

Division

Unit 2 Overview: 9 lessons

Students learn division two ways: sharing equally (how many in each group) and making equal groups (how many groups). They write division sentences and name the dividend, divisor and quotient, divide with arrays and with jumps back to 0, and find a quotient as a missing factor. Then they write fact families, divide by 2, 5 and 10 and with 0 and 1, find missing numbers in $\times$ and $\div$ equations, and solve division stories. Ask “do we know how many groups, or how many in each?” every day: it tells sharing from grouping.

THE UNIT, DAY BY DAY

Day 1	Pre-Check	What students already know, before the first lesson.
Day 2	2.1 Share equally	I can share equally and tell how many each gets.
Day 3	2.2 Make equal groups	I can make equal groups and tell how many groups.
Day 4	2.3 Division sentences	I can name the dividend, the divisor and the quotient.
Day 5	2.4 Divide with arrays and jumps	I can divide with an array and with jumps back to 0.
Day 6	2.5 Division as a missing factor	I can use a multiplication fact to divide.
Day 7	2.6 Fact families	I can write a multiplication and division fact family.
Day 8	2.7 Divide by 2, 5 and 10, and with 0 and 1	I can divide by 2, 5 and 10, and divide with 0 and 1.
Day 9	2.8 Missing numbers	I can find a missing number in $\times$ and $\div$ equations.
Day 10	2.9 Division stories	I can solve sharing and grouping stories.
Day 11	Unit Review	The review, to go over together.
Day 12	Unit Test	Form A; Form B (other numbers) is for a retest.

GET READY FOR THE UNIT

- Counters, paper plates, cups and square tiles for each pair
- Fact triangle cards, sticky notes, and whiteboards with dry erase markers
- A floor number line from 0 to 30 made with masking tape, and a number line for each student
- Multiplication charts, nickels and dimes, and story cards for sharing and grouping

HOW EACH LESSON GOES

- 1. Warm up** (5 min)
- 2. Teach** (10 min)
- 3. Try it together** (10 min)
- 4. Practice** (15 min)
- 5. Exit ticket** (5 min): a quick check on the lesson.

Each lesson page ends with the Animal Math sheets, makers, tools and quizzes for it. “Sheet 3” is the third worksheet of a pack; a color pack prints each sheet again in black and white.

CHECKING AS YOU GO

PRINTABLE	Pre-Check: Day 1, with a key	EXIT TICKET	Exit Tickets: one a lesson, four to a page
PRINTABLE	Unit Review: the day before the test	PRINTABLE	Unit Test: Forms A and B, with keys



Division

Lesson 2.1: Share equally

GOAL Students share a group of things equally, dealing them out one at a time until none are left, and tell how many each one gets.

About 45 minutes

I can share equally and tell how many each gets.

THE LESSON

- 1 Warm up** (5 min) Give 6 students 18 crayons to share. They deal them out one at a time. How many does each one get? Did everyone get the same number?
- 2 Teach** (10 min) Put out 10 counters and 2 plates. Deal the counters one at a time, first plate, second plate, until none are left: 5 on each plate. Then share 16 counters on 4 plates: 4 on each. Show a share that is not equal and fix it together.
Say: “Deal them out one at a time until they are all gone. Then count how many are on one plate.”
- 3 Try it together** (10 min) Partners take a card (“share 27 on 3 plates”, “share 30 on 5 plates”, “share 16 on 2 plates”), deal out the counters and write how many are on each plate. Then draw one share on a whiteboard as dots on plates.
- 4 Practice** (15 min) Students share the pictures on the plates and in the bags and write how many each gets on sheet 1 of Division: Sharing and Grouping. Students who need a first step share small numbers on Sharing Equally.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 2.1** and circle a face beside the “I can” line. Look for 5 on each plate and 3 grapes. A student who writes 12 took 3 away instead of sharing; 7 for the grapes gives the number of friends, not how many each one gets.

