



# 6<sup>th</sup> Grade

## Tier 2 Intervention Lessons

Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness for 6.NS.3:** Multiply multi-digit decimals

# Table of Contents

---

Session 1: Planning Guide ..... p. 4

Session 1: Re-engagement Lesson Resources ..... p. 5-13

Sessions 2 through 8: Planning Guide ..... p.14

Sessions 2 through 8: Lesson Resources ..... p. 15-57

Independent Practice Game: “Build the Greater Product” ..... p. 58-60

Classroom Poster: Questions for Solving Word Problems ..... p. 61

Tier 1 Support Classroom Poster: Steps for Solving Word Problems ..... p. 62

## IES Recommendations for Tier 2 and 3 intervention lessons:

2. Instructional materials for students receiving interventions should focus intensely on in-depth treatment of whole numbers in kindergarten through grade 5 and on rational numbers in grades 4 through 8. These materials should be selected by committee.	<b>Low</b>
3. Instruction during the intervention should be explicit and systematic. This includes providing models of proficient problem solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review.	<b>Strong</b>
4. Interventions should include instruction on solving word problems that is based on common underlying structures.	<b>Strong</b>
5. Intervention materials should include opportunities for students to work with visual representations of mathematical ideas and interventionists should be proficient in the use of visual representations of mathematical ideas.	<b>Moderate</b>
6. Interventions at all grade levels should devote about 10 minutes in each session to building fluent retrieval of basic arithmetic facts.	<b>Moderate</b>
7. Monitor the progress of students receiving supplemental instruction and other students who are at risk.	<b>Low</b>
8. Include motivational strategies in tier 2 and tier 3 interventions.	<b>Low</b>

(Institute of Educational Sciences, Assisting Students Struggling with Mathematics: Response to Intervention (RtI) for Elementary and Middle Schools, 2009, p. 6)

## Gradual release of responsibility model

### Teacher Responsibility

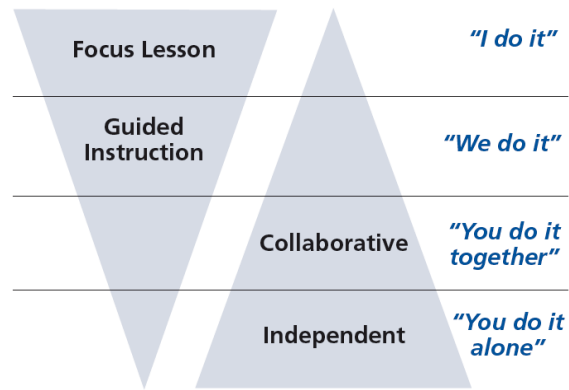


Figure 1

[\(Dr. Douglas Fisher, Effective Use of the Gradual Release of Responsibility Model\)](#)



# Planning Guide: Session 1

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

<b>Recommended Actions</b>	
<b>Beginning</b> (15 min.)	<p><u>Review</u> the readiness standard with the intervention group using the <b>Guided Review</b></p> <ul style="list-style-type: none"><li>○ Introduce the learning target and why it is important for future learning</li><li>○ Read each question on the Guided Review and ask students to share what they remember from the previous school year.</li></ul>
<b>Middle</b> (5 min.)	<ul style="list-style-type: none"><li>➤ Ask students to <u>reflect</u> on their progress towards the learning target<ul style="list-style-type: none"><li>○ What did I remember about the learning target?</li><li>○ What did I learn today about the learning target?</li><li>○ How confident do I feel about doing the learning target on my own?</li></ul></li></ul>
<b>End</b> (10 min.)	<ul style="list-style-type: none"><li>➤ <u>Assess</u> each student's progress using <b>Quick Check – Form A</b></li><li>➤ Guide students to self-correct their <b>Quick Check – Form A</b></li><li>➤ Guide students to <u>chart their progress</u> by recording the date and Quick Check score in their <b>Growth Chart</b></li><li>➤ Collect each student's Quick Check and Growth Chart</li></ul>
<b>After</b>	<ul style="list-style-type: none"><li>➤ Create sub-groups to differentiate the middle of sessions 2 through 8<ul style="list-style-type: none"><li>○ Group 1 – Include students who <u>did not</u> meet the learning goal</li><li>○ Group 2 – Include students who met or exceeded the learning goal</li></ul></li></ul>



# 6<sup>th</sup> Grade Fall Guided Review

Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**1.**

Multiply: 
$$\begin{array}{r} 3,628 \\ \times \quad 4 \\ \hline \end{array}$$

**2.**

Multiply: 
$$\begin{array}{r} 57 \\ \times 26 \\ \hline \end{array}$$



# 6<sup>th</sup> Grade Fall Guided Review

Readiness Standard 2 - 5.NBT.5

3.

Multiply:

$$\begin{array}{r} 724 \\ \times 15 \\ \hline \end{array}$$



# 6<sup>th</sup> Grade Winter Guided Review

Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

1.

Multiply:      2, 4 1 6  
                     x   3

2.

Multiply:            4 8  
                            x 1 4



# 6<sup>th</sup> Grade Winter Guided Review

Readiness Standard 2 - 5.NBT.5

3.

Multiply:

$$\begin{array}{r} 638 \\ \times 14 \\ \hline \end{array}$$





# 6<sup>th</sup> Grade Spring Guided Review

Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**1.**

Multiply: 
$$\begin{array}{r} 3,519 \\ \times \quad 5 \\ \hline \end{array}$$

**2.**

Multiply: 
$$\begin{array}{r} 62 \\ \times 34 \\ \hline \end{array}$$



# 6<sup>th</sup> Grade Spring Guided Review

Readiness Standard 2 - 5.NBT.5

3.

Multiply:

$$\begin{array}{r} 527 \\ \times 13 \\ \hline \end{array}$$



# Session 1: Self-Reflection

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

Briefly discuss student responses

- What did I remember about multiplying multi-digit whole numbers?
  
- What did I learn today about multiplying multi-digit whole numbers?
  
