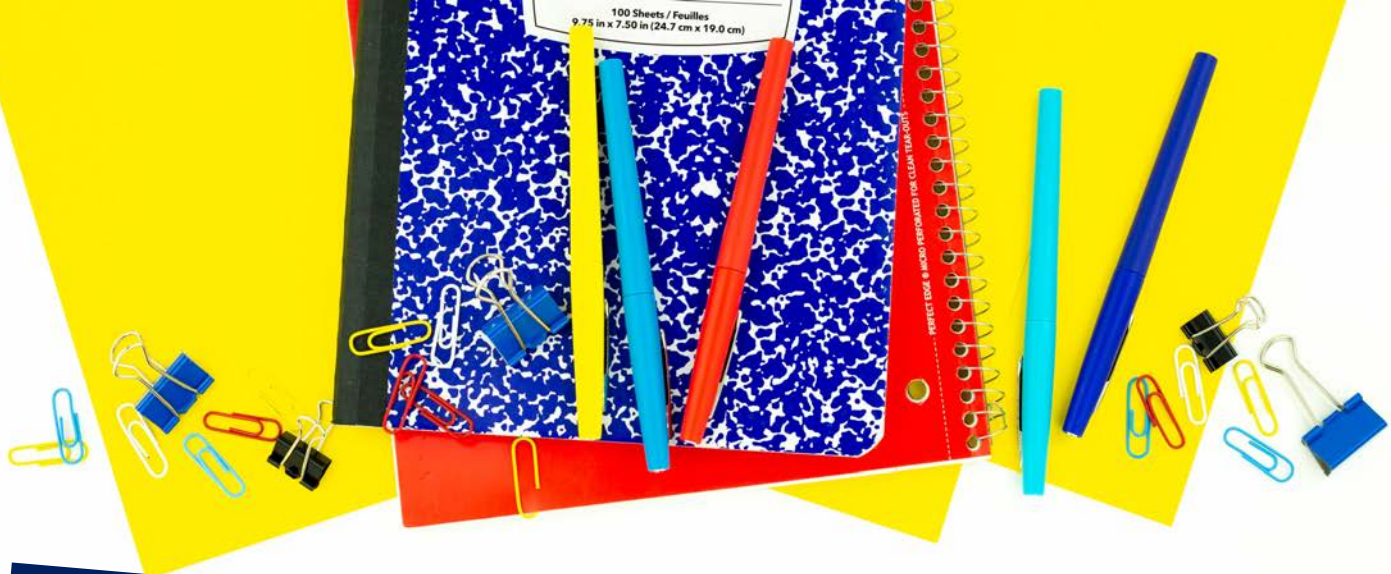# NOT SO WIMPY

UNIT 5: DIVISION

3RD GRADE MATH CURRICULUM

20 DAYS OF LESSON PLANS, POWERPOINTS, PROBLEM SETS, EXIT TICKETS, ASSESSMENTS, GAMES, TASK CARDS, PROJECT-BASED LEARNING & MORE!

NOT SO wimpy Teacher

UNIT 5: DIVISION *at a glance*

Day 1 Preassessment & Equal Groups	Day 2 Equal Groups	Day 3 Repeated Subtraction	Day 4 Repeated Subtraction	Day 5 Tape Diagrams
Day 6 Tape Diagrams	Day 7 Arrays	Day 8 Arrays	Day 9 Division as Multiplication	Day 10 Review
Day 11 Fact Families	Day 12 Missing Factor	Day 13 Missing Factor	Day 14 Missing Divisor	Day 15 Missing Divisor
Day 16 Division Word Problems	Day 17 1 and 2 Step Word Problems	Day 18 1 and 2 Step Word Problems	Day 19 PBL	Day 20 Assessment

THIS UNIT COVERS THE FOLLOWING COMMON CORE MATH STANDARDS: 3.NBT.3, 3.OA.1, 3.OA.3. 3.OA.4, 3.OA.5, 3.OA.7, 3.OA.8, 3.OA.9

Notes:

