

NOT SO WIMPY

UNIT 4:

DIVISION

4th GRADE
MATH CURRICULUM

20 DAYS OF DIVISION
MATH LESSON PLANS,
POWERPOINTS, ACTIVITIES,
AND ASSESSMENT





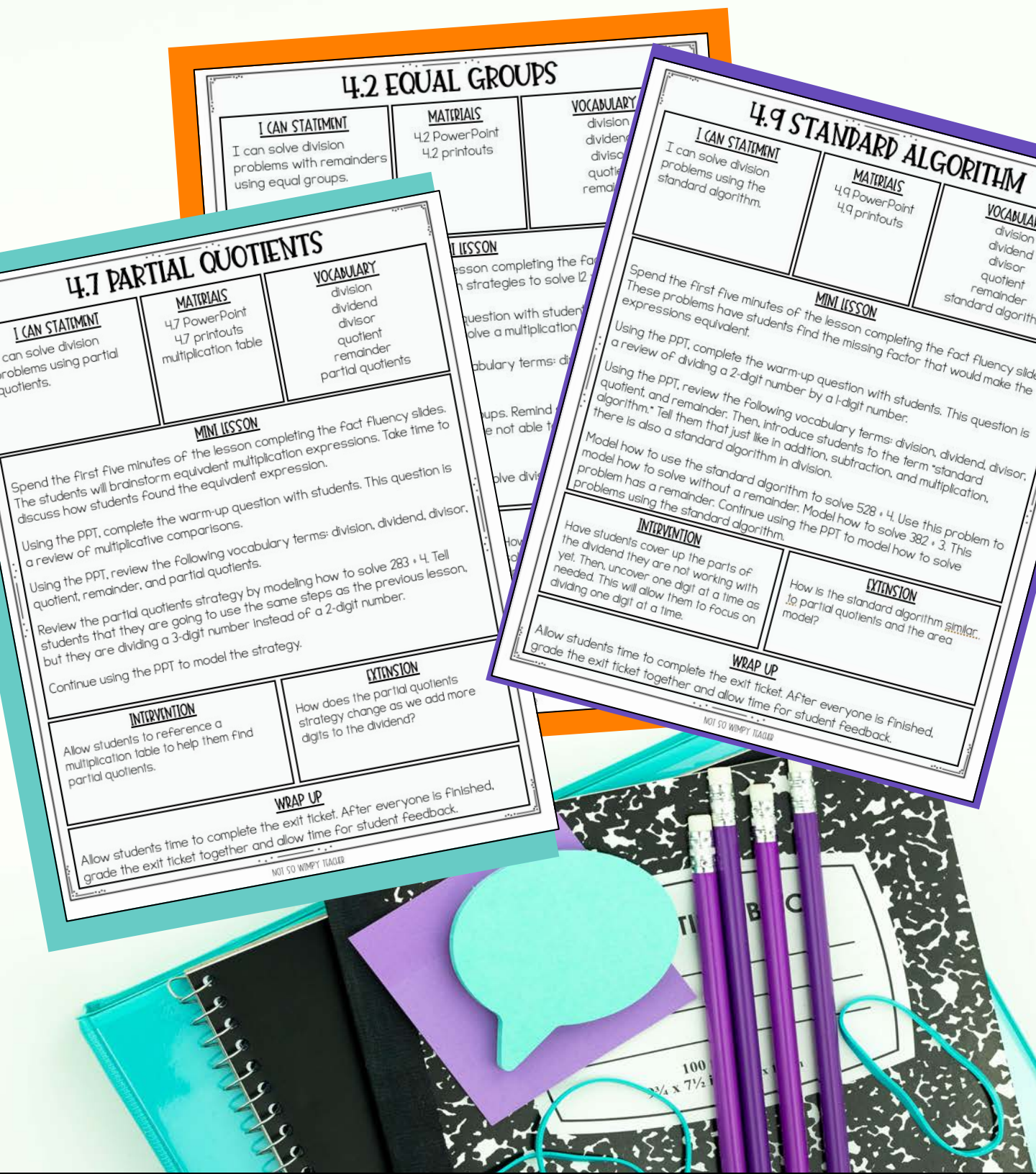
UNIT 4: DIVISION *at a glance*

Day 1 Introducing Remainders	Day 2 Remainders with Equal Groups	Day 3 Remainders with Arrays	Day 4 Area Model No Remainders	Day 5 Area Model with Remainders
Day 6 2-Digit by 1-Digit Division with Partial Quotients	Day 7 3-Digit by 1-Digit Division with Partial Quotients	Day 8 4-Digit by 1-Digit Division with Partial Quotients	Day 9 Standard Algorithm	Day 10 Standard Algorithm
Day 11 Review	Day 12 Divide by 10s, 100s, and 1,000s	Day 13 Divide by 10s, 100s, and 1,000s	Day 14 Estimate Quotients	Day 15 Estimate Quotients
Day 16 Word Problems	Day 17 Word Problems	Day 18 Word Problems	Day 19 Multiplication and Division PBL	Day 20 Assessment

THIS UNIT COVERS THE FOLLOWING COMMON CORE MATH STANDARDS: 4.OA.2, 4.OA.3, 4.NBT.1, 4.NBT.6

Notes:

Includes a pacing guide to see your entire week at a glance



4.2 EQUAL GROUPS

I CAN STATEMENT

I can solve division problems with remainders using equal groups.

MATERIALS

4.2 PowerPoint
4.2 printouts

VOCABULARY

division
dividend
divisor
quotient
remainder

MINI LESSON

Lesson completing the fact fluency strategies to solve 12

question with students solve a multiplication

ocabulary terms: di

ups. Remind e not able t

olve divi

How

4.7 PARTIAL QUOTIENTS

I CAN STATEMENT

I can solve division problems using partial quotients.

MATERIALS

4.7 PowerPoint
4.7 printouts
multiplication table

VOCABULARY

division
dividend
divisor
quotient
remainder
partial quotients

MINI LESSON

Spend the first five minutes of the lesson completing the fact fluency slides. The students will brainstorm equivalent multiplication expressions. Take time to discuss how students found the equivalent expression.

Using the PPT, complete the warm-up question with students. This question is a review of multiplicative comparisons.