- How confident do I feel about multiplying multi-digit whole numbers on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form A

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**Directions:** Write the answer to each problem. (Work time: 4 minutes)

**1.**

$$\begin{array}{r} 3122 \\ \times \quad 3 \\ \hline \end{array}$$

**2.**

$$\begin{array}{r} 45 \\ \times 13 \\ \hline \end{array}$$

**3.**

$$\begin{array}{r} 867 \\ \times 15 \\ \hline \end{array}$$

**4.**

$$\begin{array}{r} 297 \\ \times 48 \\ \hline \end{array}$$



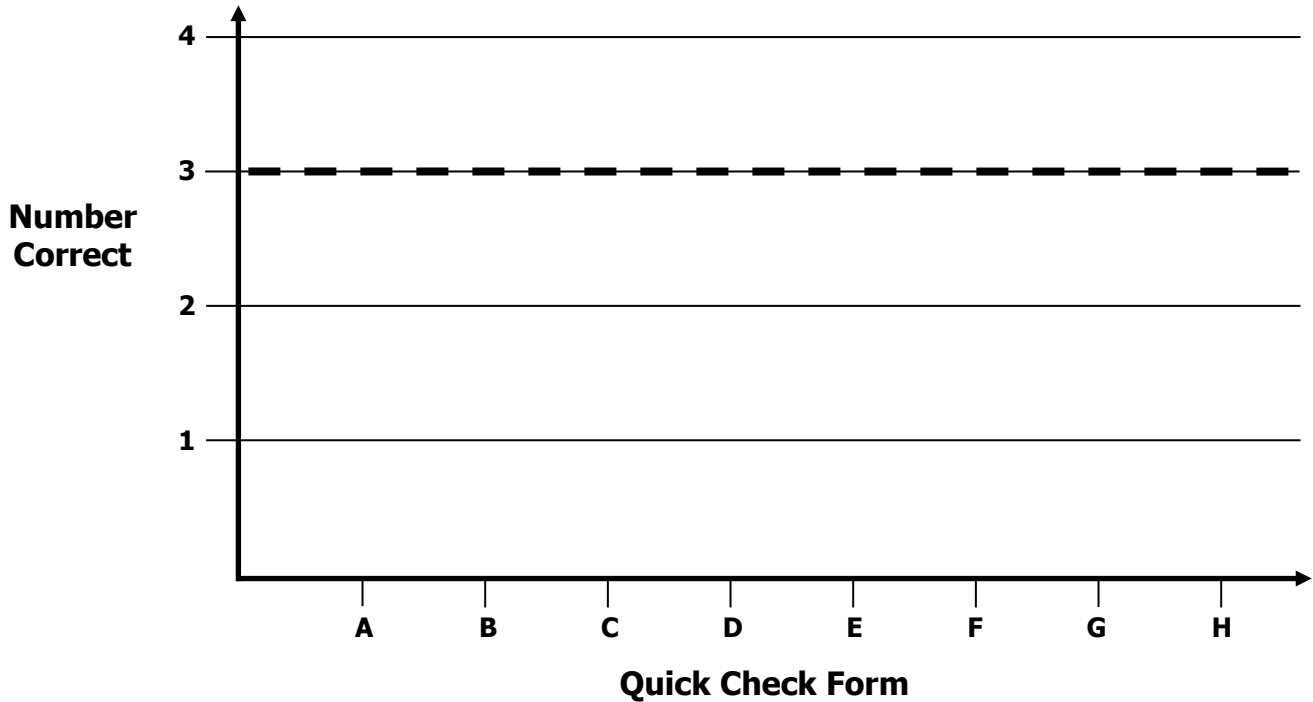
# Growth Chart

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**Goal:** 3 out of 4 correct



Intervention	Date	Score
Session 1:		
Session 2:		
Session 3:		
Session 4:		
Session 5:		
Session 6:		
Session 7:		
Session 8:		



# Planning Guide: Sessions 2 Through 8

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

<b>Recommended Actions</b>			
<b>Beginning</b> (5 min.)	<ul style="list-style-type: none"> <li>➤ Review the learning target with the whole group and ask each student to set a goal.</li> </ul>		
<b>Middle</b> (15 min.)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b>Group 1:</b> Students who scored below the learning goal on the previous Quick Check.</p> <ul style="list-style-type: none"> <li>➤ Model solving a word problem – “I do”</li> <li>➤ Guided Practice – “We do”</li> </ul> <p><b>Session 2:</b> Multiply multi-digit numbers using base-ten blocks and place-value cards.</p> <p><b>Session 3:</b> Multiply multi-digit numbers using area model drawings to find sub-totals.</p> <p><b>Session 4:</b> Multiply multi-digit numbers using place-value understanding.</p> </td> <td style="width: 50%; vertical-align: top;"> <p><b>Group 2:</b> <i>(Students who met the learning goal)</i></p> <ul style="list-style-type: none"> <li>➤ Independent practice – “You do alone”</li> </ul> <p><b>Activity 1:</b> <i>“Build the Greater Product”</i></p> <p style="text-align: center;"><i>(Look for additional activities in 5<sup>th</sup> grade core instruction resources.)</i></p> </td> </tr> </table>	<p><b>Group 1:</b> Students who scored below the learning goal on the previous Quick Check.</p> <ul style="list-style-type: none"> <li>➤ Model solving a word problem – “I do”</li> <li>➤ Guided Practice – “We do”</li> </ul> <p><b>Session 2:</b> Multiply multi-digit numbers using base-ten blocks and place-value cards.</p> <p><b>Session 3:</b> Multiply multi-digit numbers using area model drawings to find sub-totals.</p> <p><b>Session 4:</b> Multiply multi-digit numbers using place-value understanding.</p>	<p><b>Group 2:</b> <i>(Students who met the learning goal)</i></p> <ul style="list-style-type: none"> <li>➤ Independent practice – “You do alone”</li> </ul> <p><b>Activity 1:</b> <i>“Build the Greater Product”</i></p> <p style="text-align: center;"><i>(Look for additional activities in 5<sup>th</sup> grade core instruction resources.)</i></p>
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<b>End</b> (10 min.)	<ul style="list-style-type: none"> <li>➤ Bring the students back together.</li> <li>➤ Ask students to reflect on their progress towards the learning target               <ul style="list-style-type: none"> <li>○ What did I learn today about multiplying multi-digit whole numbers?</li> <li>○ How confident do you feel about multiplying multi-digit whole numbers on my own? (Thumbs up, down, or sideways)</li> </ul> </li> <li>➤ Assess each student’s progress using the next <b>Quick Check</b> form</li> <li>➤ Guide students to self-correct their <b>Quick Check</b></li> <li>➤ Guide students to chart their progress in their <b>Growth Chart</b> <ul style="list-style-type: none"> <li>○ If not using Delta Math lessons, record the activity in the table</li> </ul> </li> <li>➤ Collect each student’s <b>Quick Check</b> and <b>Growth Chart</b></li> </ul>		
<b>After</b>	<ul style="list-style-type: none"> <li>➤ Regroup students to differentiate the middle of sessions 3 through 8               <ul style="list-style-type: none"> <li>○ Promote students who met the learning goal to group 2</li> <li>○ Exit students who met the learning goal for a third time</li> </ul> </li> <li>➤ Problem solve with a team to plan additional support for students who did not exit</li> </ul>		