Need help? Share real counters on plates before drawing, starting with small numbers like 8 on 2 plates.

Ready for more? Share 20 counters on 3 plates. What happens? How could the share be made fair?

GET READY

- 30 counters and 6 paper plates for each pair
- Whiteboards and markers
- A bag of 18 crayons for the warm up

WORDS TO USE

share equally: give everyone the same number

each: every one gets this many

left over: some that could not be shared; equal shares have none

ASK

- Did every plate get the same number?
- How many are on one plate?
- What would happen with one more counter?

WATCH FOR

Puts more on some plates than on others. Deal one at a time, around the circle, and count each plate.

Gives the number of plates as the answer. Point to one plate: how many are on it?

Stops before every counter is shared. Keep dealing until the pile is gone.

ON ANIMAL MATH

PRINTABLE

Division: Sharing and Grouping: sheet 1

PRINTABLE

Sharing Equally: a first step for students who need it

QUIZ

Division Quiz: the Sharing and Grouping level

EXIT TICKET

3rd Grade Division Exit Tickets: Exit Ticket 2.1

Division

Lesson 2.2: Make equal groups

GOAL Students put a group of things into groups of a given size and count how many groups they make: 30 cubes in groups of 5 make 6 groups.

About 45 minutes

I can make equal groups and tell how many groups.

THE LESSON

- 1 Warm up** (5 min) Students line up in groups of 2. How many groups are there? Then try groups of 5. Is anyone left out?
- 2 Teach** (10 min) Show 30 cubes. Snap them into trains of 5: 1, 2, 3, 4, 5, 6 trains. 30 in groups of 5 make 6 groups. Then put 14 cubes in groups of 2: 7 groups. Compare with sharing: there we knew the number of groups; here we know how many go in each group.
Say: "When you know how many go in each group, make groups of that size and count the groups."
- 3 Try it together** (10 min) Partners get a card ("27 in groups of 9", "30 in groups of 10", "16 in groups of 4") and make the groups with cubes. Then they circle groups of that size in a row of dots on a whiteboard and write how many groups.
- 4 Practice** (15 min) Students circle groups in each row of pictures and write how many groups on sheet 2 of Division: Sharing and Grouping, then use the legs to find how many animals on sheet 6 of How Many Legs?
- 5 Exit ticket** (5 min) Students do **Exit Ticket 2.2** and circle a face beside the "I can" line. Look for 6 groups of strawberries and 4 octopuses. A student who writes 3 gave the size of a group; 24 for the octopuses means 8 was taken away from 32 once.

Need help? Snap cubes into trains of the group size before circling pictures.

Ready for more? Find every group size that puts 30 cubes in equal groups with none left over.

GET READY

- Cubes or counters, 30 for each pair
- Cups or bags
- Whiteboards and markers

WORDS TO USE

groups of: how many go in each group

how many groups: what we count when we make groups of a size

divide: split into equal groups

ASK

- How many go in each group?
- How many groups did you make?
- How is this different from sharing?

WATCH FOR

Makes groups of the wrong size. Count each group before circling the next one.

Answers with the size of a group. Count the circles, not what is inside one.

Loses track of which things are already in a group. Cross off each one as it goes into a group.

ON ANIMAL MATH

PRINTABLE

Division: Sharing and Grouping: sheet 2

PRINTABLE

How Many Legs? sheet 6

QUIZ

Division Quiz: the Sharing and Grouping level

EXIT TICKET

3rd Grade Division Exit Tickets: Exit Ticket 2.2

Division

Lesson 2.3: Division sentences

GOAL Students write a division sentence for sharing and for grouping, and name its parts: in $18 \div 3 = 6$, the dividend is 18, the divisor is 3 and the quotient is 6.

About 45 minutes

I can name the dividend, the divisor and the quotient.

