standards PLUS

Grade 5

High Impact
Standards

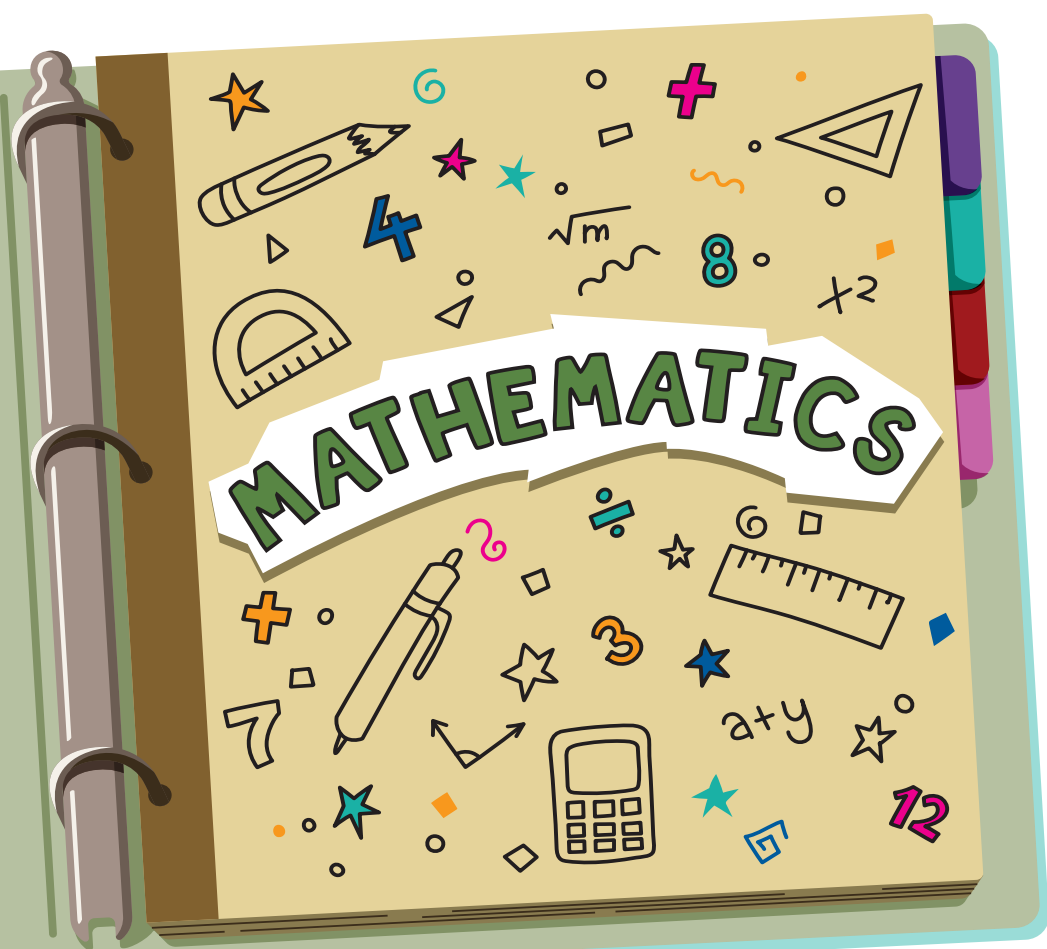MATHEMATICS

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:

In-Class **and** **Distance 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.

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How Standards Plus Increases Student Achievement

☑ **TEACHERS** are the most important factor in student learning.

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

☑ **DISCRETE LEARNING TARGETS** provide easily understood instruction that allow students to retain information.