INCLUDES A PACING GUIDE TO SEE ALL FOUR WEEKS AT A GLANCE
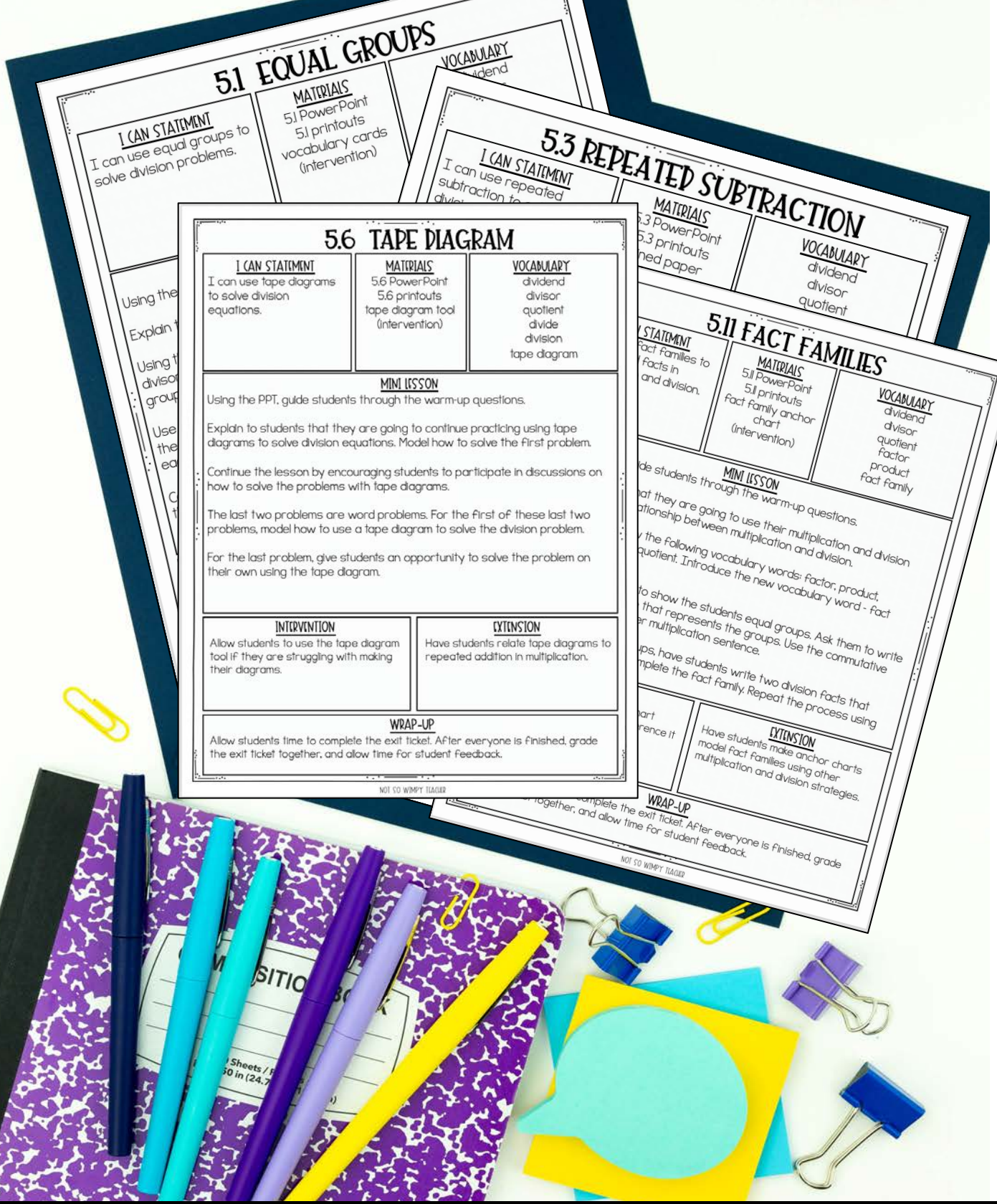
5.1 EQUAL GROUPS

I CAN STATEMENT
I can use equal groups to solve division problems.

MATERIALS
5.1 PowerPoint
5.1 printouts
vocabulary cards
(intervention)

VOCABULARY
dividend

5.3 REPEATED SUBTRACTION

I CAN STATEMENT
I can use repeated subtraction to divide

MATERIALS
5.3 PowerPoint
5.3 printouts
lined paper

VOCABULARY
dividend
divisor
quotient

5.6 TAPE DIAGRAM

I CAN STATEMENT
I can use tape diagrams to solve division equations.