THE LESSON

- 1 Warm up** (5 min) Share 12 counters on 2 plates. Then put 12 counters in groups of 2. How many on each plate? How many groups?
- 2 Teach** (10 min) Share 18 counters on 3 plates and write $18 \div 3 = 6$. Lay the cards under it: 18 is the dividend, 3 is the divisor, 6 is the quotient. Read it two ways: "18 shared into 3 groups is 6 in each" and "18 in groups of 3 makes 6 groups". Then write $40 \div 10 = 4$ for 40 pencils in boxes of 10.
Say: "The dividend is the total. The divisor is what you divide by. The quotient is the answer."
- 3 Try it together** (10 min) Partners build and write a division sentence for each card ("30 shared by 6 friends", "45 in groups of 9", "16 shared on 8 plates"), then hold up the dividend, divisor or quotient card as the teacher calls one out.
- 4 Practice** (15 min) Students write the division sentence for each picture and fill in the dividend, divisor and quotient on sheet 3 of Division: Sharing and Grouping, then write the division equation for each picture on sheets 1 and 2 of Division Equal Groups to 10.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 2.3** and circle a face beside the "I can" line. Look for 48, 8 and 6 under dividend, divisor and quotient, then $54 \div 6 = 9$. A student who writes $6 \div 54$ put the divisor first; swapping the divisor and the quotient means the words need another look.

Need help? Keep the three labeled cards on the desk and lay them under each sentence.

Ready for more? Write a sharing story and a grouping story for $42 \div 7$.

GET READY

- Counters and plates
- Three cards labeled dividend, divisor and quotient for each pair
- Whiteboards and markers

WORDS TO USE

dividend: the number you divide, the total

divisor: the number you divide by

quotient: the answer when you divide

ASK

- Which number is the total?
- What is the quotient in $18 \div 3 = 6$?
- Can you read this sentence as sharing and as grouping?

WATCH FOR

Writes the small number first: $6 \div 18$. The dividend, the total, always comes first.

Mixes up the divisor and the quotient. The divisor is what you divide by; the quotient comes after the equal sign.

Writes a times sentence for a sharing picture.

Ask: do we know the total? Then the sentence starts with it and $\div$.

ON ANIMAL MATH

PRINTABLE

Division: Sharing and Grouping: sheet 3

PRINTABLE

Division Equal Groups to 10: sheets 1-2

QUIZ

Division Quiz: the Sharing and Grouping level

EXIT TICKET

3rd Grade Division Exit Tickets: Exit Ticket 2.3



Division

Lesson 2.4: Divide with arrays and jumps

GOAL Students divide with an array (the total in a given number of equal rows) and with equal jumps back to 0 on a number line, where the number of jumps is the quotient. **About 45 minutes**

I can divide with an array and with jumps back to 0.

THE LESSON

- 1 Warm up** (5 min) Count back by 10s from 60 to 0, holding up a finger for each jump. How many fingers? Then count back by 5s from 40.
- 2 Teach** (10 min) Build 20 tiles into 5 equal rows: 4 in each row, so $20 \div 5 = 4$. Then on the floor number line, start at 20 and jump back by 4s to 0: 16, 12, 8, 4, 0. Count the jumps: 5. So $20 \div 4 = 5$. The array and the jumps show the same fact family.
Say: "Start at the total. Jump back by the divisor until you reach 0. The number of jumps is the quotient."
- 3 Try it together** (10 min) Partners take cards ("28 in 4 rows", "14 by 2s back to 0", "25 by 5s back to 0"), solve each with tiles or jumps and write the division sentence.
- 4 Practice** (15 min) Students divide with arrays and jump back to 0 on sheet 4 of Division: Sharing and Grouping, then write how much each jump takes away on sheet 4 of Division Fact Drills.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 2.4** and circle a face beside the "I can" line. Look for $45 \div 5 = 9$, then four jumps back from 12 landing on 9, 6, 3 and 0, and $12 \div 3 = 4$. A student who writes 5 for the array read the rows as the answer; jumps that stop before 0 are not finished.