☑ **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
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.
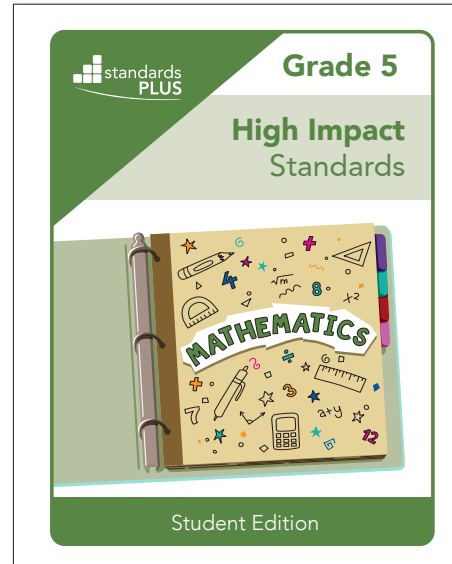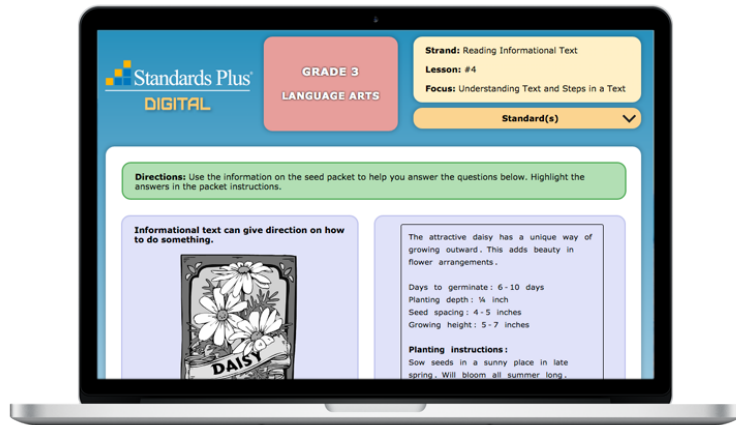
Performance Lessons
5+ Lessons (DOK 3)

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 1	Lesson 2	Lesson 3	Lesson 4	Assessment 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

ASSESS

Grade Level Skills

TEACH

ASSESS

TEACH

TEACH

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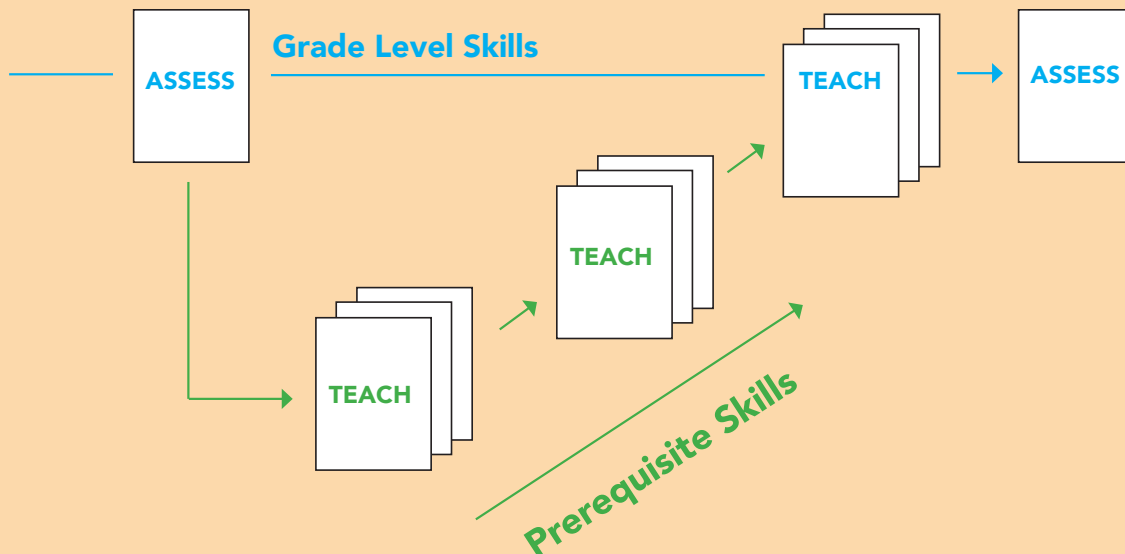
Our scaffolded intervention lessons teach the prerequisite skills necessary to master grade-level standards.

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.

Factor: A number that is multiplied.

Product: The solution to a multiplication problem.

Regroup: To group a ten in a specific place value in the place value that is one higher or one lower that the original number, e.g., 12 tens can be regrouped as 1 hundred and 2 tens.

Dividend: The number being divided.

Divisor: The number by which the dividend is being divided.

Quotient: The solution to a division problem.

Directions: Rewrite each problem below. Solve the problem, and write the steps you use to solve.