## Session 2: Modeling (I Do)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

Julian baked 4 dozen cookies to sell at the school bake sale. There are 12 cookies in one dozen.  
How many cookies did Julian bake for the bake sale?



# Session 2: Modeling (I Do – Visual Support)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

Julian baked 4 dozen cookies to sell at the school bake sale. There are 12 cookies in one dozen.  
How many cookies did Julian bake for the bake sale?

### Step 1 – Prepare to multiply

$$4 \times 12$$

**Multiplication Mat**  
3<sup>rd</sup> Grade - Readiness Standard 2 - 5.NBT.5

Number in **10** **2**<sub>tp</sub>

Number of Groups **4**

### Step 2 – Build groups of ten

$$4 \times 12$$

**Multiplication Mat**  
3<sup>rd</sup> Grade - Readiness Standard 2 - 5.NBT.5

Number in **10** **2**<sub>tp</sub>

Number of Groups **4**

### Step 3 – Build groups of ones

$$4 \times 12$$

**Multiplication Mat**  
3<sup>rd</sup> Grade - Readiness Standard 2 - 5.NBT.5

Number in **10** **2**<sub>tp</sub>

Number of Groups **4**

### Step 4 – Find the total

$$4 \times 12$$

**Multiplication Mat**  
3<sup>rd</sup> Grade - Readiness Standard 2 - 5.NBT.5

Number in **10** **2**<sub>tp</sub>

Number of Groups **4**





# Session 2: Modeling (I Do - Teacher Notes)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

Julian baked 4 dozen cookies to sell at the school bake sale. There are 12 cookies in one dozen.  
How many cookies did Julian bake for the bake sale?

**I am going to think aloud to model solving this problem.**

**Your job is to watch, listen, think and ask questions.**

**First, it is important to know what the problem is about.**

**The problem is about cookies that Julian baked for a bake sale.**

**Second, I need to determine what I need to find.**

**I need to find the total number of cookies that Julian baked.**

**Third, I need to determine what I know.**

**I know that the Julian baked 4 dozen cookies and there are 12 cookies in each dozen.**

**Fourth, I need to figure out what I can try.**

**I am going to try using base-ten blocks and place-value cards to find out how many cookies Julian baked.**

**I will begin setting up the multiplication problem by representing the 4 groups vertically on the left side of the mat and the 12 in each group horizontally above the mat.**

*(Place the Multiplication Card at the top of the Multiplication Mat and build each number on the multiplication mat using blocks and cards.)*

**Now, I'm going to find the total in 4 groups of 12 by placing 4 groups of 10 on the mat.**

*(Build the 4 groups of 10 on the multiplication mat using blocks and cards.)*

**4 groups of ten is equal to 40. (Slide the 30 place-value card below the tens.)**

**Next, I'm going to place 4 groups of 2 on the mat.**

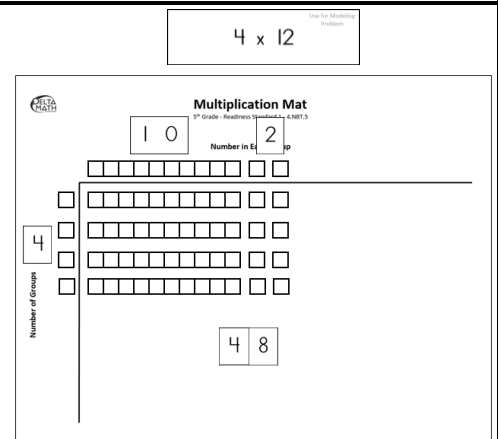
*(Build the 4 groups of 2 inside the multiplication mat using blocks and cards.)*

**4 groups of 2 is equal to 8. (Slide the 8 place-value card below the ones.)**

**The total of 40 and 8 is equal to 48. (Slide the 8 on top of the 40 place-value card to create the standard form, 48.)**

**Last, I need to make sure that my answer makes sense.**

**I found that Julian baked 48 cookies for the bake sale. It makes sense because there are 12 cookies in each dozen and I built 4 groups of 12 using base-ten blocks. Then, I added the total value of tens and total value of ones to find the total.**



# Place-Value Cards (1 → 100)

1	6	2	0	6	0	
2	7	3	0	7	0	
3	8	4	0	8	0	
4	9	5	0	9	0	
5	1	0	1	0	0	
<	>	=	+	-	x	÷
Less Than	Greater Than	Equal to				

# Place-Value Cards (200 → 900)

2 0 0

3 0 0

4 0 0

5 0 0

6 0 0

7 0 0

8 0 0

9 0 0



# Modeling & Guided Practice Cards

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

$4 \times 12$ Use for Modeling Problem	
$3 \times 16$ Use for Problem 1	$6 \times 13$ Use for Problem 2
$13 \times 16$ Use for Problem 3	$12 \times 15$ Use for Problem 4
$3 \times 14$ Use for Problem 5	$4 \times 13$ Use for Problem 6
$13 \times 14$ Use for Problem 7	$11 \times 17$ Use for Problem 8



Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 2: Guided Practice (We Do)

### Materials:

- Multiplication Cards
- Base-Ten Blocks (1 hundred, 20 tens and 20 ones)
- Place-value Cards (2 sets)
- Multiplication Mat

### We Do Together: (Teacher Actions)

- Say the multiplication problem.
- Use base-ten blocks and place-value cards to help you multiply the numbers and write the answer.