Need help? Build the array with tiles, and walk the jumps on the floor number line.

Ready for more? Show $30 \div 6$ with an array and with jumps. Do both give the same quotient?

GET READY

- Square tiles, 30 for each pair
- A number line from 0 to 30 for each student
- A floor number line from 0 to 30

WORDS TO USE

array: things in equal rows

jump back: a hop down the number line, the same size each time

count the jumps: the number of jumps is the quotient

ASK

- How many rows? How many are in each row?
- Where do you start? Where do you stop?
- What does the number of jumps tell you?

WATCH FOR

Starts at 0 and jumps forward. Start at the total and jump back toward 0.

Counts the numbers landed on, the start included. Count the arcs, not the numbers.

Builds rows that are not equal. Deal the tiles into the rows one at a time.

ON ANIMAL MATH

PRINTABLE

Division: Sharing and Grouping: sheet 4

PRINTABLE

Division Fact Drills: sheet 4

TOOL

Number Line: Mode Jump

QUIZ

Division Quiz: the Sharing and Grouping level

EXIT TICKET

3rd Grade Division Exit Tickets: Exit Ticket 2.4

Division

Lesson 2.5: Division as a missing factor

GOAL Students divide by thinking of the multiplication fact: $60 \div 10$ asks what times 10 is 60, so the quotient is the missing factor, 6.

About 45 minutes

I can use a multiplication fact to divide.

THE LESSON

- 1 Warm up** (5 min) Quick facts on whiteboards: 10×6 , 5×4 and 2×7 . Then ask: what times 5 makes 20?
- 2 Teach** (10 min) Write $20 \div 5 = ?$ and under it $? \times 5 = 20$. Count by 5s to 20: 4 fives, so $20 \div 5 = 4$. Then $18 \div 2$: what times 2 is 18? $9 \times 2 = 18$, so $18 \div 2 = 9$. Find $70 \div 10$ on the multiplication chart: go down the 10s column to 70 and read across to 7.
Say: "To divide, think multiplication. What times the divisor makes the dividend?"
- 3 Try it together** (10 min) Partners take division cards ($80 \div 10$, $14 \div 2$, $60 \div 6$): one writes the times fact with a box for the missing factor, the other finds it, then they write the quotient.
- 4 Practice** (15 min) Students write the times fact that finds each quotient on sheet 3 of Multiplication and Division Fact Families, then find the missing numbers on sheet 3 of Division Fact Drills.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 2.5** and circle a face beside the "I can" line. Look for 10 in both boxes for $90 \div 9$, 2 in both boxes for $8 \div 4$, and $4 \times 10 = 40$ circled. A student who writes 81 for $90 \div 9$ subtracted; circling $4 \times 6 = 24$ or $9 \times 4 = 36$ matched the divisor 4, not the product 40.

Need help? Use the multiplication chart: find the divisor row, slide along to the dividend, and read the top of that column.

Ready for more? Write the two division facts you can find from $8 \times 5 = 40$.

GET READY

- Multiplication charts
- Fact triangle cards
- Whiteboards and markers

WORDS TO USE

missing factor: the factor you need to find

related fact: a times fact with the same three numbers

think multiplication: turn a division fact into a times fact

ASK

- What times fact helps with this division?
- Which number is the missing factor?
- How can the multiplication chart help?

WATCH FOR

Copies the dividend into the box: $\square \times 4 = 28$, writes 28. Read it as a question: what times 4 makes 28?

Multiplies the two numbers it sees. Say it as groups: the quotient is smaller than the dividend.

Picks a times fact with the wrong product. Check the product: it must be the dividend.