1. $3{,}456 \times 91 =$ _____

What steps did you use to solve the problem? Write the step on the lines below:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

2. $8{,}023 \div 21 =$ _____

What steps did you use to solve the problem? Write the step on the lines below:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

3. What does it mean to multiply?

_____
_____
_____
_____

4. What does it mean to divide?

_____
_____
_____
_____

Pacing Options

14-Week Implementation

Teach one lesson per day.

7-Week Implementation

Teach two lessons per day.

Intensive / Bootcamp Implementation

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

Grade 5 Mathematics High Impact Standards
Lesson Index

Domain	Lesson	Focus	Standard(s)	TE Pg	St. Ed. Pg
Number and Operations in Base	17	Multiply Whole Numbers	5.NBT.5: Fluently multiply multi-digit whole numbers using the standard algorithm.	14	3
	18	Multiply Whole Numbers		16	4
	19	Multiply Whole Numbers		18	5
	20	Multiply Whole Numbers		20	6
	A5	Assessment - Multiply Whole Numbers		22	7
	21	Divide Whole Numbers	5.NBT.6: Find whole-number quotients of whole numbers with up to four-digit dividends and two-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.	24	9
	22	Divide Whole Numbers		26	10
	23	Divide Whole Numbers		28	11
	24	Divide Whole Numbers		30	12
	A6	Assessment-Divide Whole Numbers		32	13
	P3	**Performance Lesson –** Number and Operations in Base Ten: *Multiplication and Division*		34	15-16
	29	Multiply Decimals	5.NBT.7: Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	38	17
	30	Multiply Decimals		40	18
	31	Multiply Decimals		42	19
	32	Multiply Decimals		44	20
	A8	Assessment - Multiply Decimals		46	21
	37	Divide a Decimal by a Whole Number	5.NBT.7: Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	48	23
	38	Divide a Decimal by a Whole Number		50	24
	39	Divide a Whole Number by a Decimal		52	25
	40	Divide Decimals to Hundredths		54	26
	A10	Assessment - Division with Decimals		56	27
Number and Operations Fractions	1	Add Fractions	5.NF.1: Add and subtract fractions with unlike denominators by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.	60	29
	2	Add Fractions in Context	5.NF.2: see below	62	30
	3	Add Mixed Numbers	5.NF.1	64	31
	4	Add Mixed Numbers in Context	5.NF.2	66	32
	A1	Assessment – Add Fractions and Mixed Numbers	5.NF.1, 5.NF.2	68	33
	5	Subtract Fractions	5.NF.1	70	35
	6	Subtract Fractions in Context	5.NF.2	72	36
	7	Subtract Mixed Numbers	5.NF.1	74	37
	8	Subtract Mixed Numbers in Context	5.NF.2	76	38
	A2	Assessment – Subtract Fractions and Mixed Numbers	5.NF.1, 5.NF.2	78	39

Grade 5 Mathematics High Impact Standards
Lesson Index

Domain	Lesson	Focus	Standard(s)	TE Pg	St. Ed. Pg
	13	Interpret Fractions as Division	**5.NF.3:** Interpret a fraction as division of the numerator by the denominator (*a/b* = *a* ÷ *b*). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	80	41
	14	Interpret Fractions as Division		82	42
	15	Solve Problems with Fractions		84	43
	16	Solve Problems with Mixed Numbers		86	44
	A4	Assessment – Solving Fraction Problems		88	45
	P5	**Performance Lesson –** Number and Operations – Fractions: *Add & Subtract Fractions and Mixed Numbers*		90	47-49
	17	Multiply Fractions	**5.NF.4:** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. **5.NF.4a:** Interpret the product (*a/b*) × *q* as *a* parts of a partition of *q* into *b* equal parts; equivalently, as the result of a sequence of operations *a* × *q* ÷ *b*.	94	50
	18	Multiply Fractions		96	51
	19	Multiply Fractions		98	52
	20	Multiply Fractions		100	53
	A5	Assessment - Multiply Fractions		102	54
Number and Operations Fractions	25	Interpret Multiplication as Scaling	**5.NF.5:** Interpret multiplication as scaling (resizing), by: **5.NF.5a:** Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.	104	56
	26	Interpret Multiplication as Scaling		106	57
	27	Interpret Multiplication as Scaling	5.NF.5, **5.NF.5b:** Explain why multiplying a given number by a fraction greater than 1 results in a product greater than the given number; explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relate the principle of fraction equivalence *a/b* = (*n×a*)/(*n×b*) to the effect of multiplying *a/b* by 1.	108	58
	28	Interpret Multiplication as Scaling		110	59
	A7	Assessment-Interpret Multiplication as Scaling	5.NF.5, 5.NF.5a, 5.NF.5b	112	60
	29	Fraction Multiplication Problems	**5.NF.6:** Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	114	62
	30	Fraction Multiplication Problems		116	63
	31	Fraction Multiplication Problems		118	64
	32	Fraction Multiplication Problems		120	65
	A8	Assessment-Fraction Multiplication Problems		122	66
	P6	**Performance Lesson –** Number and Operations – Fractions: *Multiplying Fractions*		124-125	68-71
	33	Divide a Fraction by a Whole Number	**5.NF.7:** Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. **5.NF.7a:** Interpret division of a unit fraction by a non-zero whole number, and compute such quotients.	130	72
	34	Divide a Fraction by a Whole Number		132	73
	35	Divide a Fraction by a Whole Number		134	74
	36	Divide a Fraction by a Whole Number		136	75
	A9	Assessment-Divide a Fraction by a Whole Number		138	76