Using the PPT, review the following vocabulary terms: division, dividend, divisor, quotient, remainder, and partial quotients.

Review the partial quotients strategy by modeling how to solve $283 \div 4$. Tell students that they are going to use the same steps as the previous lesson, but they are dividing a 3-digit number instead of a 2-digit number.

Continue using the PPT to model the strategy.

INTERVENTION

Allow students to reference a multiplication table to help them find partial quotients.

EXTENSION

How does the partial quotients strategy change as we add more digits to the dividend?

WRAP UP

Allow students time to complete the exit ticket. After everyone is finished, grade the exit ticket together and allow time for student feedback.

NOT SO WIMPY TEACHER

4.9 STANDARD ALGORITHM

I CAN STATEMENT

I can solve division problems using the standard algorithm.

MATERIALS

4.9 PowerPoint
4.9 printouts

VOCABULARY

division
dividend
divisor
quotient
remainder
standard algorithm

MINI LESSON

Spend the first five minutes of the lesson completing the fact fluency slides. These problems have students find the missing factor that would make the expressions equivalent.

Using the PPT, complete the warm-up question with students. This question is a review of dividing a 2-digit number by a 1-digit number.

Using the PPT, review the following vocabulary terms: division, dividend, divisor, quotient, and remainder. Then, introduce students to the term "standard algorithm." Tell them that just like in addition, subtraction, and multiplication, there is also a standard algorithm in division.

Model how to use the standard algorithm to solve $528 \div 4$. Use this problem to model how to solve without a remainder. Model how to solve $382 \div 3$. This problem has a remainder. Continue using the PPT to model how to solve problems using the standard algorithm.

INTERVENTION

Have students cover up the parts of the dividend they are not working with yet. Then, uncover one digit at a time as needed. This will allow them to focus on dividing one digit at a time.