MATERIALS
5.6 PowerPoint
5.6 printouts
tape diagram tool
(intervention)

VOCABULARY
dividend
divisor
quotient
divide
division
tape diagram

MINI LESSON
Using the PPT, guide students through the warm-up questions.

Explain to students that they are going to continue practicing using tape diagrams to solve division equations. Model how to solve the first problem.

Continue the lesson by encouraging students to participate in discussions on how to solve the problems with tape diagrams.

The last two problems are word problems. For the first of these last two problems, model how to use a tape diagram to solve the division problem.

For the last problem, give students an opportunity to solve the problem on their own using the tape diagram.

INTERVENTION
Allow students to use the tape diagram tool if they are struggling with making their diagrams.

EXTENSION
Have students relate tape diagrams to repeated addition in multiplication.

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

5.11 FACT FAMILIES

I CAN STATEMENT
fact families to facts in and division.

MATERIALS
5.11 PowerPoint
5.11 printouts
fact family anchor chart
(intervention)

VOCABULARY
dividend
divisor
quotient
factor
product
fact family

MINI LESSON
de students through the warm-up questions.

at they are going to use their multiplication and division ationship between multiplication and division.

y the following vocabulary words: factor, product, quotient. Introduce the new vocabulary word - fact

to show the students equal groups. Ask them to write that represents the groups. Use the commutative r multiplication sentence.

ups, have students write two division facts that mplete the fact family. Repeat the process using

EXTENSION
Have students make anchor charts model fact families using other multiplication and division strategies.

WRAP-UP
complete the exit ticket. After everyone is finished, grade together, and allow time for student feedback.

NOT SO WIMPY TEACHER

5.6 MEET THE TEACHER

MATERIALS FOR TEACHER: whiteboard, marker, eraser

MATERIALS FOR STUDENTS: whiteboard, marker, eraser

APPROACHING	Model how to solve 27 ÷ 3 using a tape diagram. Model how to add one to each group until you reach the dividend.
	Write 40 ÷ 4 on your whiteboard. Ask students to write the dividend on their tape diagrams. Have students add to each group until they reach 40. Find the quotient by asking them how many are in each group.
	Repeat with 32 ÷ 8, 28 ÷ 4, and 72 ÷ 8.
ON TRACK	Ask students to solve 27 ÷ 3 on their whiteboards using tape diagrams. Monitor for misconceptions or errors, and reteach as necessary.
	Ask students to solve 32 ÷ 8 on their boards, and choose a student to model how to solve it to the rest of the group.
	Repeat with 28 ÷ 4, 72 ÷ 8, and 42 ÷ 6.
MASTERED	Ask students to solve 32 ÷ 8 on their boards, and choose a student to model how to solve it to the rest of the group.
	Repeat with 28 ÷ 4, 72 ÷ 8, and 42 ÷ 6.
	Ask students to relate using tape diagrams to skip counting and repeated addition in multiplication. How are they similar?

NOTES:

5.15 MEET THE TEACHER

FOR TEACHER: journal page for self and students, scissors, glue

FOR STUDENTS: scissors, glue, pencils, journals

APPROACHING	Model how to quickly cut and glue the journal page. Have students show you that they can do the same with their journal pages.
	Complete the journal page with students.
ON TRACK	Model how to quickly cut and glue the journal page. Have students show you that they can do the same with their journal pages.
	Scaffold the journal page by completing it with the students, and then let them work independently.
MASTERED	Model how to quickly cut and glue the problems. Have students show you that they can do the same.
	Ask students to solve the problems, and then review their answers with their partners.

NOTES:

Unit 5 Lesson 18 — **Problem Set**

Directions: Solve each problem using the word problem solving strategy.

1. Marty had $97. He went shopping and bought 4 shirts for $8 each.

2. Misty each stamp

3. Heidi batch cupca

4. Newm minute him 38

Unit 5 Lesson 15 — **Problem Set**

Directions: Use a tape diagram to find the missing divisor.

1. $36 \div r = 4$ r =

2. $100 \div a = 10$ a=

3. Melanie bought 7 packs of pens. She pens. How many pens were in each pac

4. Clent has 18 horses. His barn has 9 st should he put in each stall?

Unit 5 Lesson 18 — **Exit Ticket**

Directions: Solve the problem using the word problem solving strategy.