Grade 5 Mathematics High Impact Standards
Lesson Index

Domain	Lesson	Focus	Standard(s)	TE Pg	St. Ed. Pg
	37	Divide a Whole Number by a Fraction		140	78
	38	Divide a Whole Number by a Fraction		142	79
	39	Divide a Whole Number by a Fraction	**5.NF.7b:** Interpret division of a whole number by a unit fraction, and compute such quotients.	144	80
	40	Divide a Whole Number by a Fraction		146	81
	A10	Assessment-Divide a Whole Number by a Fraction		148	82
Measurement and Data	9	Measure with Cubic Units	5.MD.3: Recognize volume as an attribute of solid figures and understand concepts of volume measurement.	152	84
	10	Measure with Cubic Units		154	85
	11	Measure with Cubic Units	5.MD.4: Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	156	86
	12	Measure with Cubic Units		158	87
	A3	Assessment - Measure with Cubic Units	5.MD.3, 5.MD.4	160	88
	13	Find Volume by Multiplying Edge Lengths	5.MD.5: Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. 5.MD.5a: Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.	162	90
	14	Find Volume by Multiplying Edge Lengths		164	91
	15	Find Volume by Multiplying Edge Lengths		166	92
	16	Find Volume by Multiplying Edge Lengths		168	93
	A4	Assessment-Find Volume by Multiplying Edge Lengths		170	94

standards PLUS

High Impact
Standards

Sample Lessons

Number and Operations in Base Ten

Lesson	Focus	Standard(s)
17	Multiply Whole Numbers	
18	Multiply Whole Numbers	
19	Multiply Whole Numbers	5.NBT.5: Fluently multiply multi-digit whole numbers using the standard algorithm.
20	Multiply Whole Numbers	
A5	Assessment - Multiply Whole Numbers	

Sample Teacher Lesson Plan

Teacher Lesson Plan

Standards Plus® – Mathematics – Grade 5		
Domain: Number and Operations in Base Ten	Focus: Multiply Whole Numbers	Lesson: #17
Standard: 5.NBT.5: Fluently multiply multi-digit whole numbers using the standard algorithm.		

Lesson Objective: The students will multiply three-digit whole numbers by two-digit whole numbers.

Introduction: "Today we will review how to multiply a three-digit whole number by a two-digit multiplier. Remember that the numbers in a multiplication problem are called factors and the answer is called the product."

Instruction: "When we multiply a number by a two-digit multiplier we start by lining the numbers up with the larger number on top. Then we multiply each digit in the top factor by each digit in the multiplier. We regroup as necessary. Multiplying this way is a simplified method of regrouping in expanded form. In Example A, we could multiply 627 by 5 and 627 by 40 and combine: $(5 \times 627) + (40 \times 627) = 28{,}215$. Learning vertical multiplication eliminates many steps and takes less time."

Guided Practice: "Let's use our step-by-step process to work Example A. After lining up the numbers and drawing a line, we start by multiplying the top factor by the ones place in the multiplier (5) and write that product below the line. Then we multiply by the tens place number (4). Because we are now multiplying by tens, we place a zero in the ones place of the next line before writing out the product. Of course, we regroup as necessary by *carrying*. Finally, we draw another line and add the totals of the two partial products to get the answer."