ON ANIMAL MATH

PRINTABLE

Multiplication and Division Fact Families: sheet 3

PRINTABLE

Division Fact Drills: sheet 3

MAKER

Fill in the Blank Equations: Multiplication, Division, Range Within 10

TOOL

Multiplication Chart

QUIZ

Division Quiz: the Missing Factor level

EXIT TICKET

3rd Grade Division Exit Tickets: Exit Ticket 2.5

Division

Lesson 2.6: Fact families

GOAL Students write the four facts of a fact family, two times facts and two division facts with the same three numbers, and see that a square fact like 6×6 has only two.

About 45 minutes

I can write a multiplication and division fact family.

THE LESSON

- 1 Warm up** (5 min) Show a 4 by 6 array of tiles. Students write a times fact for it, turn it a quarter turn and write another.
- 2 Teach** (10 min) Draw a fact triangle with 24 at the top and 4 and 6 at the bottom. Write $4 \times 6 = 24$ and $6 \times 4 = 24$, then $24 \div 4 = 6$ and $24 \div 6 = 4$. Cover the top number: multiply. Cover a bottom number: divide. Then show $6 \times 6 = 36$: that family has only two facts.
Say: "The same three numbers, four facts: two times facts and two division facts."
- 3 Try it together** (10 min) Partners take fact triangles (3, 9 and 27; 4, 7 and 28; 7, 10 and 70) and write all four facts on whiteboards. Then they find the fact that does not belong in a list like $4 \times 7 = 28$, $28 \div 4 = 7$ and $21 \div 7 = 3$.
- 4 Practice** (15 min) Students write the four facts for each triangle on sheet 1 and for each array on sheet 2 of Multiplication and Division Fact Families, then find and fix the fact that does not belong on sheet 5.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 2.6** and circle a fact beside the "I can" line. Look for $8 \times 10 = 80$, $10 \times 8 = 80$, $80 \div 8 = 10$ and $80 \div 10 = 8$ in any order, and $42 \div 6 = 7$ circled. A student who writes $8 \div 80$ put the small number first; circling $6 + 7 = 13$ or $42 - 6 = 36$ used the numbers with + or -, not $\times$ or $\div$.

Need help? Build the array with tiles: the rows, the columns and the total are the three numbers.

Ready for more? Make a fact family with a 1 in it, like 1, 8 and 8. How many facts does it have?

GET READY

- Fact triangle cards
- Square tiles for arrays
- Whiteboards and markers

WORDS TO USE

fact family: facts that use the same three numbers

product: the number you get when you multiply the other two

related facts: facts in the same family

ASK

- Which number is the product?
- How many facts are in this family? Why?
- What division facts come from $7 \times 10 = 70$?

WATCH FOR

Writes a division fact with the small number first. The product always comes first in a division fact.

Writes only two of the facts. Count: two times facts and two division facts.

Adds the bottom numbers of the triangle. Multiply the bottom numbers to get the top one.

ON ANIMAL MATH

PRINTABLE

Multiplication and Division Fact Families: sheets 1-2 and 5

MAKER

Fact Families: Multiplication and Division, Number Range Within 10, Difficulty Write All 4 Facts

QUIZ

Division Quiz: the Missing Factor level

EXIT TICKET

3rd Grade Division Exit Tickets: Exit Ticket 2.6

Division

Lesson 2.7: Divide by 2, 5 and 10, and with 0 and 1

GOAL Students divide by 2, 5 and 10 by thinking of the times fact, and learn the rules for 0 and 1: a number divided by 1 is itself, a number divided by itself is 1, 0 divided by a number is 0, and no number can be divided by 0.

About 45 minutes

I can divide by 2, 5 and 10, and divide with 0 and 1.