1. $3 \times 16$	2. $6 \times 13$
3. $13 \times 16$	4. $12 \times 15$

### You Do Together: (As a class, or in small groups)

- Students take turns leading and repeat the steps to multiply the numbers.

5. $3 \times 14$	6. $4 \times 13$
7. $13 \times 14$	8. $11 \times 17$

**Learning Target:** I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 2: Guided Practice (We Do – Visual Support)

**Materials:**

- Multiplication Cards
- Base-Ten Blocks (1 hundred, 20 tens and 20 ones)
- Place-value Cards (2 sets)
- Multiplication Mat

**We Do Together:** (Teacher Actions)

- Say the multiplication problem.
- Use base-ten blocks and place-value cards to help you multiply the numbers and write the answer.

<p><b>1.</b></p> <p style="text-align: center; font-size: 24px;"><math>3 \times 16</math></p>	<p><b>2.</b></p> <p style="text-align: center; font-size: 24px;"><math>6 \times 13</math></p>
<p><b>3.</b></p> <p style="text-align: center; font-size: 24px;"><math>13 \times 16</math></p>	<p><b>4.</b></p> <p style="text-align: center; font-size: 24px;"><math>12 \times 15</math></p>



## Session 2: Self-Reflection

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

Briefly discuss student responses

- What did I learn today about multiplying multi-digit whole numbers?
  
- How confident do I feel about multiplying multi-digit whole numbers on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form B

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**Directions:** Write the answer to each problem. (Work time: 4 minutes)

**1.**

$$\begin{array}{r} 5133 \\ \times \quad 4 \\ \hline \end{array}$$

**2.**

$$\begin{array}{r} 52 \\ \times 28 \\ \hline \end{array}$$

**3.**

$$\begin{array}{r} 324 \\ \times 16 \\ \hline \end{array}$$

**4.**

$$\begin{array}{r} 635 \\ \times 47 \\ \hline \end{array}$$





# Session 3: Modeling (I Do)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

A store ordered 13 boxes of baseball cards. Each box holds 125 cards. How many baseball cards did the store order?



# Session 3: Modeling (*I Do – Visual Support*)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

A store ordered 13 boxes of baseball cards. Each box holds 125 cards. How many baseball cards did the store order?

<b>Prepare to multiply</b>	<p style="text-align: center;"><b>125 Per Box</b></p> <p style="text-align: center;">100      +      20      +      5</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 100px; height: 100px;"></td> <td style="width: 100px; height: 100px;"></td> <td style="width: 100px; height: 100px;"></td> </tr> <tr> <td style="text-align: center;">10</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">+</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">3</td> <td></td> <td></td> </tr> </table> <p style="margin-left: 20px;">13 Boxes</p>				10			+			3																																		
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<b>Find 10 groups of 125</b>	<p style="text-align: center;"><b>125 Per Box</b></p> <p style="text-align: center;">100      +      20      +      5</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 100px; height: 100px; text-align: center;">10 x 100 1000</td> <td style="width: 100px; height: 100px; text-align: center;">10 x 20 200</td> <td style="width: 100px; height: 100px; text-align: center;">10 x 5 50</td> <td style="width: 50px;"></td> </tr> <tr> <td style="text-align: center;">10</td> <td></td> <td></td> <td style="text-align: right;">1000</td> </tr> <tr> <td style="text-align: center;">+</td> <td></td> <td></td> <td style="text-align: right;">200</td> </tr> <tr> <td style="text-align: center;">3</td> <td></td> <td></td> <td style="text-align: right;">50</td> </tr> </table> <p style="margin-left: 20px;">13 Boxes</p>	10 x 100 1000	10 x 20 200	10 x 5 50		10			1000	+			200	3			50																												
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<b>Find the total</b>	<p style="text-align: center;"><b>125 Per Box</b></p> <p style="text-align: center;">100      +      20      +      5</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 100px; height: 100px; text-align: center;">10 x 100 1000</td> <td style="width: 100px; height: 100px; text-align: center;">10 x 20 200</td> <td style="width: 100px; height: 100px; text-align: center;">10 x 5 50</td> <td style="width: 50px;"></td> </tr> <tr> <td style="text-align: center;">10</td> <td></td> <td></td> <td style="text-align: right;">1000</td> </tr> <tr> <td style="text-align: center;">+</td> <td></td> <td></td> <td style="text-align: right;">200</td> </tr> <tr> <td style="text-align: center;">3</td> <td></td> <td></td> <td style="text-align: right;">50</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: right;">300</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: right;">60</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: right;">15</td> </tr> </table> <p style="margin-left: 20px;">13 Boxes</p> <table style="margin-left: 400px;"> <tr> <td style="text-align: right;">+ 1000</td> <td></td> </tr> <tr> <td style="text-align: right;">200</td> <td></td> </tr> <tr> <td style="text-align: right;">50</td> <td></td> </tr> <tr> <td style="text-align: right;">300</td> <td></td> </tr> <tr> <td style="text-align: right;">60</td> <td></td> </tr> <tr> <td style="text-align: right;">15</td> <td></td> </tr> <tr> <td style="text-align: right;">+ 15</td> <td></td> </tr> <tr> <td style="text-align: right;">1,625</td> <td></td> </tr> </table>	10 x 100 1000	10 x 20 200	10 x 5 50		10			1000	+			200	3			50				300				60				15	+ 1000		200		50		300		60		15		+ 15		1,625	
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# Session 3: Modeling (I Do - Teacher Notes)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

A store ordered 13 boxes of baseball cards. Each box holds 125 cards. How many baseball cards did the store order?