EXTENSION

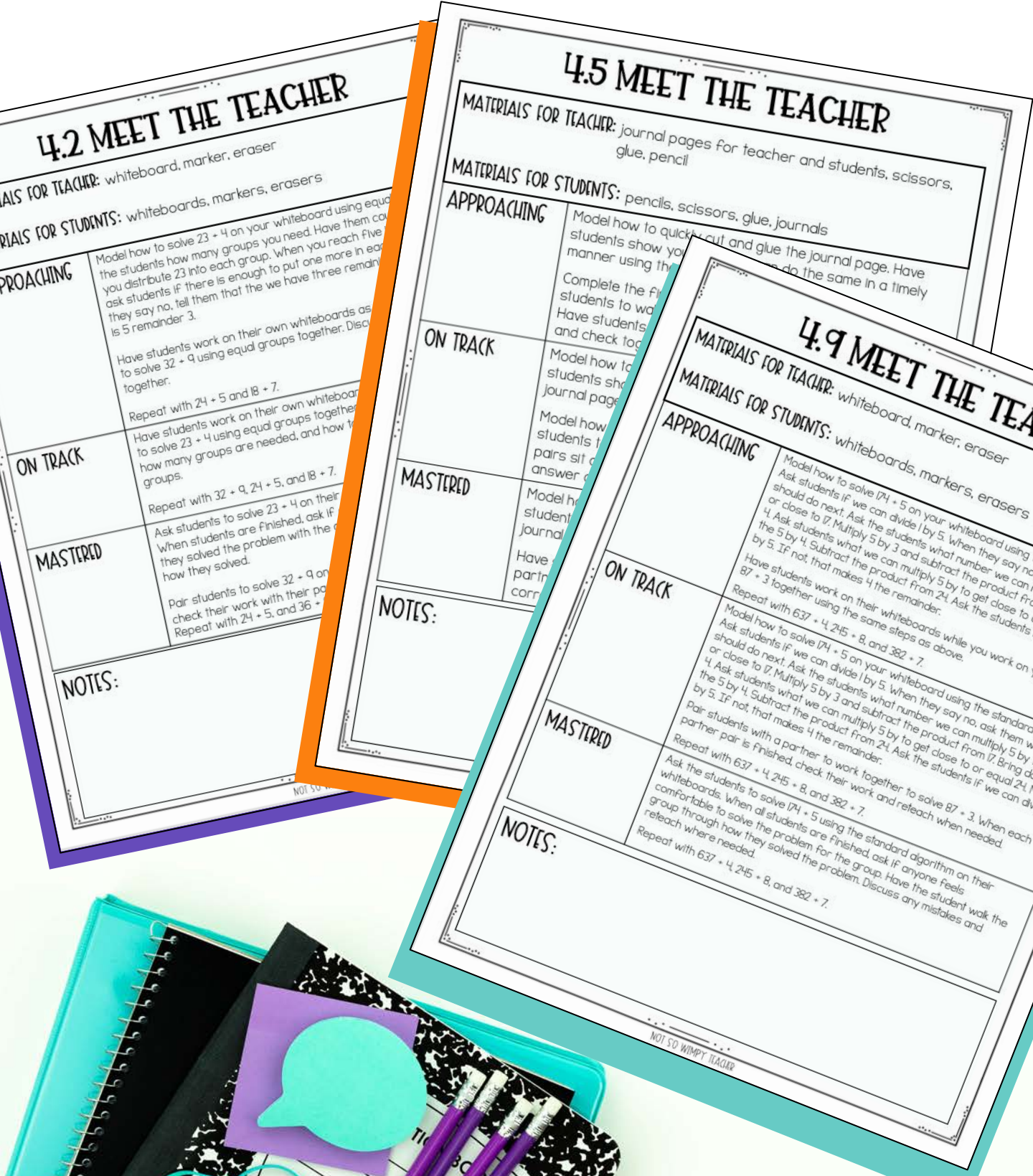
How is the standard algorithm similar to partial quotients and the area model?

WRAP UP

Allow students time to complete the exit ticket. After everyone is finished, grade the exit ticket together and allow time for student feedback.

NOT SO WIMPY TEACHER

INCLUDES WHOLE GROUP LESSON PLANS!



4.2 MEET THE TEACHER

MATERIALS FOR TEACHER: whiteboard, marker, eraser
MATERIALS FOR STUDENTS: whiteboards, markers, erasers

APPROACHING
 Model how to solve $23 \div 4$ on your whiteboard using equal groups. Have the students show how many groups you need. Have them color the students how many groups you need. Have them color you distribute 23 into each group. When you reach five, ask students if there is enough to put one more in each group. If they say no, tell them that we have three remainder. Is 5 remainder 3.