Unit 5 Lesson 15 — **Exit Ticket**

Directions: Use a tape diagram to find the missing divisor.

1. $50 \div p = 10$ p =

Unit 5 Lesson 7 — **Exit Ticket**

Directions: Solve the equation using an array.

1. $28 \div 7 = $ _____

Unit 5 Lesson 9 — **Homework**

Directions: Use skip counting to solve the division equation.

1. $27 \div 3 = $ _____

Unit 5 Lesson 14 — **Homework**

Directions: Use a tape diagram to find the missing divisor.

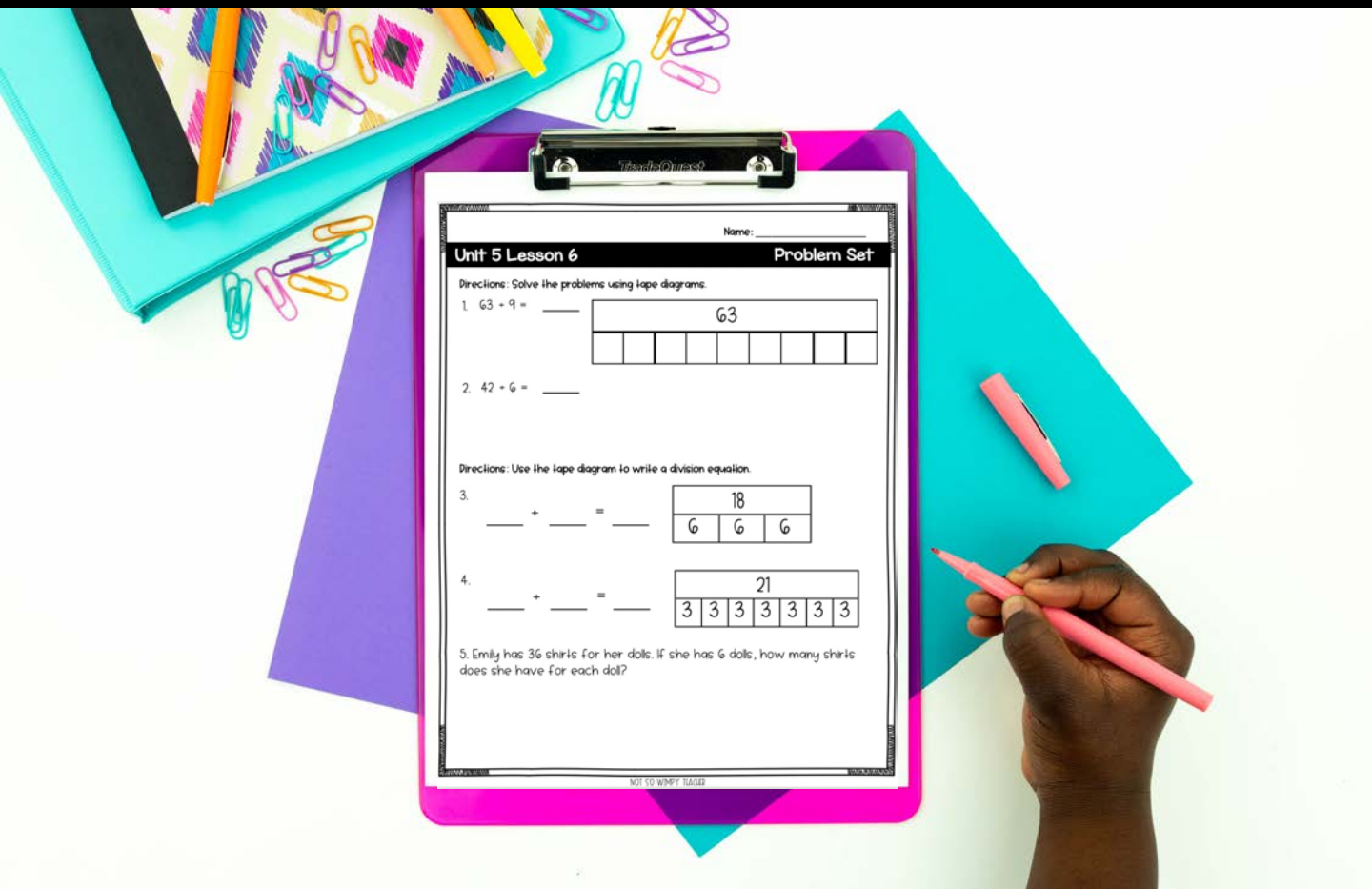1. $21 \div v = 3$ v =

p =

w =

54

anges. If

les of the Appalachian Trail. They
many miles did they walk each day?

