Tier 3
Intervention Lessons

4.NBT.6

Learning Target: I will divide multi-digit numbers

Readiness for 5.NBT.6: Divide up to a 4-digit number by a 2-digit number

Table of Contents

Tier 3 Intervention Planning Guide

Learning Target: I will divide multi-digit numbers

Readiness for dividing up to a 4-digit number by a 2-digit number

Recommended Actions	
Beginning (5 min.)	➢ Review the learning target with the whole group ➢ Ask each student to set a goal for the day based on their previous Quick Check Score ➢ Have each student use a highlighter to plot their goal for the day
Middle (15 min.)	➢ Model solving a word problem – "I do" *(Sessions 1, 3 and 6 only)* ➢ Guided Practice – "We do" **Sessions 1 and 2:** Divide multi-digit numbers using base-ten blocks and place-value cards **Sessions 3, 4 and 5:** Divide multi-digit numbers using area model drawings and sub-totals **Sessions 6, 7 and 8:** Divide multi-digit numbers using place-value understanding
End (10 min.)	➢ Bring the students back together. ➢ Ask students to reflect on their progress towards the learning target o What did I learn today about dividing multi-digit numbers? o How confident do you feel about dividing multi-digit numbers on my own? (Thumbs up, down, or sideways) ➢ Assess each student's progress using the next **Quick Check** form ➢ Guide students to self-correct their **Quick Check** ➢ Guide students to chart their progress in their **Growth Chart** o If not using Delta Math lessons, record the activity in the table ➢ Collect each student's **Quick Check** and **Growth Chart**
After Session 6	➢ Differentiation Options: o Allow students who met the learning goal to work independently while others do the guided practice during the next session o Exit students who met the learning goal for a third time ➢ Problem solve with a team to plan additional support for students who do not meet the learning goal within 8 sessions

Session 1: Modeling (I Do)

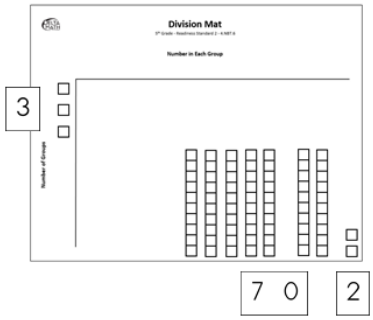
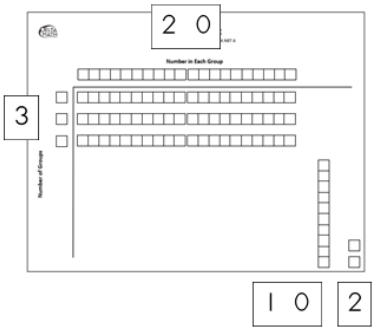
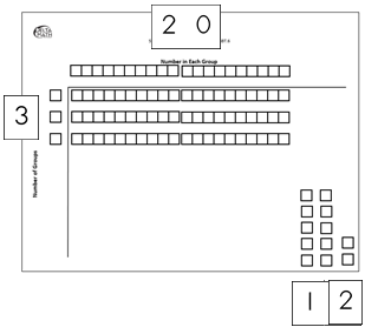
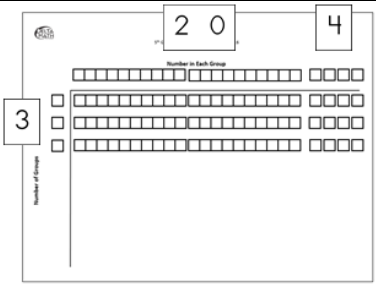
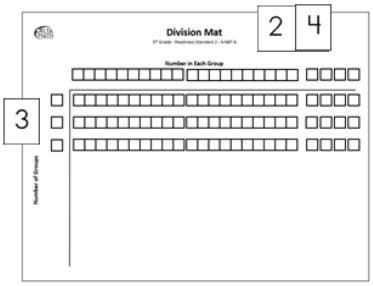
Learning Target: I will divide multi-digit numbers

Readiness for dividing up to a 4-digit number by a 2-digit number

Principal Skinner is helping to plan a 4th grade party. He has 72 cookies to share equally among three 4th classrooms. How many cookies should each 4th grade classroom get?