Independent Practice: "Complete problems 1-3 independently. Remember to write the numbers with the greater factor on top, so the ones digits are lined up. Begin by multiplying the ones place first and then move to the left. Remember to place a zero in the ones place of the answer column when you move to the tens place digit in the multiplier."

Review: Review problems 1-3 with students. Discuss the reasoning for each solution.

Closure: "Today we reviewed how to multiply a three-digit number by a two-digit multiplier. Please turn to your partner and tell them the steps we used today for multiplying whole numbers."

Answers:

1. 23,738
2. 18,810
3. 13,736

Each lesson includes a step by step lesson plan.

Sample Student Lesson

Standards Plus® – Mathematics – Grade 5

Domain: Number and Operations in Base Ten	Focus: Multiply Whole Numbers	Lesson: #17

Standard: 5.NBT.5: Fluently multiply multi-digit whole numbers using the standard algorithm.

Step 1: Line up the numbers with the larger number on top. Draw a line.

Step 2: Multiply by the ones digit in the multiplier. Write that as the first product under the line.

Step 3: Put a zero in the ones place on the next line because we are going to multiply by the ten's digit of the bottom number.

Step 4: Multiply the top number by the tens place number of the multiplier and write the answer in front of the zero. Be sure to line up the numbers vertically.

Step 5: Add all of the partial products together to get the total.

Example:

$$\begin{array}{r} 627 \\ \times\ 45 \\ \hline \end{array}$$

A. 627 × 45 =

B. 346 × 27 = _____

Directions: Multiply to find each product.