THE LESSON

- 1 Warm up (5 min)** Count nickels by 5s and dimes by 10s, a finger for each coin. How many dimes make 80 cents? How many nickels make 40 cents?
- 2 Teach (10 min)** Dividing by 2 finds half: half of 24 is 12, so $24 \div 2 = 12$. Divide by 5 or 10 by counting nickels or dimes: $40 \div 5 = 8$ and $80 \div 10 = 8$. Then the rules, with 12 counters: $12 \div 1 = 12$, one group gets them all. $12 \div 12 = 1$, groups of 12 make 1 group. $0 \div 12 = 0$, there is nothing to share. $12 \div 0$ cannot be done: there are no groups to put them in.
Say: "Divide by 1 and you get the number. Divide a number by itself and you get 1. Zero divided by any number is 0."
- 3 Try it together (10 min)** Flip division cards for 2, 5 and 10 and rule cards like $15 \div 1$, $20 \div 20$ and $0 \div 30$. Partners say the quotient and the times fact or the rule that proves it.
- 4 Practice (15 min)** Students divide by thinking of the times fact and circle the one that cannot be done on sheet 4 of Facts With 0, 1, 2, 5 and 10, then solve the riddles on sheet 5.
- 5 Exit ticket (5 min)** Students do **Exit Ticket 2.7** and circle a face beside the "I can" line. Look for $18 \div 2 = 9$, $10 \div 2 = 5$, $50 \div 5 = 10$ and $20 \div 10 = 2$, then 3, 1, 0 and 10. A student who writes 9 for $9 \div 9$ or 1 for $3 \div 1$ mixed up the two rules for 1; 8 for $0 \div 8$ means dividing 0 was taken to give the number.

Need help? Keep the multiplication chart and the coins out, and act out the 0 and 1 rules with counters and plates.

Ready for more? Tell a story that shows why $7 \div 0$ cannot be done.

GET READY

- Multiplication charts
- Nickels and dimes, or pictures of them
- Division fact cards for 2, 5 and 10, and rule cards with 0 and 1

WORDS TO USE

half: dividing by 2 finds half

divide by 1: one group gets them all

divide by itself: groups of the whole number make 1 group

ASK

- What times fact helps with $80 \div 10$?
- Why is $0 \div 30$ equal to 0?
- Why can we not divide by 0?

WATCH FOR

Mixes up $12 \div 1$ and $12 \div 12$. Act it out: one group gets all 12; groups of 12 make one group.

Writes 30 for $0 \div 30$. Ask: if there is nothing to share, how many does each one get?

Counts by the wrong number to divide by 5. Count nickels: each one is 5.

ON ANIMAL MATH

PRINTABLE

Facts With 0, 1, 2, 5 and 10: sheets 4-5

MAKER

Division Fact Drills: Times Tables: 2s, 5s and 10s

TOOL

Multiplication Chart

QUIZ

Division Quiz: the Divide by 2, 5 and 10 level

EXIT TICKET

3rd Grade Division Exit Tickets: Exit Ticket 2.7

Division

Lesson 2.8: Missing numbers

GOAL Students find a missing number in any place of a multiplication or division equation by thinking of its fact family: $4 \times \square = 24$, $\square \div 3 = 6$, $40 = \square \times 10$.

About 45 minutes

I can find a missing number in $\times$ and $\div$ equations.

THE LESSON

- 1 Warm up** (5 min) Show a fact triangle for 3, 8 and 24 with a sticky note over the 8. Students write a fact that finds the hidden number.
- 2 Teach** (10 min) Write $4 \times \square = 24$. Think: 4 times what is 24? $4 \times 6 = 24$, so the box is 6. Write $\square \div 3 = 6$: the box is the dividend, so multiply, $6 \times 3 = 18$. Write $40 = \square \times 10$: the equal sign can come first and it still means 40 is what times 10. Check each one by putting the number in the box.
Say: "Find the fact family. Use the times fact to find the missing number, then check it in the box."
- 3 Try it together** (10 min) Partners write $8 \times 4 = 32$, $36 \div 9 = 4$ and $40 = 4 \times 10$, cover one number with a sticky note, and trade: the other partner finds the number and checks it.
- 4 Practice** (15 min) Students find the unknown in any place on sheet 4 of Multiplication and Division Fact Families, then find the missing numbers on sheet 3 of Multiplication Fact Drills.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 2.8** and circle a face beside the "I can" line. Look for 9 and 7 in the top row and 10 and 6 in the bottom row, then 5 for the riddle. A student who writes 1 or 5 in $\square \div 3 = 2$ subtracted or added instead of multiplying 2×3 ; 20 for the riddle took 5 away from 25.