Session 1: Modeling *(I Do – Visual Support)*

Learning Target: I will divide multi-digit numbers **Readiness** for dividing up to a 4-digit number by a 2-digit number

Prepare to Divide	*Build the number of classrooms. (3)* *Build the total number of cookies to be shared. (72)*	
Find the Sub-Totals for each classroom	*Find how many **tens** of cookies for each classroom. (2)*	
	Ungroup the ten into 10 ones.	
	*Find how many **ones** of cookies for each classroom. (4)*	
Find the total for each classroom	*Find how many cookies each classroom will get. (24)*	

Session 1: Modeling *(I Do - Teacher Notes)*

Learning Target: I will divide multi-digit numbers

Readiness for dividing up to a 4-digit number by a 2-digit number

> Principal Skinner is helping to plan a 4th grade party. He has 72 cookies to share equally among three 4th classrooms. How many cookies should each 4th grade classroom get?

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 sharing cookies for a 4th grade party.

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

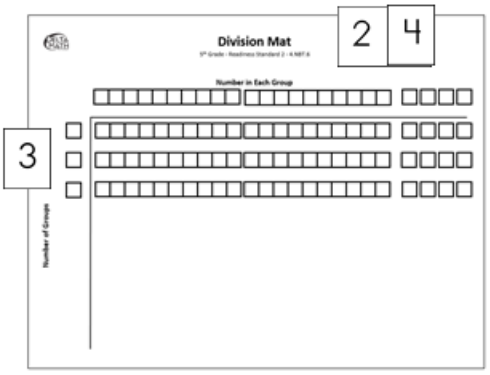
I need to find how many cookies each 4th grade classroom should get.

Third, I need to determine what I know.

I know that the principal brought 72 cookies to be shared equally among three 4th grade classrooms.

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 each classroom gets.



I will begin setting up the division problem by building the total number of cookies…72…and the number of equal groups…3.
(Build each number on the division mat using base-ten blocks and place-value cards.)

Now, I will find the first sub-total that each classroom will get by sharing the tens among the 4 classrooms. *(Move 2 tens to each group on the mat.)*

It looks like each classroom will get at least 20 cookies.
(Place 2 tens and the "20" place-value card near the top of the mat.)

Before I can share the rest of the cookies with in each class, I must ungroup this ten into 10 ones.
(Exchange the remaining ten for 10 ones. Then, slide the place-value cards together to represent 12 ones.)

I will find the second sub-total by sharing the ones among the 4 classes. *(Move 4 ones to each group on the mat.)*

It looks like each class got another 4 cookies.
(Place 4 ones and the "4" place-value card near the top of the division mat.)

To find the total number of cookies shared with each class, I will combine the sub-totals 20 and 4…this equals 24.
(Slide the "4" place-value card on top of the "20 to represent the 24 cookies for each class.)

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

I found that the principal brought 24 cookies for each 4th grade class. It makes sense because I built the total number of cookies being shared using base-ten blocks. Then, I found each sub-total by separati the blocks into 3 equal groups of tens and ones to find my answer.

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				

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 1: Guided Practice (We Do)

Materials:

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

We Do Together: (Teacher Actions)

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

1. $4\overline{)52}$	**2.** $3\overline{)41}$
3. $5\overline{)120}$	**4.** $4\overline{)144}$

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

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

5. $5\overline{)67}$	**6.** $3\overline{)42}$
7. $4\overline{)108}$	**8.** $3\overline{)111}$

Essential Questions for Division

- How many equal groups are there?
- How many total objects are in each group?
- How many objects are in each group?

Session 1: Self-Reflection

Learning Target: I will divide multi-digit numbers

Briefly discuss student responses

- What did I learn today about dividing multi-digit numbers?

- How confident do I feel about dividing multi-digit numbers on my own? *(Thumbs up, down, or sideways)*

Quick Check - Form A

Name_____ Date_____

Learning Target: I will divide up to a four-digit number by a one-digit number.