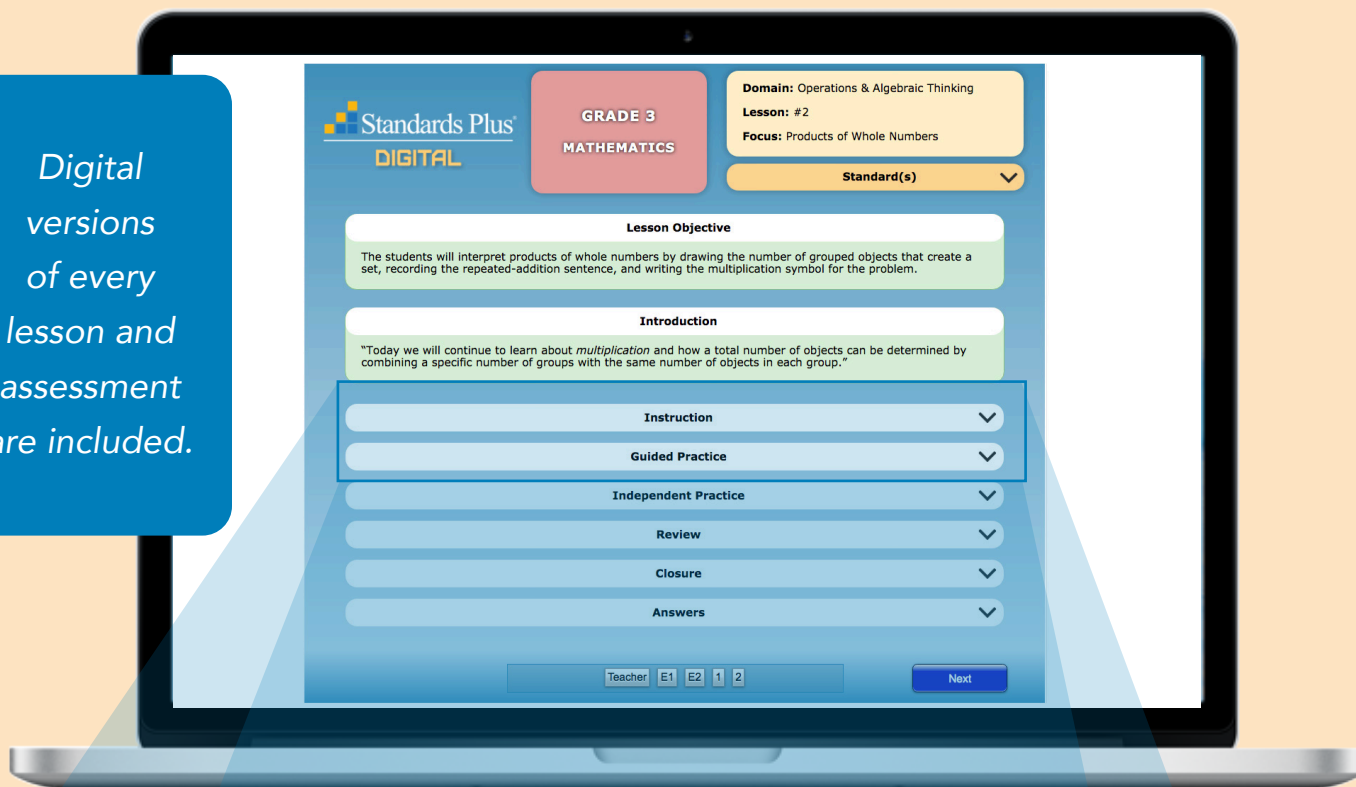1. 913 × 26 = _____

2. 38 × 495 = _____

3. 808 × 17 = _____

Each lesson also has an easy to follow student page.

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

Digital versions of every lesson and assessment are included.

Standards Plus® DIGITAL

GRADE 3 MATHEMATICS

Domain: Operations & Algebraic Thinking
Lesson: #2
Focus: Products of Whole Numbers

Standard(s) ⌄

Lesson Objective
The students will interpret products of whole numbers by drawing the number of grouped objects that create a set, recording the repeated-addition sentence, and writing the multiplication symbol for the problem.

Introduction
"Today we will continue to learn about *multiplication* and how a total number of objects can be determined by combining a specific number of groups with the same number of objects in each group."

Instruction	⌄
Guided Practice	⌄
Independent Practice	⌄
Review	⌄
Closure	⌄
Answers	⌄

Teacher E1 E2 1 2   **Next**

Instruction ⌃

"We have learned that when we have groups of objects and we want to determine the total number of objects, we can *multiply*. We *multiply* by adding the same number over and over again. Look at Example 1. Maria has 4 boxes of limes. Each box has 4 limes in it. To find out the total number of limes Maria has, we add 4 + 4 + 4 + 4. We can also write this 4 × 4. The product is 16 limes. *Multiplication* lets us add more quickly and efficiently."

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 × 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)

Standards Plus® DIGITAL

GRADE 3 MATHEMATICS

Domain: Operations & Algebraic Thinking
Lesson: #2
Focus: Products of Whole Numbers

Standard(s) ⌄

Directions: Read each problem below. Draw a picture of the objects in groups. Record the repeated-addition sentence, the multiplication symbol, and the total number of objects on the line to complete each number sentence. Make sure you write the product on the last line.

Example 2:

Juan has three groups of glass marbles. Each group has five marbles. What is Juan's total number of glass marbles? Finish the picture by putting the marbles in the circles.

✏️ 🧽 Clear

☐ + ☐ + ☐ = 3 ☐ 5 = ☐
product

5 + 5 + 5 = 3 × 5 = 15
product

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

Sample Teacher Lesson Plan

Teacher Lesson Plan

Standards Plus® – Mathematics – Grade 5		
Domain: Number and Operations in Base Ten	Focus: Multiply Whole Numbers	Lesson: #19
Standard: 5.NBT.5: Fluently multiply multi-digit whole numbers using the standard algorithm.		

Lesson Objective: The students will multiply multi-digit whole numbers by three-digit whole numbers.

Introduction: "Today we will review how to multiply a multi-digit whole number by a three-digit multiplier."

Instruction: "When we multiply a number by a three-digit number, we start by lining the numbers up with the larger number on top. Then we multiply each digit in the top factor by each digit in the multiplier. We regroup as necessary. Multiplying this way is a simplified method of regrouping in expanded form. In the Example, we could multiply 8,504 by 6, by 10 and by 300 and combine: (6 × 8,504) + (10 × 8,504) + (300 × 8,504) = 2,687,264. Learning vertical multiplication eliminates many steps and takes less time."

Guided Practice: "Let's use our step-by-step process to work the example. We start by lining up the numbers and drawing a line. Next we multiply by the ones place in the multiplier (6) and write that below the line. Then we multiply by the tens place number (1). Because we are now multiplying by tens, we place a zero in the ones place of the next line before writing out the product. We do the same with the hundreds (3). This time we add two zeros because we are multiplying by hundreds and write the product of 3 times 8,504 on the third line. Of course, we regroup as necessary by *carrying*. Finally, we draw another line and add the totals of the three partial products to get the answer."