**I am going to think aloud to model solving this problem.**

**Your job is to watch, listen, think and ask questions.**

**First, it is important to know what the problem is about.**

**The problem is about a store ordering baseball cards.**

**Second, I need to determine what I need to find.**

**I need to find how many baseball cards the store ordered.**

**Third, I need to determine what I know.**

**I know that a store ordered 13 boxes and each box holds 125 cards.**

**Fourth, I need to figure out what I can try.**

**Since this problem includes hundreds, tens and ones, I think using blocks would be more difficult, so I will draw an area model to help me find the total number of cards.**

		<b>125 Per Box</b>					
		100	+	20	+	5	
10		10 x 100 1000	10 x 20 200	10 x 5 50		1000 200 50 300 60	
+						+ 15	
3		3 x 100 300	3 x 20 60	3 x 5 15		1,625	

**I will begin drawing a rectangle, similar to the shape created when we multiplied using base ten blocks.**

*(Draw a rectangle and label the sides with "13 Boxes" and "125 Per Box".)*

**Next, I will separate the area into sections to represent each sub-total of place-values...across the top of the rectangle I will break apart 125 into 1 hundred...2 tens...and 5 ones. (Write "100 + 20 + 5" above the rectangle and draw 2 vertical lines inside the rectangle.)**

**And, across the left side of the rectangle I will break 13 into 1 ten...and 3 ones. (Write "10 + 3" along the left side of the rectangle and draw 1 horizontal line inside the rectangle.)**

**To find 10 groups of 125, I need to multiply 10 times 1 hundred, 10 times 2 tens and 10 times 5.**

*(Write "10 x 100", "10 x 20", and "10 x 5" inside the rectangle.)*

**10 times 1 hundred is 10 hundreds...which is equal to 1000. (Write "1000" inside and to the right of the rectangle.)**

**10 times 2 tens is 20 tens...which is equal to 200. (Write "200" inside and to the right of the rectangle.)**

**10 times 5 ones is 50. (Write "50" inside and to the right of the rectangle.)**

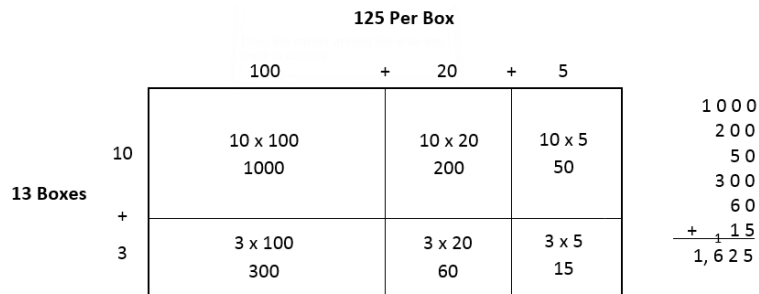


# Session 3: Modeling (I Do - Teacher Notes)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals



**To find 3 groups of 125, I need to multiply 3 times 1 hundred, 3 times 2 tens and 3 times 5.**

*(Write "3 x 100", "3 x 20", and "3 x 5" inside the rectangle.)*

**3 times 1 hundred is 3 hundreds.** *(Write "300" inside and to the right of the rectangle.)*

**3 times 2 tens is 6 tens...which is equal to 60.** *(Write "60" inside and to the right of the rectangle.)*

**3 times 5 ones is 15.** *(Write "15" inside and to the right of the rectangle.)*

**To combine the sub-totals I will turn the list next to the drawing into an addition problem.**

*(Draw a line under the sub-totals and include a "+".)*

**I only have 5 ones in the ones column.**

*(Point to the digits in the ones column. Then, write 5 in the ones-digit of the answer.)*

**5 tens plus 6 tens plus 1 ten is 12 tens.**

*(Point to the digits in the tens column.)*

**12 tens is equal to 1 hundred and 2 tens. I will write this new hundred below and the 2 tens in the answer.**

*(Write a small 1 on the answer line in the hundreds column. Then, write a 2 in the tens-digit of the answer.)*

**2 hundreds plus 3 hundreds plus this new hundred is 6 hundreds.**

*(Point to the digits in the hundreds column. Then, write 6 in the hundreds-digit of the answer.)*

**Lastly, there is only 1 thousand to be included in the answer.**

*(Write the 1 in the thousands-digit of the answer.)*

**Last, I need to make sure that my answer makes sense.**

**I found that 1,625 squares baseball cards were ordered. It makes sense because I represented 13 groups of 125 using an area model drawing. Then, I multiplied both 10 and 3 times each place-value of 125 to help me find the total.**



Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 3: Guided Practice (We Do)

**We Do Together:** (Teacher Actions)

- Say the multiplication problem.
- Use an area model drawing to help you multiply the numbers.

1.

$$\begin{array}{r} 284 \\ \times 17 \\ \hline \end{array}$$


2.

$$\begin{array}{r} 527 \\ \times 39 \\ \hline \end{array}$$




Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 3: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to multiply multi-digit numbers.

3.

$$\begin{array}{r} 826 \\ \times 14 \\ \hline \end{array}$$


4.

$$\begin{array}{r} 695 \\ \times 32 \\ \hline \end{array}$$




Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 3: Guided Practice (We Do – Visual Support)

**We Do Together:** (Teacher Actions)

- Say the multiplication problem.
- Use an area model drawing to help you multiply the numbers.

1.

$$\begin{array}{r}
 284 \\
 \times 17 \\
 \hline
 2000 \\
 800 \\
 40 \\
 1400 \\
 560 \\
 + \phantom{00} 28 \\
 \hline
 4828
 \end{array}$$

	200	+	80	+	4												
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: none; padding-right: 10px; vertical-align: middle;">10</td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>10 \times 200</math> 2000         </td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>10 \times 80</math> 800         </td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>10 \times 4</math> 40         </td> </tr> <tr> <td style="border: none; padding-right: 10px; vertical-align: middle;">+</td> <td colspan="3" style="border: none;"></td> </tr> <tr> <td style="border: none; padding-right: 10px; vertical-align: middle;">7</td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>7 \times 200</math> 1400         </td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>7 \times 80</math> 560         </td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>7 \times 4</math> 28         </td> </tr> </table>					10	$10 \times 200$ 2000	$10 \times 80$ 800	$10 \times 4$ 40	+				7	$7 \times 200$ 1400	$7 \times 80$ 560	$7 \times 4$ 28
10	$10 \times 200$ 2000	$10 \times 80$ 800	$10 \times 4$ 40														
+																	
7	$7 \times 200$ 1400	$7 \times 80$ 560	$7 \times 4$ 28														