Directions: Write the answer to each problem. (Work time: 5 minutes)

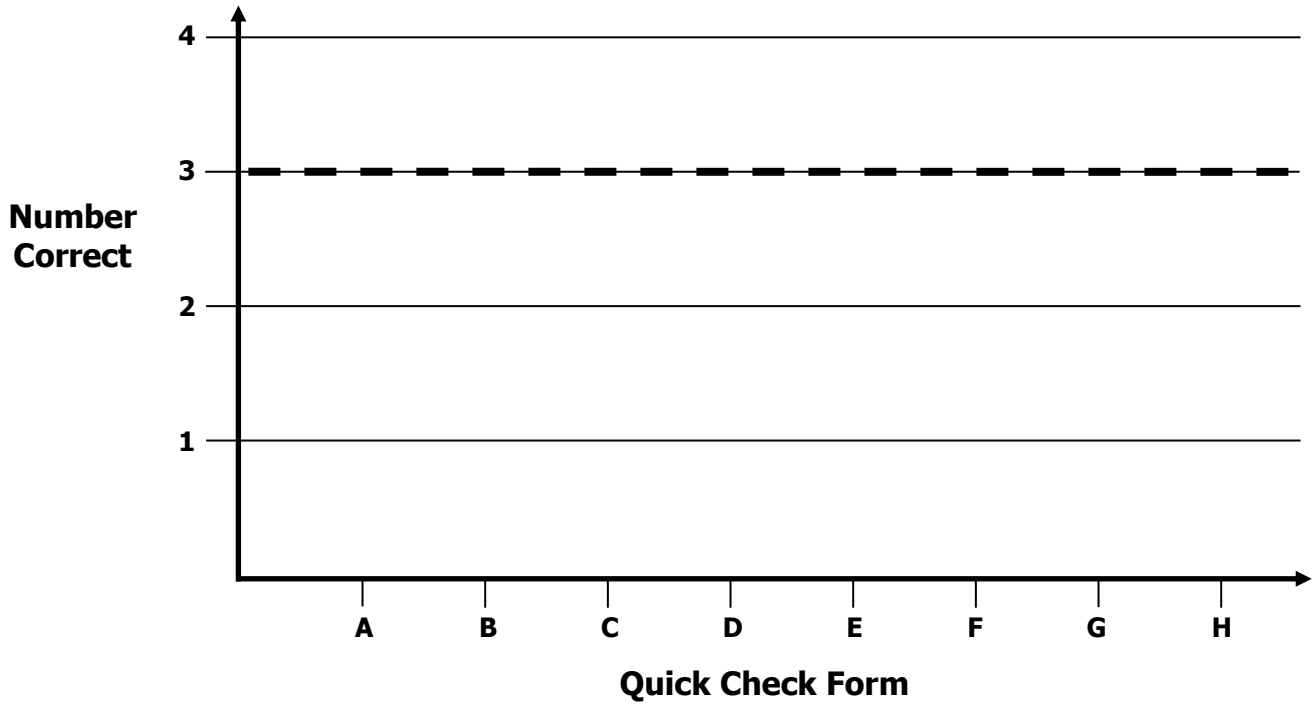
1. $5\overline{)42}$	**2.** $6\overline{)504}$
3. $7\overline{)2,464}$	**4.** $4\overline{)5,932}$

Growth Chart

Name_____ Date_____

Learning Target: I will divide up to a four-digit number by a one-digit number.

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:		

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 2: Guided Practice (We Do)

Materials:

- Base-Ten Blocks (1 hundred, 20 tens and 20 ones)
- Place-value Cards (2 sets – See Session 1)
- Multiplication Mat
- Essential Questions for Division (See Session 1)

We Do Together: (Teacher Actions)

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

1. $4\overline{)68}$	**2.** $3\overline{)47}$
3. $5\overline{)130}$	**4.** $4\overline{)152}$

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

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

5. $5\overline{)67}$	**6.** $3\overline{)42}$
7. $4\overline{)104}$	**8.** $3\overline{)114}$

Session 2: Self-Reflection

Learning Target: I will divide multi-digit numbers

Briefly discuss student responses

- What did I learn today about dividing multi-digit numbers?

- How confident do I feel about dividing multi-digit numbers on my own? *(Thumbs up, down, or sideways)*

Quick Check - Form B

Name_____ Date_____

Learning Target: I will divide up to a four-digit number by a one-digit number.

Directions: Write the answer to each problem. (Work time: 5 minutes)

1. $4\overline{)29}$	**2.** $7\overline{)406}$
3. $5\overline{)8{,}710}$	**4.** $8\overline{)2{,}184}$

Session 3: Modeling (I Do)

Learning Target: I will divide multi-digit numbers

Readiness for dividing up to a 4-digit number by a 2-digit number

Our school ordered supplies to help students throughout the year. The order included for 5 cases of pencils for a total of 625 pencils. How many pencils does each case include?