Independent Practice: "Complete problems 1-2 independently. Remember to write the numbers with the greater factor on top, so the ones digits are lined up. Begin by multiplying the ones place first and then move to the left. Remember to regroup if needed and to use zero placeholders in the answer column as you move to the left in the multiplier."

Review: Review problems 1-2 with students. Discuss the reasoning for each solution.

Closure: "Today we reviewed how to multiply a multi-digit number by a three-digit multiplier. Please turn to your partner and tell them what you do when the product of two digits is greater than nine."

Answers:
1. 1,498,940
2. 784,763

Each lesson plan includes the following direct instruction components:

Introduction

Instruction

Guided Practice

Independent Practice

Review

Closure

Sample Student Lesson

Standards Plus® – Mathematics – Grade 5

Domain: Number and Operations in Base Ten	Focus: Multiply Whole Numbers	Lesson: #19

Standard: 5.NBT.5: Fluently multiply multi-digit whole numbers using the standard algorithm.

Each student page includes examples for Guided Practice...

Step 1: Line up the numbers with the larger number on top. Draw a line.
Step 2: Multiply by the ones digit in the bottom number. Write that as the first product under the line.
Step 3: Put a zero in the ones place on the next line because we are going to multiply by the tens digit of the multiplier.
Step 4: Multiply the top number by the tens place number of the multiplier and write the answer before the zero. Be sure to line up the numbers vertically.
Step 5: Place a zero in the ones and tens place on the next line because we are now going to multiply by the hundreds place.
Step 6: Multiply the top number by the hundreds place digit in the multiplier. Since this is the last operation, draw another line.
Step 7: Add all of the partial products together to get the total.

Line up   8,504
                         316 ← multiplier
                  ....4 ← multiplied by ones place
Draw lines ....0 ← multiplied by tens place   ⎤ Partial Products
                  ....0 ← multiplied by hundreds place
                  ....4 ← Total by adding

We add zeros, as place holders, because we are multiplying by a factor of ten and hundred.

Example: $8,504 \times 316 =$ _____

...and items to be completed in Independent Practice.

Directions: Multiply to find each product.

1. $503 \times 2,980 =$ _____

2. $497 \times 1,579 =$ _____

Sample Teacher Lesson Plan

Teacher Lesson Plan

Standards Plus® – Mathematics – Grade 5
Domain: Number and Operations in Base Ten   Focus: Multiply Whole Numbers   Lesson: #20
Standard: 5.NBT.5: Fluently multiply multi-digit whole numbers using the standard algorithm.

Lesson Objective: The students will multiply multi-digit whole numbers by multi-digit whole numbers.

Introduction: "Today we will review how to multiply a multi-digit whole number by a multi-digit multiplier."

Instruction: "When we multiply a number by a multi-digit multiplier, we start by lining the numbers up with the larger number on top. Then we multiply each digit in the top factor by each digit in the multiplier. We regroup as necessary. Multiplying this way is a simplified method of regrouping in expanded form. In the example, we could multiply 4,173 by 3, by 60, by 200, and by 1000 and combine: (3 × 4,173) + (60 × 4,173) + (200 × 4,173) + (1000 × 4,173) = 5,270,499. Learning vertical multiplication eliminates many steps and takes less time."

Guided Practice: "Let's use our step-by-step process to work the example. After lining up the numbers and drawing a line, we start by multiplying the top factor by the ones place in the multiplier (3) and write that below the line. Then we multiply by the tens place number (6). Because we are now multiplying by tens, we place a zero in the ones place of the next line before writing out the product. We do the same with the hundreds (2). This time we add two zeros because we are multiplying by hundreds. Next we add three zeros because we are now multiplying by thousands and write the product of 1 times 4,173 on the fourth line. Of course, we regroup as necessary by *carrying*. Finally, we draw another line and add the totals of the four partial products to get the answer."

Independent Practice: "Complete problems 1-2 independently. Remember to write the numbers with the greater factors on top, so the ones digits are lined up. Begin by multiplying the ones place first and then move to the left. Remember to regroup if needed and use zero placeholders in the answer column as you move to the left in the multiplier. Remember to put commas in your answer."

Review: Review problems 1-2 with students. Discuss the reasoning for each solution.