Have students work on their own whiteboards as they solve $32 \div 4$ using equal groups together. Discuss how many groups together.

Repeat with $24 \div 5$ and $18 \div 7$.

ON TRACK
 Have students work on their own whiteboards as they solve $23 \div 4$ using equal groups together. Discuss how many groups are needed, and how to solve the problem.

Repeat with $32 \div 4$, $24 \div 5$, and $18 \div 7$.

MASTERED
 Ask students to solve $23 \div 4$ on their own whiteboards. When students are finished, ask if they solved the problem with the standard algorithm. How they solved.

Pair students to solve $32 \div 4$ on their own whiteboards. Have them check their work with their partner. Repeat with $24 \div 5$, and $36 \div 4$.

4.5 MEET THE TEACHER

MATERIALS FOR TEACHER: journal pages for teacher and students, scissors, glue, pencil
MATERIALS FOR STUDENTS: pencils, scissors, glue, journals

APPROACHING
 Model how to quickly cut and glue the journal page. Have students show you how to do the same in a timely manner using the journal page.

Complete the first journal page. Have students to work on their own journals and check together.

ON TRACK
 Model how to solve $174 \div 5$ on your whiteboard using the standard algorithm. Have students work on their own journals and check together.

MASTERED
 Model how to solve $174 \div 5$ on your whiteboard using the standard algorithm. Have students work on their own journals and check together.

NOTES:

4.9 MEET THE TEACHER

MATERIALS FOR TEACHER: whiteboard, marker, eraser
MATERIALS FOR STUDENTS: whiteboards, markers, erasers

APPROACHING
 Model how to solve $174 \div 5$ on your whiteboard using the standard algorithm. Ask students if we can divide 1 by 5. When they say no, ask them what we should do next. Ask the students what number we can multiply 5 by to get close to 17. Multiply 5 by 3 and subtract the product from 17. Bring down the 4. Ask students what we can multiply 5 by to get close to 24. Multiply 5 by 4. Subtract the product from 24. Ask the students what we can multiply 5 by to get close to 87. If not, that makes 4 the remainder.

Repeat with $637 \div 4$, $245 \div 8$, and $382 \div 7$.

ON TRACK
 Model how to solve $174 \div 5$ on your whiteboard using the standard algorithm. Ask students if we can divide 1 by 5. When they say no, ask them what we should do next. Ask the students what number we can multiply 5 by to get close to 17. Multiply 5 by 3 and subtract the product from 17. Bring down the 4. Ask students what we can multiply 5 by to get close to 24. Multiply 5 by 4. Subtract the product from 24. Ask the students what we can multiply 5 by to get close to 87. If not, that makes 4 the remainder.

Pair students with a partner to work together to solve $87 \div 3$. When each partner is finished, check their work and reteach when needed.

Repeat with $637 \div 4$, $245 \div 8$, and $382 \div 7$.

MASTERED
 Ask the students to solve $174 \div 5$ using the standard algorithm on their own whiteboards. When all students are finished, ask if anyone feels uncomfortable to solve the problem for the group. Have the student walk the group through how they solved the problem. Discuss any mistakes and reteach where needed.

Repeat with $637 \div 4$, $245 \div 8$, and $382 \div 7$.

NOTES:

INCLUDES SMALL GROUP/ MEET WITH TEACHER LESSON PLANS

STANDARD ALGORITHM

PART

STEP 1:

1 2 7

EA M

13

6

Name: _____
Unit 4 Lesson 1 **Homework**

Name: _____
Unit 4 Lesson 1 **Problem Set**

Directions: Read each problem and solve.
Name: _____
Unit 4 Lesson 5 **Level Up**

1. A bake cakes.
2. Mr. Je chairs any c
3. Betty hats
4. Creec ever gum

1. Frida and Flynn picked blueet and Flynn picked 32 blueber many pies can they make?

Name: _____
Unit 4 Lesson 8
Directions: Use the partial quotients.

Unit 4 Lesson 1
Directions: Read and solve the problem.
1. Dingo's dog food bag has day. How many days will food left over?