2.

$$\begin{array}{r}
 527 \\
 \times 39 \\
 \hline
 15000 \\
 600 \\
 210 \\
 4500 \\
 180 \\
 + \phantom{000} 63 \\
 \hline
 20553
 \end{array}$$

	500	+	20	+	7												
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: none; padding-right: 10px; vertical-align: middle;">30</td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>30 \times 500</math> 15000         </td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>30 \times 20</math> 600         </td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>30 \times 7</math> 210         </td> </tr> <tr> <td style="border: none; padding-right: 10px; vertical-align: middle;">+</td> <td colspan="3" style="border: none;"></td> </tr> <tr> <td style="border: none; padding-right: 10px; vertical-align: middle;">9</td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>9 \times 500</math> 4500         </td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>9 \times 20</math> 180         </td> <td style="border: 1px solid black; padding: 10px; text-align: center;"> <math>9 \times 7</math> 63         </td> </tr> </table>					30	$30 \times 500$ 15000	$30 \times 20$ 600	$30 \times 7$ 210	+				9	$9 \times 500$ 4500	$9 \times 20$ 180	$9 \times 7$ 63
30	$30 \times 500$ 15000	$30 \times 20$ 600	$30 \times 7$ 210														
+																	
9	$9 \times 500$ 4500	$9 \times 20$ 180	$9 \times 7$ 63														



## Session 3: Self-Reflection

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

Briefly discuss student responses

- What did I learn today about multiplying multi-digit whole numbers?
  
- How confident do I feel about multiplying multi-digit whole numbers on my own? (*Thumbs up, down, or sideways*)





# Quick Check - Form C

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**Directions:** Write the answer to each problem. (Work time: 4 minutes)

**1.**

$$\begin{array}{r} 1723 \\ \times \quad 4 \\ \hline \end{array}$$

**2.**

$$\begin{array}{r} 64 \\ \times 29 \\ \hline \end{array}$$

**3.**

$$\begin{array}{r} 752 \\ \times 18 \\ \hline \end{array}$$

**4.**

$$\begin{array}{r} 354 \\ \times 37 \\ \hline \end{array}$$



# Session 4: Modeling (I Do)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

A school store ordered cases of sport drinks to sell throughout the school year. Each case holds 18 bottles. If the school store ordered 135 cases, how many bottles were ordered?



# Session 4: Modeling (I Do - Teacher Notes)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

A school store ordered cases of sport drinks to sell throughout the school year. Each case holds 18 bottles. If the school store ordered 135 cases, how many bottles were ordered?

**First, it is important to know what the problem is about.**

**This problem is about a school store ordering sport drinks.**

**Second, I need to determine what I need to find.**

**I need to find how many bottles were ordered.**

**Third, I need to determine what I know.**

**I know that there are 18 bottles in each case and 135 cases were ordered.**

**Fourth, I need to figure out what I can try.**

**This time, I am going to use my understanding of place value to help me find the total number of bottles and save time by thinking about the area model, but not actually drawing it.**

**I will begin by writing what I know...135 cases were ordered...and there are 18 bottles per case...which can be calculated using multiplication.**

*(Write the multiplication problem and labels.)*

**When I reflect back to the multiplication drawings, I remember breaking the 2-digit multiplier apart to find 10 groups of 135...(Point to the tens digit, 1.)**

**...and 8 groups of 135...(Point to the ones digit, 8.)**

**...before adding the sub-totals together.**

1 3 5	<i>Cases</i>
<u>  x 1 8</u>	<i>Bottles per case</i>
1 0 0 0	
3 0 0	
5 0	
8 0 0	
2 4 0	
+ 4 0	
2 4 3 0	<i>Bottles</i>

**10 times 1 hundred is 10 hundreds...which is equal to 1 thousand.**

*(Point to the tens-digit, 1, and hundreds-digit, 1. Then, write 1000 as the first sub-total.)*

**10 times 3 tens is 30 tens...which is equal to 3 hundreds.**

*(Point to the tens-digit, 1, and tens-digit, 3. Then, write 300 as the second sub-total.)*

**10 times 5 ones is 50 ones.**

*(Point to the tens-digit, 1, and ones-digit, 5. Then, write 50 as the third sub-total.)*

**8 times 1 hundred is 8 hundreds.**

*(Point to the ones-digit, 8, and hundreds-digit, 1. Then, write 800 as the fourth sub-total.)*

**8 times 3 tens is 24 tens...which is equal to 240.**

*(Point to the ones-digit, 8, and tens-digit, 3. Then, write 300 as the fifth sub-total.)*

**8 times 5 ones is 40 ones.**

*(Point to the ones-digit, 8, and ones-digit, 5. Then, write 40 as the sixth sub-total.)*

**To find the total, I must add the sub-totals.**

*(Write the "+" sign and answer line.)*



# Session 4: Modeling (I Do - Teacher Notes Cont.)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Readiness** for multiplying multi-digit decimals

A school store ordered cases of sport drinks to sell throughout the school year. Each case holds 18 bottles. If the school store ordered 135 cases, how many bottles were ordered?

$$\begin{array}{r}
 135 \text{ Cases} \\
 \times 18 \text{ Bottles per case} \\
 \hline
 1000 \\
 300 \\
 50 \\
 800 \\
 240 \\
 + 40 \\
 \hline
 2430 \text{ Bottles}
 \end{array}$$

**There are no ones in the sub-totals, so I will write a zero in the ones place of the answer.**

*(Point to the ones column. Then, write "0" as the ones-digit of the answer.)*

**5 tens plus 4 tens plus 4 more tens is 13 tens...which has the same value as 1 hundred and 3 tens.**

*(Point to the tens column. Then, write the new hundred on the answer line and "3" as the tens-digit of the answer.)*

**3 hundreds plus 8 hundreds plus 2 hundreds plus this new hundred below is 14 hundreds...which has the same value as 1 thousand and 4 hundreds.**

*(Point to the digits in the hundreds column. Then, write the new thousand on the answer line and "4" as the hundreds-digit of the answer.)*

**1 thousand plus this new thousand below is 2 thousands.**

*(Point to the hundreds column. Then, write the "2" as the thousands-digit of the answer.)*

**Last, I need to make sure that my answer makes sense.**

**I found that 2430 bottles were ordered. It makes sense because I modeled this situation of equal groups as a multiplication problem. Then, I multiplied 10 times 135 to help me find the first sub-totals...then 8 times 135 to find the other sub-totals before adding each sub-total together.**



Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 4: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say the problem and use place-value understanding to multiply the multi-digit numbers.