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

Unit 5 Lesson 6 — **Problem Set**

Directions: Solve the problems using tape diagrams.

1. $63 \div 9 = $ _____

63								

2. $42 \div 6 = $ _____

Directions: Use the tape diagram to write a division equation.

3. _____ ÷ _____ = _____

18		
6	6	6

4. _____ ÷ _____ = _____

21						
3	3	3	3	3	3	3

5. Emily has 36 shirts for her dolls. If she has 6 dolls, how many shirts does she have for each doll?

5.4 Repeated Subtraction

I can use repe[ated]
subtraction to s[olve]

Fact Fluency

+ & − within 20

Use the ten frames to add and subtract within 20.
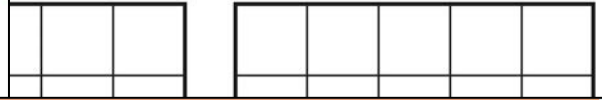
Repeated Subtraction

Use repeated subtraction to find the quotient.

$$42 \div 6 =$$

Repeated Subtraction

Vocabulary Review:

$$15 \div 3 = 5$$

Repeated Subtraction

How many times did we have to [subtract]
to reach zero?

$$36 \div 6$$

$$36 - 6 = 30$$
$$30 - 6 = 24$$

Centers

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

NOT SO WIMPY TEACHER

Exit Ticket

Directions: Solve the equation using repeated subtraction.
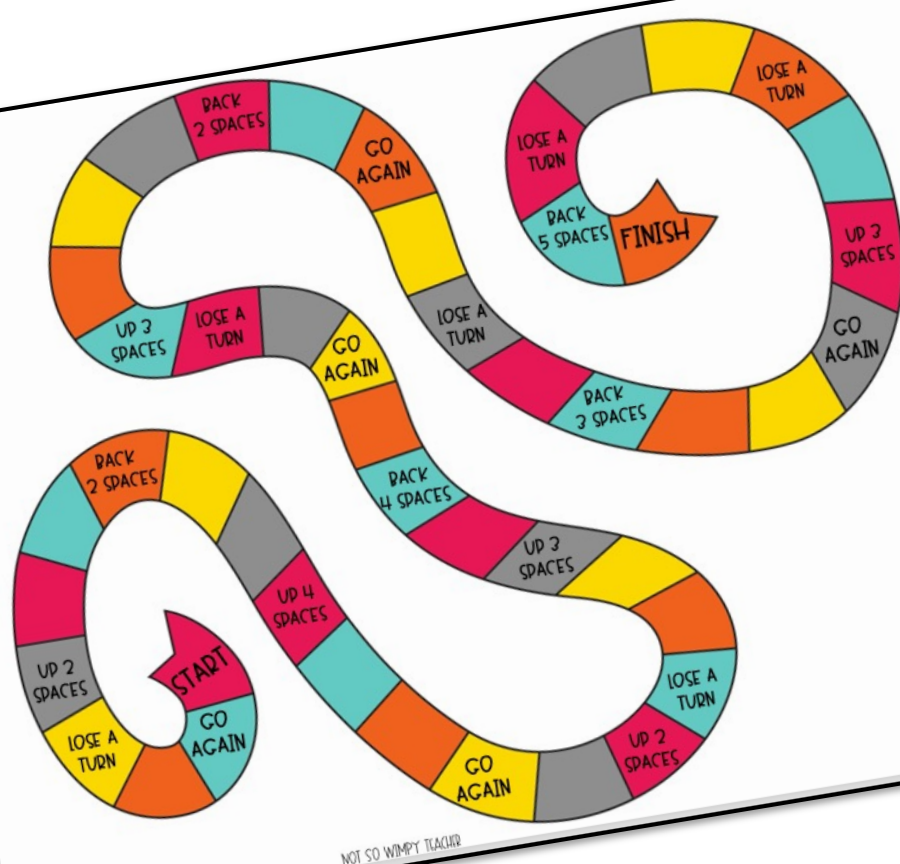
1. $32 \div 8 =$ _____

Directions: Write the division equation that represents the repeated subtraction sentences.