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

Learning Target: I will divide multi-digit numbers

Readiness for dividing up to a 4-digit number by a 2-digit number

Our school ordered supplies to help students throughout the year. The order included for 5 cases of pencils for a total of 625 pencils. How many pencils does each case include?

<table>
<tr>
<td>Prepare to Divide</td>
<td>Write and understand the division problem.

Draw and label the rectangle.

List the multiples of 5.</td>
<td>5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50

How many pencils are in each case?

5 | 625 | | |

5)625</td>
</tr>
<tr>
<td rowspan="3">Find the Sub-Totals in each case</td>
<td>Find how many hundreds are in each case. (1)

Find how many pencils remain to divide. (125)</td>
<td>5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50

How many pencils are in each case?

100
5 | 625 | 500 | |

100
5)625
– 500
125</td>
</tr>
<tr>
<td>Find how many tens are in each case. (2)

Find how many pencils remain to divide. (25)</td>
<td>5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50

How many pencils are in each case?

100 20
5 | 625 | 500 | 100 | |

20
100
5)625
– 500
125
– 100
25</td>
</tr>
<tr>
<td>Find how many ones are in each case. (5)

Find how many pencils remain to divide. (0)</td>
<td>5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50

How many pencils are in each case?

100 20 5
5 | 625 | 500 | 100 | 25 |

5
20
100
5)625
– 500
125
– 100
25
– 25
0</td>
</tr>
<tr>
<td>Find the total in each case</td>
<td>Find how many pencils are total in each case. (125)</td>
<td>5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50

How many pencils are in each case?

100 20 5
5 | 625 | 500 | 100 | 25 |

5
20
100] 125
5)625
– 500
125
– 100
25
– 25
0</td>
</tr>
</table>

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

Learning Target: I will divide multi-digit numbers

Readiness for dividing up to a 4-digit number by a 2-digit number

> Our school ordered supplies to help students throughout the year. The order included for 5 cases of pencils for a total of 625 pencils. How many pencils does each case include?

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 our school store ordering supplies.

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

I need to find how many pencils are included in each case.

Third, I need to determine what I know.

I know that our school ordered 5 cases of pencils and a total of 625 pencils were ordered.

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

Since this problem is looking for the number of pencils in each case, I can use the division problem 625 ÷ 5 to find the answer.

I will also draw a picture to help me find the answer since the numbers are large and using base-ten blocks would be more difficult.

I will begin drawing a rectangle and labeling it with information I know…the total number of pencils is 625…there are 5 cases of pencils…and the amount in each case is unknown.
(Draw a rectangle and label the sides and interior with "625", "5", and "How many pencils are in each case?")

To make finding each sub-total easier, I will list the multiples of 5…5 x 1 = 5, 5 x 2 = 10…5 x 3 = 15…
(Continue listing each multiple up to 5 x 10 = 50.)

Now I'm ready to find how many hundreds are in each of the 5 cases.

To find how many <u>hundreds</u> are in each of the 5 cases, I need to find…"5 times how many <u>hundreds</u> gets me close to…but not greater than 625?"
(Point to the 5 and underline the digit "6" in the hundreds place of 625.)

I see that 5 x 1 = 5, so 5 times 1 hundred is 5 hundreds…which is equal to 500.
(Write "100" at the top of the math drawing. Then, draw a vertical line and write "500" inside the first section.)

I need to find how many remain from the original 625 pencils before I can find the number of tens in each case.

I shared 500 pencils so far.
(Write "100" above the 625 and "<u>– 500</u>" below the 625 to the right of the math drawing.)

Therefore, I need to subtract 500 from 625…this equals 125.
(Write "125" below the 500 to the right of the math drawing.)

Session 3: Modeling *(I Do - Teacher Notes Cont.)*

Learning Target: I will divide multi-digit numbers

Readiness for dividing up to a 4-digit number by a 2-digit number

To find how many tens are in each of the 5 cases, I need to find…"5 times how many tens gets me close to…but not greater than 125?"
(Point to the 5 and 125 in the math drawing.)