2. Mallie's le \$45. If si Sunday?
3. Mrs. Pickins students. Sh

Name: _____
Unit 4 Lesson 5
Directions: Solve each problem using the

1. $74 + 8 = \underline{\hspace{2cm}}$
2. $154 + 6 = \underline{\hspace{2cm}}$

Ur
Dire
1.
2. $19 + 4 = \underline{\hspace{2cm}}$

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DIV
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INCLUDES PROBLEM SETS, HOMEWORK,
AND EXIT TICKETS FOR EACH DAY

4.8 Partial Quotients

Fact Fluency

I can solve division problems using partial quotients.

QUICK THINK

Make it true.

Partial Quotients

Vocabulary Review:

$$\begin{array}{ccc} 15 & \div & 3 = 5 \\ \uparrow & & \uparrow \\ \text{dividend} & & \text{divisor} \quad \text{quotient} \end{array}$$

Partial Quotients

Vocabulary Review:

The remainder is the part over after division.

Partial Quotients

411 with 5 remaining is the quotient.

$$\begin{array}{r} 411 \text{ r } 5 \\ 8 \overline{) 3,293} \\ \underline{- 3,200} \\ 93 \\ \underline{- 80} \\ 13 \\ \underline{- 8} \\ 5 \end{array}$$

Centers

	MON.	TUES.	WED.	THURS.
GROUP 1	Meet the Teacher Technology	Independent Math Facts	Meet the Teacher Technology	Independent Math Facts
GROUP 2	Independent Math Facts	Meet the Teacher Technology	Independent Math Facts	Meet the Teacher Technology
GROUP 3	Technology Meet the Teacher	Math Facts Independent	Technology Meet the Teacher	Math Facts Independent
GROUP 4	Math Facts Independent	Technology Meet the Teacher	Math Facts Independent	Technology Meet the Teacher