2. _____ ÷ _____ = _____

$$16 - 8 = 8$$
$$8 - 8 = 0$$

INCLUDES DAILY POWERPOINTS FOR TEACHING MATH SKILLS.

CARD 1:

Write a division equation from the tape diagram.

18		
6	6	6

CARD 13:

Complete the fact family.

$3 \times 4 = 12$ $12 \div 3 = 4$

$4 \times 3 = 12$ $\_ \div \_ = \_$

CARD 5:

Write a division equation for the array.

a game and scoot are included for the end of unit review

Write a division equation for the array.

5

Complete the fact family.

$3 \times 4 = 12$

$4 \times 3 = 12$

$12 \div 3 = 4$

$\_ \div \_ = \_$

Find the missing factor.

$7 \times w = 63$

19

DIVISION

Name: _____

Directions: Read each card and record your answer in the box.

1.	2.	3.	4.
5.	6.	7.	8.
9.	10.	11.	12.
13.	14.	15.	16.
18.	19.	20.	
22.	23.	24.	

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

Name: _____

Unit 5 Division

Assessment

Directions: Use skip counting to solve the problems. Write the quotient on the lines.

5.a.   24 ÷ 4 = _____

_____

5.b.   25 ÷ 5 = _____

_____

Directions: Find the missing factor by ____ factor on the line.

Name: _____

Assessment

ng an array. Write the quotient on the

Name: _____

Assessment

gram to solve. Write the quotient in the blank.

te the quotient on the line.

Name: _____

Unit 5 Division

Directions: Use skip counting to sol on the lines.

5.a.   24 ÷ 4 = **6**

    4, 8, 12, 16, 20, 24

5.b.   25 ÷ 5 = **5**

    5, 10, 15, 20, 25

Directions: Find the missing factor factor on the line.

6.a.   4 × ___**9**___ = 36

6.b.   7 × ___**8**___ = 56

Directions: Find the missing divisor by using a division strategy. Write the divisor on the line.

7.a.   24 ÷ ___**6**___ = 4

7.b.   63 ÷ ___**9**___ = 7

Skill	Tape Diagram	Equal Groups	Arrays	Repeated Subtraction	Skip Counting	Missing Factor	Missing Divisor	Fact Family	One Step Word Problems	Two Step Word Problems	TOTAL
Student	1	2	3	4	5	6	7	8	9, 10	11, 12, 13	
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20
	__/2	__/2	__/2	__/2	__/2	__/2	__/2	__/1	__/2	__/3	__/20

Name: _____

Assessment Answer Key

rite the quotient in the blank.
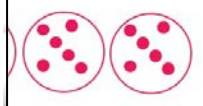
6

32

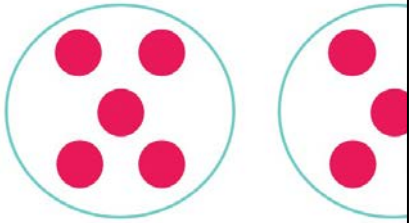| **4** | **4** | **4** | **4** | **4** |

te the quotient on the line.

12 − 4 = 8
8 − 4 = 4
4 − 4 = 0

42 − 6 = 36
36 − 6 = 30
30 − 6 = 24
24 − 6 = 18
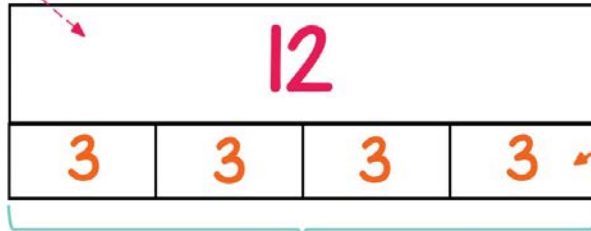18 − 6 = 12
12 − 6 = 6
6 − 6 = 0