I see that 5 x 2 = 10…so 5 times 2 tens is 10 tens…which is equal to 100.
(Write "20" at the top of the math drawing. Then, draw another vertical line and "100" inside the second section.)

I need to find how many remain from the 125 pencils before I can find the number of ones in each case.

I shared another 100 pencils in the 5 cases.
(Write "20" above the 100 and "– 100" below the 125 to the right of the math drawing.)

Therefore, I need to subtract these 100 from 125…this equals 25.
(Write "25" below the 100 to the right of the math drawing.)

To find how many ones are in each of the 5 cases, I need to find…"5 times how many ones gets me close to, but not greater than 25?"

I see that 5 times 5 is 25…so there are 5 more pencils in each of the 5 cases.
(Write "5" at the top of the third section and "25" inside the third section of the math drawing.)

I need to verify there are no pencils remaining of the original 625.

I shared another 25 pencils among the 5 cases.
(Write "5" above the 20 and "– 25" below the 25 to the right of the math drawing.)

25 – 25 = 0, so there are no more pencils remaining to divide.
(Write "0" below the – 25 to the right of the math drawing.)

Now I will add the sub-totals to find the total number of pencils in each case…1 hundred…2 tens…and 5 ones combine to equal 125.
(Write a "]" and "125" as the total to the right of the math drawing)

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

I found that 125 pencils would be in each case. It makes sense because I represented this division problem with an area model drawing. Then, I used unknown multiplication to help me find each sub-total of pencils that were shared equally in each case.

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 3: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say the problem and use an area model drawing to help you divide the numbers.

1.

How many are in each group? 56 = 3 x ___

$3\overline{)56}$

2.

How many are in each group? 572 = 4 x ___

$4\overline{)572}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 3: Guided Practice (We Do Together – Cont.)

3.

How many are in each group? 7305 = 5 x ___

$5\overline{)7305}$

4.

How many are in each group? 3024 = 6 x ___

$6\overline{)3024}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 3: Guided Practice (You Do Together)

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

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

5.

How many are in each group? 75 = 4 x ___

$4\overline{)75}$

6.

How many are in each group? 578 = 8 x ___

$8\overline{)578}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 3: Guided Practice (You Do Together – Cont.)

7.

How many are in each group? 7406 = 9 x ___

$9\overline{)7406}$

8.

How many are in each group? 8020 = 5 x ___

$5\overline{)8020}$

Name ______________________________ Date _________

Learning Target: I will divide multi-digit numbers

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

We Do Together: (Teacher Actions)

- Say the multiplication problem and use an area model drawing to help you divide the numbers.

1.

How many are in each group? 56 = 3 x 18 R2

3 x 1 = 3
3 x 2 = 6
3 x 3 = 9
3 x 4 = 12
3 x 5 = 15
3 x 6 = 18
3 x 7 = 21
3 x 8 = 24
3 x 9 = 27
3 x 10 = 30

	10	8
3	56 30	24

```
    8  ]
   10  ]  18 R2
3 ) 56
  - 30
    26
  - 24
     2
```

2.

How many are in each group? 572 = 4 x 143

4 x 1 = 4
4 x 2 = 8
4 x 3 = 12
4 x 4 = 16
4 x 5 = 20
4 x 6 = 24
4 x 7 = 28
4 x 8 = 32
4 x 9 = 36
4 x 10 = 40

	100	40	3
4	572 400	160	12

```
      3  ]
     40  ]  143
    100  ]
4 ) 572
  - 400
    172
  - 160
     12
  -  12
      0
```

Session 3: Self-Reflection

Learning Target: I will divide multi-digit numbers

Briefly discuss student responses

- What did I learn today about dividing multi-digit numbers?

- How confident do I feel about dividing multi-digit numbers on my own? *(Thumbs up, down, or sideways)*

Quick Check - Form C

Name_____ Date_____

Learning Target: I will divide up to a four-digit number by a one-digit number.

Directions: Write the answer to each problem. (Work time: 5 minutes)

1. $3\overline{)25}$	**2.** $8\overline{)504}$
3. $5\overline{)2{,}365}$	**4.** $6\overline{)8{,}790}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 4: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say the problem and use an area model drawing to help you divide the numbers.

1.

How many are in each group? 76 = 3 x ___

$3\overline{)76}$

2.