NOT SO WIMPY TEACHER

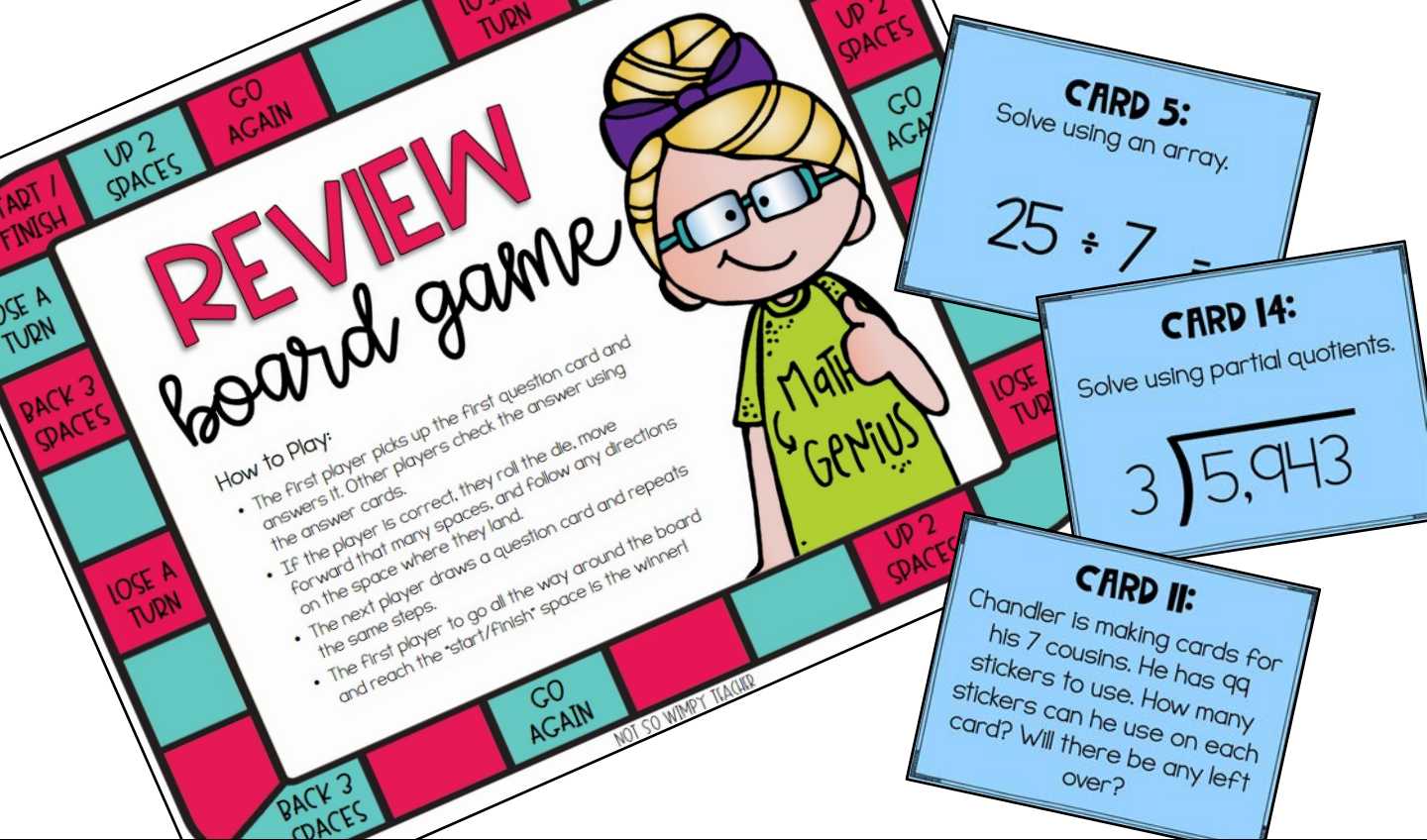
Exit Ticket

Directions: Use the partial quotients strategy to solve each problem.

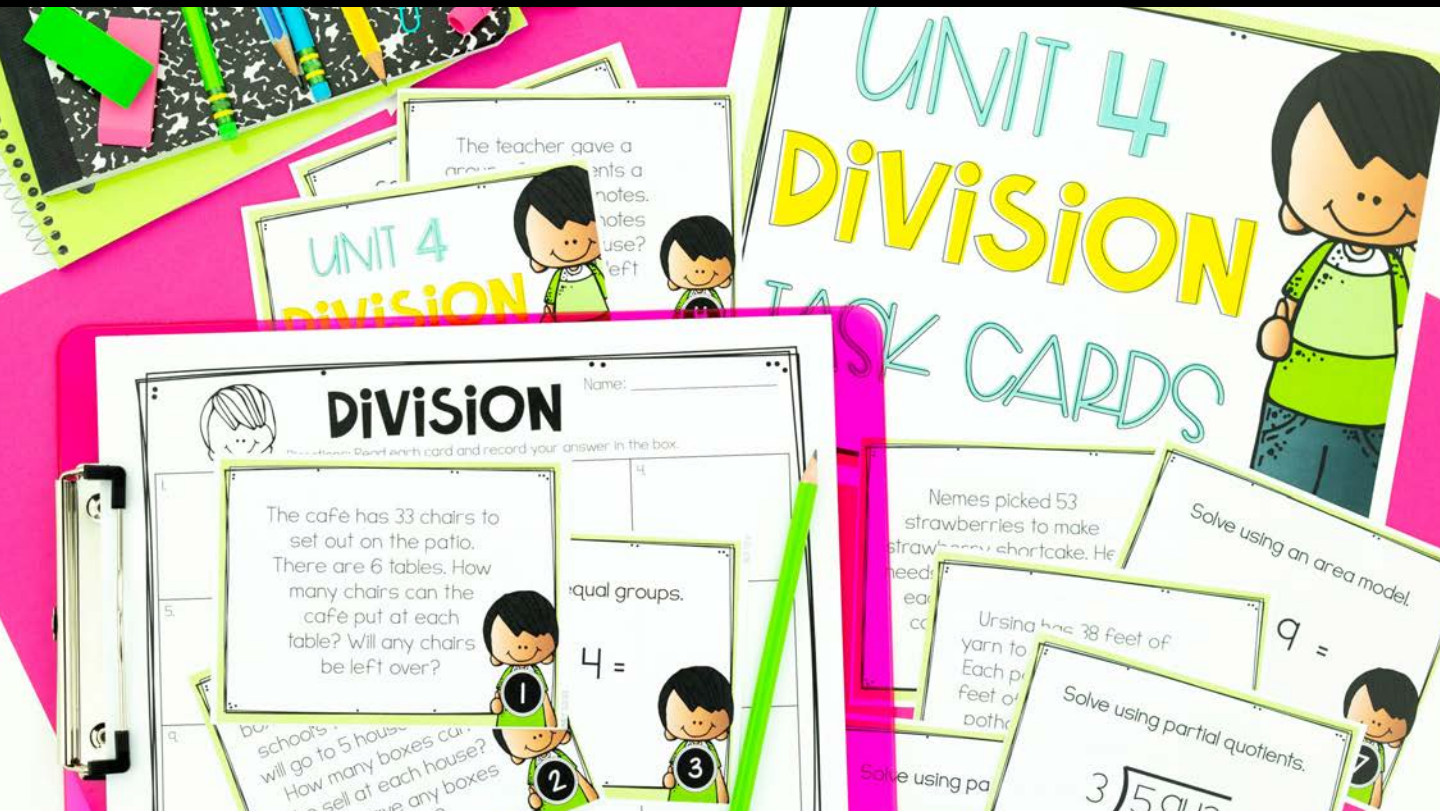
1. $6 \overline{) 1,458} = \underline{\quad} \times \underline{\quad}$
 $= \underline{\quad} \times \underline{\quad}$