EQUAL GROUPS

15 ÷

15 ÷ 3

TAPE DIAGRAMS

$$12 \div 4 = 3$$

dividend

12

3 | 3 | 3 | 3

quotient
(in each)

divisor
(groups)

VOCABULARY CARDS AND ANCHOR CHARTS FOR TEACHER AND STUDENTS TO REFERENCE THROUGHOUT THE UNIT
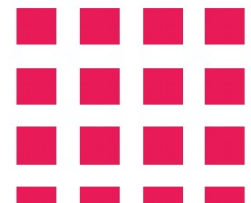

TAPE DIAGRAM
using boxes of equal size

15

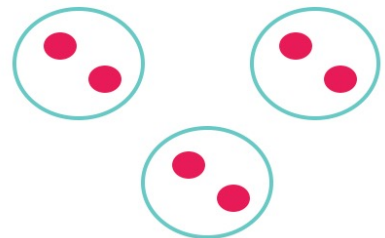# ARRAYS
arranging items into rows and columns

EQUAL GROUPS
separating items into groups that have the same number of items

Community Garden

Planting your Garden

Garden Cost

The Farmer's Market

Harvesting Your Garden

Community Harvest

a Project-Based Learning for students to review the standards in a fun and engaging way

5.7 ARRAYS

I CAN STATEMENT	MATERIALS	VOCABULARY
I can use arrays to solve division equations.	5.7 PowerPoint 5.7 printouts array, column, row vocabulary cards array anchor chart	dividend divisor quotient divide division array row column

MINI LESSON

Using the PPT, guide students through the warm-up questions.

Tell the students that we are going to learn a new division strategy today, using arrays. Remind students what an array is and how we used it in multiplication.

Using the PPT, model how to make an array to solve a division equation. Begin by asking how many total dots we have (the dividend). Then, ask how many

---

Name: _____

5 Lesson 9

ons: Use skip counting to solve the division equation.

6 ÷ 8 = _____

54 ÷ 6 = _____

Directions: Use skip counting to write a division equation.

3. _____ + _____ = _____

4. _____ + _____ = _____

5. A photo album can hold a total of 45 _____ each page, how many pages are in the

---

Name: _____

Unit 5 Lesson 1   **Exit Ticket**

Directions: Solve each equation using equal groups.

1.   28 ÷ 4 = _____

2.   64 ÷ 8 =

Name: _____

Homework

he division equation.

9, 18, 27, 36, 45, 54

10, 20, 30, 40, 50

had a total

FACT FAMILIES

A set of related multiplication and division number sentences, tha

---

REPEATED SUBTRACTION

15 ÷ 3

15 - 3 = 12   ←--- 1 time
12 - 3 = 9   ←--- 2 times
9 - 3 = 6   ←--- 3 times
6 - 3 = 3   ←--- 4 ti

5 ×
3 ×

DIVISOR
how the dividend is being

42 ÷ 6

VARIABLE
letter that represents a missing number

4 × v = 2

FACT FAMILY
ers that make 2
on and 2 division
quations

5, 3,
5 × 3 =
3 × 5 =
15 ÷ 3 =
15 ÷ 5 =

Equal Groups
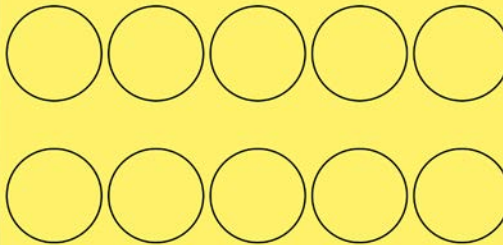
Directions: Cut along the scissor lines. Glue the flaps into a journal. Under each flap, write the corresponding division equation for the array, or write the array that represents the multiplication equation.

DIVISION
Arrays

15 ÷ 3	32 ÷ 8

Multiplication Table

2	3	4	5	6	7	8	9	10
2	3	4	5	6	7	8	9	10
4	6	8	10	12	14	16	18	20
6	9	12	15	18	21	24	27	30
8	12	16	20	24	28	32	36	40
10	15	20	25	30	35	40	45	50
12	18	24	30	36	42	48	54	60
14	21	28	35	49	49	56	63	70

EACH DAY OF MATH IS FULLY PLANNED FOR YOU WITH ALL THE TOOLS YOU'LL NEED!