How many are in each group? 704 = 4 x ___

$4\overline{)704}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 4: Guided Practice (We Do Together – Cont.)

3.

How many are in each group? 6860 = 5 x ___

$5\overline{)6860}$

4.

How many are in each group? 2052= 6 x ___

$6\overline{)2052}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 4: Guided Practice (You Do Together)

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

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

5.

How many are in each group? 95 = 4 x ___

$4\overline{)95}$

6.

How many are in each group? 610 = 8 x ___

$8\overline{)610}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 4: Guided Practice (You Do Together – Cont.)

7.

How many are in each group? 6508 = 9 x ___

$9\overline{)6508}$

8.

How many are in each group? 7030 = 5 x ___

$5\overline{)7030}$

Session 4: Self-Reflection

Learning Target: I will divide multi-digit numbers

Briefly discuss student responses

- What did I learn today about dividing multi-digit numbers?

- How confident do I feel about dividing multi-digit numbers on my own? *(Thumbs up, down, or sideways)*

Quick Check - Form D

Name_____ Date_____

Learning Target: I will divide up to a four-digit number by a one-digit number.

Directions: Write the answer to each problem. (Work time: 5 minutes)

1. $4\overline{)32}$	**2.** $6\overline{)402}$
3. $5\overline{)9{,}315}$	**4.** $7\overline{)2{,}982}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 5: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say the problem and use an area model drawing to help you divide the numbers.

1.

How many are in each group? 75 = 6 x ___

$6\overline{)75}$

2.

How many are in each group? 968 = 7 x ___

$7\overline{)968}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 5: Guided Practice (We Do Together – Cont.)

3.

How many are in each group? 9605 = 9 x ___

$9\overline{)9605}$

4.

How many are in each group? 2448 = 8 x ___

$8\overline{)2448}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 5: Guided Practice (You Do Together)

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

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

5.

How many are in each group? 79 = 4 x ___

$4\overline{)79}$

6.

How many are in each group? 586 = 8 x ___

$8\overline{)586}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 5: Guided Practice (You Do Together – Cont.)

7.

How many are in each group? 7506 = 9 x ___

$9\overline{)7506}$

8.

How many are in each group? 7045 = 5 x ___

$5\overline{)7045}$

Session 5: Self-Reflection

Learning Target: I will divide multi-digit numbers

Briefly discuss student responses

- What did I learn today about dividing multi-digit numbers?

- How confident do I feel about dividing multi-digit numbers on my own? *(Thumbs up, down, or sideways)*

Quick Check - Form E

Name_____ Date_____

Learning Target: I will divide up to a four-digit number by a one-digit number.

Directions: Write the answer to each problem. (Work time: 5 minutes)

1. $5\overline{)42}$	**2.** $6\overline{)504}$
3. $7\overline{)2,464}$	**4.** $4\overline{)5,932}$

Session 6: Modeling (I Do)

Learning Target: I will divide multi-digit numbers

Readiness for dividing up to a 4-digit number by a 2-digit number

Becca kept a "hydration" journal for 7 days and recorded that she drank 448 ounces of water. On average, how many ounces of water did Becca drink each day?

Session 6: Modeling *(I Do - Teacher Notes)*

Learning Target: I will divide multi-digit numbers

Readiness for dividing up to a 4-digit number by a 2-digit number

Becca kept a "hydration" journal for 7 days and recorded that she drank 448 ounces of water. On average, how many ounces of water did Becca drink each day?

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

This problem is about a Becca drinking water.

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

I need to find the average number of ounces that Becca drank each day.

Third, I need to determine what I know.

I know that Becca drank 448 ounces of water over 7 days.

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 divide 448 by 7.

I will begin by writing what I know as a division problem… 448 divided by 7 and how I understand it.
(Write the division problem and "7 equal groups of ___ is 448 total ounces".)

To make finding the sub-totals easier, I will list the multiples of 7…7 x 1 = 7…7 x 2 = 14…7 x 3 = 21…
(Continue listing each multiple up to 7 x 10 = 70.)

Now I am ready to find how many hundreds of ounces Becca drank each of the 7 days.

There are only 4 hundreds to be shared over 7 days.
(Underline the digit "4" in the hundreds place of the total.)

I cannot share a hundred ounces among each of the 7 days, so I will need to combine the hundreds with the tens to find the first sub-total of each day.