Closure: "Today we reviewed how to multiply a multi-digit number by a four-digit multiplier. Please turn to your partner restate the steps in the process for multiplying multi-digit whole numbers."

Answers:
1. 13,709,520
2. 21,412,506

Each lesson plan includes an answer key

Sample Student Lesson

Standards Plus® – Mathematics – Grade 5

| Domain: Number and Operations in Base Ten | Focus: Multiply Whole Numbers | Lesson: #20 |

Standard: 5.NBT.5: Fluently multiply multi-digit whole numbers using the standard algorithm.

Step 1: Line up the numbers with the larger number on top. Draw a line.
Step 2: Multiply by the ones digit in the bottom number. Write that as the first product under the line.
Step 3: Put a zero in the ones place on the next line because we are going to multiply by the tens digit of the bottom number.
Step 4: Multiply the top number by the tens place number of the bottom number and write the answer before the zero. Be sure to line up the numbers vertically.
Step 5: Place a zero in the ones and tens place on the next line because now we are going to multiply by the hundreds place.
Step 6: Multiply the top number by the hundreds place digit in the bottom factor.
Step 7: Place a zero in the ones, tens, and hundreds place on the next line because we are going to multiply by the thousands place.
Step 8: Multiply the top number by the thousands place digit in the bottom factor. Since this is the last operation, draw another line.
Step 9: Add all of the partial products together to get the total.

Example: 4,173 × 1,263 = _____

Directions: Multiply to find each product.

1. 2,640 × 5,193 = _____   2. 3,154 × 6,789 = _____

Sample Assessment - Teacher Page

Standards Plus® – Mathematics – Grade 5	
Domain: Number and Operations in Base Ten	Focus: Multiply Whole Numbers
Assessment: #5	

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: 5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.

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 the week's 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. (5.NBT.5) 247,690
2. (5.NBT.5) 561,660
3. (5.NBT.5) 432,662

Sample Assessment - Student Page

Standards Plus® – Mathematics – Grade 5

Domain: Number and Operations in Base Ten   Focus: Multiply Whole Numbers

Assessment: #5

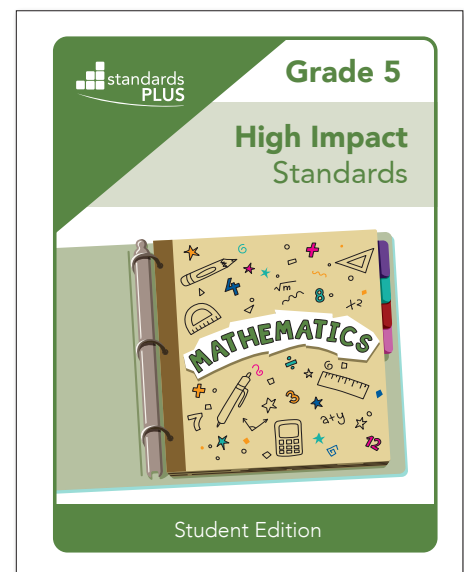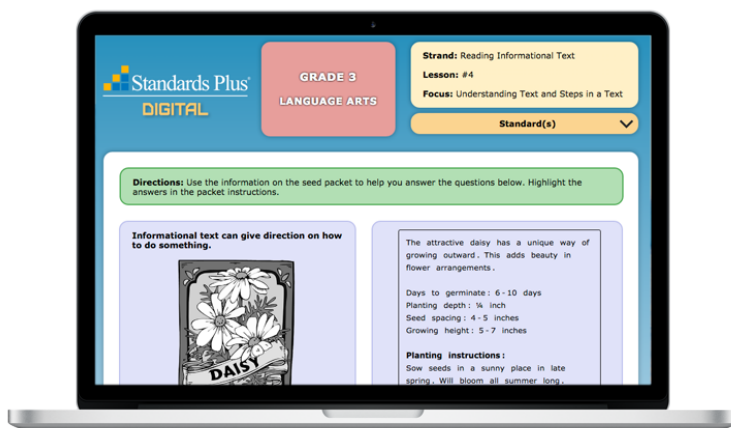**Directions:** Find each product for questions 1-3. Show your work.

1. 34 × 7,285

2. 690 × 814

3. 227 × 1,906

All Standards Plus purchases include live online teacher training to ensure a successful implementation.