1.

$$\begin{array}{r} 257 \\ \times 19 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 904 \\ \times 38 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 2583 \\ \times \quad 7 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 618 \\ \times 25 \\ \hline \end{array}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 4: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to multiply the multi-digit numbers.

5.

$$\begin{array}{r} 539 \\ \times 14 \\ \hline \end{array}$$

6.

$$\begin{array}{r} 409 \\ \times 26 \\ \hline \end{array}$$

7.

$$\begin{array}{r} 2714 \\ \times \quad 8 \\ \hline \end{array}$$

8.

$$\begin{array}{r} 897 \\ \times 43 \\ \hline \end{array}$$



Name \_\_\_\_\_

Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 4: Guided Practice (We Do – Visual Support)

**We Do Together:** (Teacher Actions)

- Say the problem and use place-value understanding to multiply the multi-digit numbers.

<p>1.</p> $\begin{array}{r} 257 \\ \times 19 \\ \hline 2000 \\ 500 \\ 70 \\ 1800 \\ 450 \\ + \quad 63 \\ \hline 4883 \end{array}$ <p><i>Think:</i></p> <p>(10 times 2 hundreds) (10 times 5 tens) (10 times 7 ones) (9 times 2 hundreds) (9 times 2 tens) (9 times 7 ones)</p>	<p>2.</p> $\begin{array}{r} 904 \\ \times 38 \\ \hline 27000 \\ 0 \\ 120 \\ 72000 \\ 0 \\ + \quad 32 \\ \hline 34352 \end{array}$ <p><i>Think:</i></p> <p>(30 times 9 hundreds) (30 times 0 tens) (30 times 4 ones) (8 times 9 hundreds) (8 times 0 tens) (8 times 4 ones)</p>
<p>3.</p> $\begin{array}{r} 2583 \\ \times \quad 7 \\ \hline 14000 \\ 3500 \\ 560 \\ + \quad 21 \\ \hline 18081 \end{array}$ <p><i>Think:</i></p> <p>(7 times 2 thousands) (7 times 5 hundreds) (7 times 8 tens) (7 times 3 ones)</p>	<p>2.</p> $\begin{array}{r} 618 \\ \times 25 \\ \hline 1200 \\ 200 \\ 160 \\ 3000 \\ 50 \\ + \quad 40 \\ \hline 15450 \end{array}$ <p><i>Think:</i></p> <p>(20 times 6 hundreds) (20 times 1 ten) (20 times 8 ones) (5 times 6 hundreds) (5 times 1 ten) (5 times 8 ones)</p>



## Session 4: Self-Reflection

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

Briefly discuss student responses

- What did I learn today about multiplying multi-digit whole numbers?
  
- How confident do I feel about multiplying multi-digit whole numbers on my own? (*Thumbs up, down, or sideways*)





# Quick Check - Form D

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**Directions:** Write the answer to each problem. (Work time: 4 minutes)

**1.**

$$\begin{array}{r} 4213 \\ \times \quad 6 \\ \hline \end{array}$$

**2.**

$$\begin{array}{r} 93 \\ \times 27 \\ \hline \end{array}$$

**3.**

$$\begin{array}{r} 721 \\ \times 18 \\ \hline \end{array}$$

**4.**

$$\begin{array}{r} 526 \\ \times 27 \\ \hline \end{array}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 5: Guided Practice (We Do)

**We Do Together:** (Teacher Actions)

- Say the multiplication problem.
- Use an area model drawing to help you multiply the numbers.

1.

$$\begin{array}{r} 397 \\ \times 16 \\ \hline \end{array}$$


2.

$$\begin{array}{r} 476 \\ \times 28 \\ \hline \end{array}$$




Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 5: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to multiply multi-digit numbers.

3.

$$\begin{array}{r} 695 \\ \times 17 \\ \hline \end{array}$$


4.

$$\begin{array}{r} 487 \\ \times 39 \\ \hline \end{array}$$




# Session 5: Self-Reflection

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

Briefly discuss student responses

- What did I learn today about multiplying multi-digit whole numbers?
  
- How confident do I feel about multiplying multi-digit whole numbers on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form E

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**Directions:** Write the answer to each problem. (Work time: 4 minutes)

**1.**

$$\begin{array}{r} 3122 \\ \times \quad 3 \\ \hline \end{array}$$

**2.**

$$\begin{array}{r} 45 \\ \times 13 \\ \hline \end{array}$$

**3.**

$$\begin{array}{r} 867 \\ \times 15 \\ \hline \end{array}$$

**4.**

$$\begin{array}{r} 297 \\ \times 48 \\ \hline \end{array}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 6: Guided Practice (We Do)

**We Do Together:** (Teacher Actions)

- Say the multiplication problem.
- Use an area model drawing to help you multiply the numbers.

1.

$$\begin{array}{r} 286 \\ \times 27 \\ \hline \end{array}$$


2.

$$\begin{array}{r} 697 \\ \times 38 \\ \hline \end{array}$$




Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 6: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to multiply multi-digit numbers.

3.

$$\begin{array}{r} 968 \\ \times 13 \\ \hline \end{array}$$


4.

$$\begin{array}{r} 739 \\ \times 46 \\ \hline \end{array}$$




# Session 6: Self-Reflection

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

Briefly discuss student responses

- What did I learn today about multiplying multi-digit whole numbers?
  