448 ounces is 7 groups of how many?

7 x 1 = 7
7 x 2 = 14
7 x 3 = 21
7 x 4 = 28
7 x 5 = 35
7 x 6 = 42
7 x 7 = 49
7 x 8 = 56
7 x 9 = 63
7 x 10 = 70

$$\begin{array}{r} 4 \\ 60 \end{array}\ \Big]\ \textit{64 Cups}$$
$$7\overline{)448}$$
$$\begin{array}{r} -\ 420 \\ \hline 28 \\ -\ 28 \\ \hline 0 \end{array}$$

Next, I will find how many tens will be in each group.
(Underline the digit "4" in the tens place of the total.)

To find how many <u>tens</u> are in each of the 7 groups, I need to find…
"7 times how many <u>tens</u> gets me close to, but not greater than 44 tens?" *(Point to the underlined 44.)*

I see that 7 x 6 is 42…so 7 times 6 ten is 42 tens…which is equal to 420.
(Point to the "7 x 6 = 42" in the list. Then, write "60" above the 448.)

I need to find how many ounces remain from the original 448 before I can find the number of ones for each day.

I shared 420 ounces for each day so far…so I need to subtract 420 from 448 to find how much remains.
(Write "<u>– 420</u>" below the 448.)

448 minus 420 equals 28.
(Write "28" below the 420.)

Session 6: Modeling *(I Do - Teacher Notes Cont.)*

Learning Target: I will divide multi-digit numbers

Readiness for dividing up to a 4-digit number by a 2-digit number

To find how many <u>ones</u> are in each of the 7 groups, I need to find…"7 times how many <u>ones</u> gets me close to, but not greater than 28 tens?" *(Point to the 28.)*

I see that 7 times 4 ones is 28.
(Point to the "7 x 4 = 28" in the list. Then, write "4" above the 60.)

I need to verify that no more ounces remain to be divided.

I just shared 28 more among the 7 days…so I need to subtract 28 from 28.
(Write "<u>– 28</u>" below the 28.)

28 minus 28 equals 0.
(Write "0" below the <u>– 28</u>.)

To find the total number of ounces in each of the 7 days I will add the number of tens and ones in each group.

60…5 ones combine to equal 65.
(Write a "]" and "65".)

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

I found that Becca drank 65 ounces each day. It makes sense because I represented this "equal groups" situation of as a division problem. Then, I used unknown multiplication to help me find the total number of ounces she drank each day.

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 6: Guided Practice (We Do)

We Do Together: (Teacher Actions)

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

1. $3\overline{)74}$	**2.** $5\overline{)817}$
3. $4\overline{)5302}$	**4.** $6\overline{)4590}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 6: Guided Practice (We Do)

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

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

5. $4\overline{)93}$	**6.** $7\overline{)459}$
7. $9\overline{)7506}$	**8.** $6\overline{)8046}$

Name ______________________________ Date __________

Learning Target: I will divide multi-digit numbers

Session 6: Guided Practice (We Do – Visual Support)

We Do Together: (Teacher Actions)

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

1.

3 x 1 = 3
3 x 2 = 6
3 x 3 = 9
3 x 4 = 12
3 x 5 = 15
3 x 6 = 18
3 x 7 = 21
3 x 8 = 24
3 x 9 = 27
3 x 10 = 30

Partial quotients: 4, 20 → ***24 R2***

```
     4
    20
   ____
3 ) 74
  − 60
    14
  − 12
     2
```

2.

5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50

Partial quotients: 3, 60, 100 → ***163 R3***

```
      3
     60
    100
   _____
5 ) 817
  − 500
    317
  − 300
     17
  −  15
      3
```

3.

4 x 1 = 4
4 x 2 = 8
4 x 3 = 12
4 x 4 = 16
4 x 5 = 20
4 x 6 = 24
4 x 7 = 28
4 x 8 = 32
4 x 9 = 36
4 x 10 = 40

Partial quotients: 5, 20, 300, 1000 → ***1325 R2***

```
        5
       20
      300
     1000
   ______
4 ) 5302
  − 4000
    1302
  − 1200
     102
  −   80
      22
  −   80
       2
```

4.

