Standard: 4.NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm.
Lesson Objective: The students will subtract multi-digit whole numbers up to 1,000,000 with regrouping across zeros.

Introduction: "Today we will review how to subtract whole numbers using regrouping, and learning how to regroup when there are zeros in the top number."

Instruction: "Remember that to subtract whole numbers, first we align the numbers in vertical columns. Then we begin by subtracting the numbers in the ones column and regrouping if necessary. We continue to subtract each column from right to left until we find the difference."

Guided Practice: Direct students' attention to Example A at the top of the page. "Look at the rules for subtracting multi-digit numbers and read them with me. Now look at the place value chart. The place value chart can help you line up the numbers in a problem correctly. Remember to regroup if the top digit is less than the bottom digit. Pay special attention to how to regroup across zeros. Let's follow the steps to solve Example A.

- Step 1: Write the numbers vertically so the place values are aligned correctly. (The problem in Example A is already in a place value chart.)
- Step 2: Subtract the numbers in the ones column first (5-7 = $\qquad$ ). Since 7 is greater than 5 regroup from the tens column. But there is a 0 in the tens column, so before you can regroup to the ones column you must regroup 10 ones from the hundreds column.
- Step 3: Regroup ten ones from the hundreds column. Add the 10 ones to the tens column. Now regroup from the 10 to the ones column. Write the difference $(15-7=8)$ in the ones column.
- Step 4: Repeat the process for each column by working from right to left."

Continue to solve the problem with students. Regrouping is necessary for the ones, tens, hundreds, and thousands in this problem $(933,348)$. Follow the steps to model Example B $(88,857)$. Remind students that you cannot regroup from a zero. You must regroup the zeros first. Thoroughly model the steps for regrouping when there are consecutive zeros in the top number.

Independent Practice: "Complete problems 1-4 independently. Remember to work the problem from right to left and cross out and rename the digit when you regroup."

Review: Review problems 1-4 with students by solving each problem. Discuss the reasoning used to arrive at the answer.

Closure: "Today we used regrouping when we subtracted numbers. Turn to your partner and explain the steps for regrouping when there are consecutive zeros."
Answers:

3. 581,289
2. 59,861
4. 8,766

[^2]
## Sample Student Lesson

Student Page

## Standards Plus ${ }^{\circledR}$ - Mathematics - Grade 4

Domain: Number and Operations in Base Ten Focus: Subtract Multi-Digit Whole Numbers Lesson: \#16
Standard: 4.NBT.4: Fluently add and subtract multi-digit whole numbers using the standard algorithm.

Step 1: Align numbers in vertical columns.
Step 2: Subtract the ones column first. Regroup if the top digit is less than the bottom digit.
Step 3: Regroup any zeroes before subtracting.
Step 4: Repeat process for each column moving to the left.
Example:
A. 981,805
$-48,457$

| HTh | TTh | Th | H | T | O |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 9 | 8 | 1 | 8 | 0 | 5 |
| - | 4 | 8 | 4 | 5 | 7 |
|  |  |  |  |  |  |

B. $300,583-211,726=$ $\qquad$

## Practice,

review
each item
to check for
understanding.

Directions: Find the difference.

1. 47,083

- 32,657

2. $69,302-9,441=$ $\qquad$
3. $650,079-68,790=$ $\qquad$
4. 28,007

- 19,241


## Sample Assessment - Teacher Page

## Teacher Lesson Plan



This assessment may be used in the following ways:

- As a formative assessment of the students' progress
- As an additional opportunity to reinforce the vocabulary, concepts, and knowledge presented in the previous 4 lessons.

Standard: 4.NBT. 1 Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.

Procedure: Read the directions aloud and ensure that students understand how to respond to each item.

- If you are using this as a formative assessment, have the students complete the evaluation independently.
- If you are using this to reinforce instruction, determine the items that will be completed as guided practice, and those that will be completed as independent practice.


## Additional Tips:

- All Standards Plus assessments are available in an interactive digital format in the Standards Plus Digital Platform.
- When the assessments are administered and scored digitally, the platform automatically creates intervention groups and recommends additional printable intervention lessons.
- You can also access the printable intervention lessons from the home screen in the digital platform.

Review: Review the correct answers with students as soon as they are finished.

Answers:

| 1. | (4.NBT.1) $10 \times 90=900$ | Nine Hundred |
| :---: | :---: | :---: |
| 2. | (4.NBT.1) $10 \times 5,000=50,000$ | Fifty Thousand |
| 3. | (4.NBT.1) $60,000 \div 10=6,000$ | Six Thousand |
| 4. | (4.NBT.1) $700,000 \div 10=70,000$ | Seventy Thousand |
|  | (4.NBT.1) Answers will vary. Bo 7, but they have a different value 790, 7 represents the digit in the value is 700 . In 970, this 7 repre place so the value is 70 . | bers have a number of the numbers. In ds place so the e digit in the tens |

[^3]
## Sample Assessment - Student Page

| Standards Plus ${ }^{\circledR}$ - Mathematics - Grade 4 |
| :---: | :---: |
| Domain: Number and Operations in Base Ten Page |
| Assessment: \#1 Focus: Place Value |



Directions: For problems 1 and 2, move the underlined digit on place value to the left. Write the equation for the new number and the value of the new number.

$$
\text { Equation } \quad \text { Value of New Number }
$$

1. 90
2. 5,000

$\qquad$

Directions: For problems 3 and 4, move the underlined digit one place value to the right. Write the equation for the new number and the value of the new number.

$$
\text { Equation } \quad \text { Value of New Number }
$$

3. $\underline{6} 0,000$ $\qquad$
$\qquad$
4. $\underline{7} 00,000$ $\qquad$
$\qquad$
5. How is the number 7 in the number 790 similar or different from the 7 in the number 970 ?
$\qquad$
$\qquad$
$\qquad$

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