2. $8 \overline{) 2,036}$

INCLUDES DAILY POWERPOINTS FOR TEACHING MATH SKILLS.



games and task cards are INCLUDED FOR END OF UNIT REVIEW





Unit 4

Directions: Write the quotient for each equation.

1. $24 \div 8 =$ _____ 2. $32 \div 4 =$ _____

4. $49 \div 7 =$ _____ 5. $70 \div 7 =$ _____

7. $15 \div 5 =$ _____ 8. $36 \div 6 =$ _____

Directions: Solve the problem using each strategy.

9. $12 \div 4 =$ _____

10. Equal Groups

12. Array

Unit 4

Directions: Solve each problem using equal groups. Write the quotient on the line.

1. $36 \div 7 =$ _____

2. $49 \div 5 =$ _____

Unit 4 Assessment

Directions: Use the standard algorithm to solve each problem.

11. $3 \overline{)56}$ 12. $7 \overline{)540}$

14. $4 \overline{)2,998}$

Unit 4 Pre

Directions: Write the quotient for each equation.

1. $24 \div 8 =$ 3 2. $32 \div 4 =$ _____

4. $49 \div 7 =$ 7 5. $70 \div 7 =$ _____

7. $15 \div 5 =$ 3 8. $36 \div 6 =$ _____

Directions: Solve the problem using each strategy.

9. $12 \div 4 =$ 3

10. Equal Groups

12. Array

Skill	Equal Groups	Arrays	Area Model	Partial Quotients	Standard Algorithm	Place Value	Estimating Quotients	Word Problems	
Student	1-2	3-4	5-6	7-10	11-14	15-22	23-26	27-31	TOTAL
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$
	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{5}$	$\frac{1}{31}$

Assessment Answer Key

the word problem solving strategy.

to his wedding. 134 people were not at the wedding. How many people were at Teddy's wedding?

There were 31 rows of 8 people at Teddy's wedding.

creation ordered 34 crates of mulch. Each flower bed had 283 bags of mulch. How many flower beds can they fill?

They can fill 1,924 flower beds with mulch.

Yummy Pizza Company ordered 453 bags of flour. They used 104 bags to make breadsticks. The rest of the flour was used for pizzas. Each pizza needs 3 bags of flour. How many pizzas can they make with the flour?

They can make 116 pizzas with the flour.

Directions: Read and solve the problem in the space below.

H. Vanessa is selling candy bars to raise money. She has 8 bars of each flavor for a total of 64. How many different flavors are in the box?

$64 \div 8 = 8$

There are 8 different flavors in the box.

4. $29 \div 6 =$ 4 r 5

31. Yummy Pizza Company ordered 453 bags of flour. They used 104 bags to make breadsticks. The rest of the flour was used for pizzas. Each pizza needs 3 bags of flour. How many pizzas can they make with the flour?

They can make 116 pizzas with the flour.