- How confident do I feel about multiplying multi-digit whole numbers on my own? (*Thumbs up, down, or sideways*)





# Quick Check - Form F

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**Directions:** Write the answer to each problem. (Work time: 4 minutes)

**1.**

$$\begin{array}{r} 5133 \\ \times \quad 4 \\ \hline \end{array}$$

**2.**

$$\begin{array}{r} 52 \\ \times 28 \\ \hline \end{array}$$

**3.**

$$\begin{array}{r} 324 \\ \times 16 \\ \hline \end{array}$$

**4.**

$$\begin{array}{r} 635 \\ \times 47 \\ \hline \end{array}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 7: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say the problem and use place-value understanding to multiply the multi-digit numbers.

1.

$$\begin{array}{r} 267 \\ \times 19 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 906 \\ \times 38 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 4639 \\ \times \quad 7 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 736 \\ \times 25 \\ \hline \end{array}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 7: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to multiply the multi-digit numbers.

5.

$$\begin{array}{r} 728 \\ \times 14 \\ \hline \end{array}$$

6.

$$\begin{array}{r} 307 \\ \times 26 \\ \hline \end{array}$$

7.

$$\begin{array}{r} 3927 \\ \times 8 \\ \hline \end{array}$$

8.

$$\begin{array}{r} 965 \\ \times 43 \\ \hline \end{array}$$



# Session 7: Self-Reflection

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

Briefly discuss student responses

- What did I learn today about multiplying multi-digit whole numbers?
  
- How confident do I feel about multiplying multi-digit whole numbers on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form G

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**Directions:** Write the answer to each problem. (Work time: 4 minutes)

**1.**

$$\begin{array}{r} 1723 \\ \times \quad 4 \\ \hline \end{array}$$

**2.**

$$\begin{array}{r} 64 \\ \times 29 \\ \hline \end{array}$$

**3.**

$$\begin{array}{r} 752 \\ \times 18 \\ \hline \end{array}$$

**4.**

$$\begin{array}{r} 354 \\ \times 37 \\ \hline \end{array}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 8: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say the problem and use place-value understanding to multiply the multi-digit numbers.

1.

$$\begin{array}{r} 297 \\ \times 16 \\ \hline \end{array}$$

2.

$$\begin{array}{r} 906 \\ \times 28 \\ \hline \end{array}$$

3.

$$\begin{array}{r} 2478 \\ \times \quad 9 \\ \hline \end{array}$$

4.

$$\begin{array}{r} 689 \\ \times 37 \\ \hline \end{array}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

6th Grade - Readiness Standard 2 - 5.NBT.5

## Session 8: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

- Students take turns leading to multiply the multi-digit numbers.

5.

$$\begin{array}{r} 539 \\ \times 13 \\ \hline \end{array}$$

6.

$$\begin{array}{r} 409 \\ \times 27 \\ \hline \end{array}$$

7.

$$\begin{array}{r} 2764 \\ \times \quad 8 \\ \hline \end{array}$$

8.

$$\begin{array}{r} 897 \\ \times 46 \\ \hline \end{array}$$



## Session 8: Self-Reflection

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

Briefly discuss student responses

- What did I learn today about multiplying multi-digit whole numbers?
  
- How confident do I feel about multiplying multi-digit whole numbers on my own? (*Thumbs up, down, or sideways*)





# Quick Check - Form H

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will multiply multi-digit numbers.

**Directions:** Write the answer to each problem. (Work time: 4 minutes)

**1.**

$$\begin{array}{r} 4213 \\ \times \quad 6 \\ \hline \end{array}$$

**2.**

$$\begin{array}{r} 93 \\ \times 27 \\ \hline \end{array}$$

**3.**

$$\begin{array}{r} 721 \\ \times 18 \\ \hline \end{array}$$

**4.**

$$\begin{array}{r} 526 \\ \times 27 \\ \hline \end{array}$$



# Independent Practice

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

**Learning Target:** I will multiply multi-digit whole numbers

**Title of Game:** Build the Greater Product

**Number of Players:** 2

**Objective:** To build the greatest product.

**Materials:** 1 set of 1-digit number cards and 1 recording sheet per player.

**Directions:**

- Each player...
  - Shuffle a set of Digit-cards and set in a pile face down out on the table.
  - Choose the top 4 cards.
  - Create 2-digit times a 2-digit multiplication problem and find the product on their recording sheet.
  - Verify each answer by checking it with a calculator.
    - For each incorrect answer, use a drawing to find the error and correct the recording sheet.
  - Assign points for the round. (0, 1, or 2 points are possible.)
    - Each player can earn 1 point for having a correct product.
    - The player with the greatest product receives 1 point.
  - Shuffle all of the cards together and repeat for the next round.

**Player 1**


X

**Player 2**


X



Name \_\_\_\_\_ Date \_\_\_\_\_

Learning Target: I will multiply multi-digit whole numbers

# Independent Practice: Build the Greater Product

*(Recording Sheet)*

<p><b>Round 1</b></p>  $\begin{array}{r} \phantom{0}x \\ \hline \end{array}$	<p><b>Round 2</b></p>  $\begin{array}{r} \phantom{0}x \\ \hline \end{array}$
<p><b>Round 3</b></p>  $\begin{array}{r} \phantom{0}x \\ \hline \end{array}$	<p><b>Round 4</b></p>  $\begin{array}{r} \phantom{0}x \\ \hline \end{array}$

# Digit-Cards (3 sets)

6<sup>th</sup> Grade - Readiness Standard 2 - 5.NBT.5

0	1	2	3	4
5	6	7	8	9
0	1	2	3	4
5	6	7	8	9
0	1	2	3	4
5	6	7	8	9



# Questions for Solving Word Problems

Q<sub>1</sub>

*What is the problem about?*

Q<sub>2</sub>

*What do I need to find?*

Q<sub>3</sub>

*What do I know?*

Q<sub>4</sub>

*What can I try?*

Q<sub>5</sub>

*Does my answer make sense?*



# Steps for Solving Word Problems

Q<sub>1</sub>. *What is the problem about?*

Q<sub>2</sub>. *What do I need to find?*

Q<sub>3</sub>. *What do I know?*

Q<sub>4</sub>. *What can I try?*

Q<sub>5</sub>. *Does my answer make sense?*