6 x 1 = 6
6 x 2 = 12
6 x 3 = 18
6 x 4 = 24
6 x 5 = 30
6 x 6 = 36
6 x 7 = 42
6 x 8 = 48
6 x 9 = 54
6 x 10 = 60

Partial quotients: 5, 60, 700 → ***765***

```
        5
       60
      700
   ______
6 ) 4590
  − 4200
     390
  −  360
      30
  −   30
       0
```

Session 6: Self-Reflection

Learning Target: I will divide multi-digit numbers

Briefly discuss student responses

- What did I learn today about dividing multi-digit numbers?

- How confident do I feel about dividing multi-digit numbers on my own? *(Thumbs up, down, or sideways)*

Quick Check - Form F

Name_____ Date_____

Learning Target: I will divide up to a four-digit number by a one-digit number.

Directions: Write the answer to each problem. (Work time: 5 minutes)

1. $4\overline{)29}$	**2.** $7\overline{)406}$
3. $5\overline{)8{,}710}$	**4.** $8\overline{)2{,}184}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 7: Guided Practice (We Do)

We Do Together: (Teacher Actions)

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

1. $3\overline{)83}$	**2.** $5\overline{)727}$
3. $4\overline{)4705}$	**4.** $6\overline{)4698}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 7: Guided Practice (We Do)

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

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

5. $4\overline{)97}$	**6.** $7\overline{)409}$
7. $9\overline{)7106}$	**8.** $6\overline{)9042}$

Session 7: Self-Reflection

Learning Target: I will divide multi-digit numbers

Briefly discuss student responses

- What did I learn today about dividing multi-digit numbers?

- How confident do I feel about dividing multi-digit numbers on my own? *(Thumbs up, down, or sideways)*

Quick Check - Form G

Name_____ Date_____

Learning Target: I will divide up to a four-digit number by a one-digit number.

Directions: Write the answer to each problem. (Work time: 5 minutes)

1. $3\overline{)25}$	**2.** $8\overline{)504}$
3. $5\overline{)2{,}365}$	**4.** $6\overline{)8{,}790}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 8: Guided Practice (We Do)

We Do Together: (Teacher Actions)

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

1. $4\overline{)94}$	**2.** $7\overline{)968}$
3. $3\overline{)5014}$	**4.** $8\overline{)4509}$

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Session 8: Guided Practice (We Do)

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

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

5. $3\overline{)95}$	**6.** $7\overline{)478}$
7. $9\overline{)6705}$	**8.** $6\overline{)7016}$

Session 8: Self-Reflection

Learning Target: I will divide multi-digit numbers

Briefly discuss student responses

- What did I learn today about dividing multi-digit numbers?

- How confident do I feel about dividing multi-digit numbers on my own? *(Thumbs up, down, or sideways)*

Quick Check - Form H

Name_____ Date_____

Learning Target: I will divide up to a four-digit number by a one-digit number.

Directions: Write the answer to each problem. (Work time: 5 minutes)

1. $4\overline{)32}$	**2.** $6\overline{)402}$
3. $5\overline{)9{,}315}$	**4.** $7\overline{)2{,}982}$

Independent Practice

Learning Target: I will divide multi-digit numbers

Title of Game: Build the Greater Quotient

Number of Players: 2

Objective: To build the greatest quotient.

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 on the table.
  - Choose the top 4 cards.
  - Create and find the quotient of a 3-digit by 1-digit division problem on their recording sheet.
    - If a player chooses a "1", it must be used as part of the 3-digit dividend.
  - 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 quotient.
    - The player with the greatest quotient receives 1 point.
  - Shuffle all of the cards together and repeat to see who wins 2 out of 3 points for each game.

Name _____ Date _____

Learning Target: I will divide multi-digit numbers

Independent Practice: Build the Greater Quotient

(Recording Sheet)

Game 1	Game 2
Round 1	**Round 1**
Round 2	**Round 2**
Round 3	**Round 3**

Digit-Cards *(3 sets)*

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_1 ***What is the problem about?***
Q_2 ***What do I need to find?***
Q_3 ***What do I know?***
Q_4 ***What can I try?***
Q_5 ***Does my answer make sense?***

Steps for Solving Word Problems

Q_1. *What is the problem about?*
Q_2. *What do I need to find?*
Q_3. *What do I know?*
Q_4. *What can I try?*
Q_5. *Does my answer make sense?*