INCLUDES PRE- AND POST-ASSESSMENTS, ANSWER KEYS AND A RUBRIC FOR TRACKING STUDENT PROGRESS



Area Model Template



Multiplication Table							
2	4	5	6	7	8	9	10

UNIT FOR VOCABULARY CARDS

DIV

ESTIMATE
when we calculate

DIVIDEND
the total in a division

$$42 \div 6$$

DIVISION
making a number into equal parts

$$6 \div 3 = 2$$

STANDARD ALGORITHM
the common step-by-step

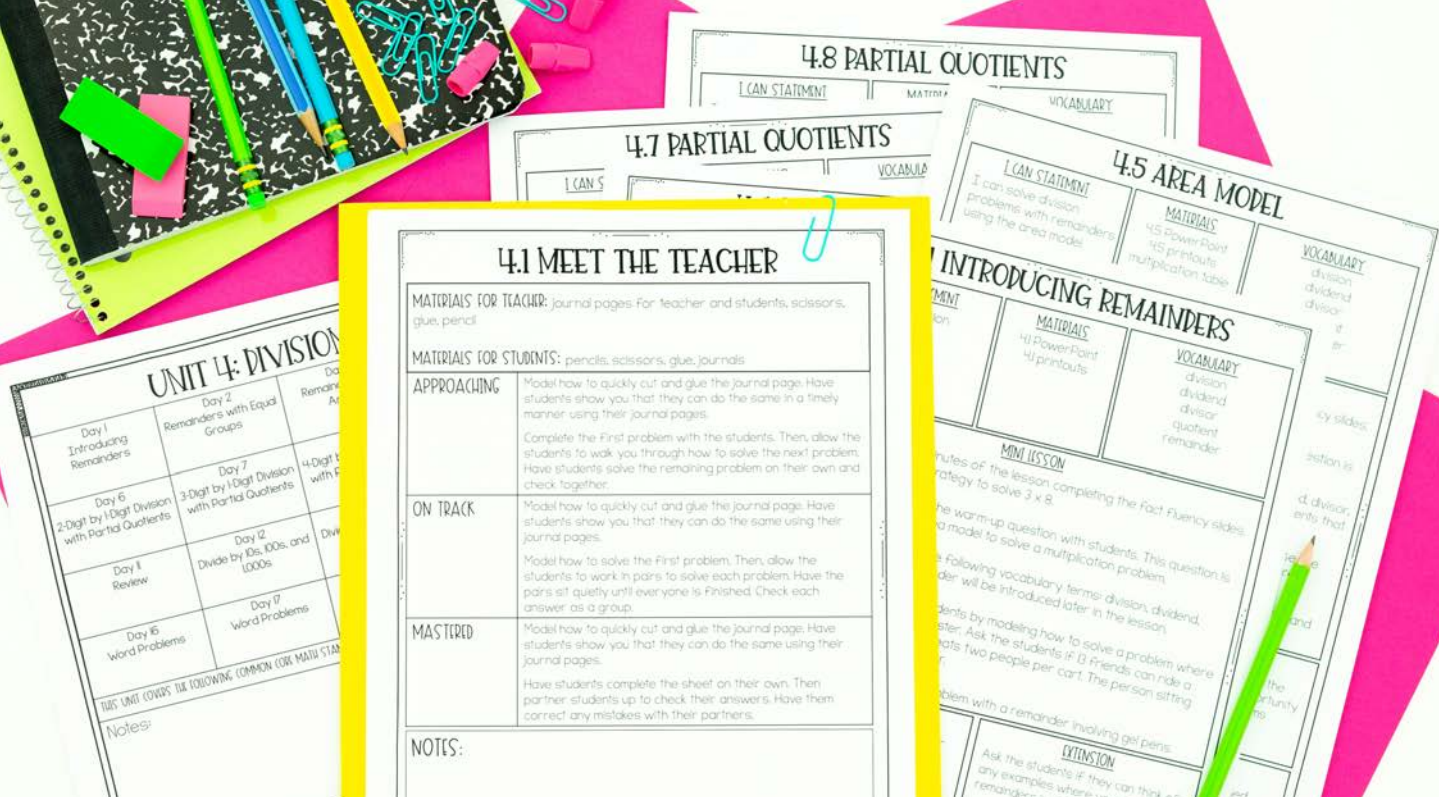
DIVISOR
what the dividend is being divided

$$42 \div 6$$

PARTIAL QUOTIENTS
parts of an answer to a division problem

REMAINDER
the part left over after division

Vocabulary cards and anchor charts for teacher and students to reference throughout the unit



each day of math is fully planned for you with all the tools you'll need!