Need help? Write the fact triangle for each equation first and cover the number that is missing.

Ready for more? Write three equations for the family of 7, 8 and 56, with the box in a different place each time.

GET READY

- Fact triangle cards
- Sticky notes to cover a number
- Whiteboards and markers

WORDS TO USE

unknown: the number we need to find

equation: a number sentence with an equal sign

box: the place for the unknown number

ASK

- Is the box a factor, the product or the dividend?
- What fact family does this equation belong to?
- How can you check your number?

WATCH FOR

Divides when the box is the dividend: writes 2 for $\square \div 3 = 6$. The dividend is the biggest number: multiply 6×3 .

Thinks the equal sign must come last. Read $40 = \square \times 10$ as "40 is the same as what times 10".

Does not check the answer. Put the number in the box and read the fact.

ON ANIMAL MATH

PRINTABLE **Multiplication and Division Fact Families:** sheet 4

PRINTABLE **Multiplication Fact Drills:** sheet 3

MAKER **Fact Families:** Multiplication and Division, Difficulty Fill in Missing Numbers

MAKER **Fill in the Blank Equations:** Multiplication, Division, Range Within 10, Position Mixed

QUIZ **Division Quiz:** the Missing Factor level

EXIT TICKET **3rd Grade Division Exit Tickets:** Exit Ticket 2.8

Division

Lesson 2.9: Division stories

GOAL Students solve division stories: they tell whether a story asks how many in each group (sharing) or how many groups (grouping), write a division sentence and answer with the unit.

About 45 minutes

I can solve sharing and grouping stories.

THE LESSON

- 1 Warm up** (5 min) Read two short stories: 18 crayons shared by 2 friends, and 18 crayons in boxes of 2. Students act both out. How are they different?
- 2 Teach** (10 min) Read: "Jo puts 32 marbles in 4 bags with the same number in each. How many in each bag?" It asks how many in each, so it is sharing: $32 \div 4 = 8$ marbles. Then: "There are 27 kids. Each team has 9 kids. How many teams?" It asks how many groups: $27 \div 9 = 3$ teams.
Say: "What does the story want: how many in each, or how many groups? Write the division sentence, then the unit."
- 3 Try it together** (10 min) Partners sort story cards into sharing and grouping, then solve one of each with counters and write the division sentence and the answer with its unit. Include stories with 2, 5 and 10, like 30 cards in 5 piles and 90 cents in dimes.
- 4 Practice** (15 min) Students solve the sharing and grouping stories on sheet 3 of Multiplication and Division Word Problems, then circle the question and write the division sentence for the stories on sheet 5 of Division: Sharing and Grouping.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 2.9** and circle a face beside the "I can" line. Look for $60 \div 10 = 6$ stickers and $12 \div 6 = 2$ plates. A student who writes 50 subtracted, and 10 gives the divisor; an answer without stickers or plates is not finished.

Need help? Act each story out with counters and plates before writing the sentence.

Ready for more? Write a sharing story and a grouping story for $63 \div 7$.

GET READY

- Story cards for sharing and grouping
- Counters and plates
- Whiteboards and markers

WORDS TO USE

how many in each: a sharing story: we know the number of groups

how many groups: a grouping story: we know the size of each group

unit: what the answer counts, like marbles or teams

ASK

- Does the story ask how many in each or how many groups?
- Which number is the dividend?
- What does your answer count?

WATCH FOR

Multiplies because the story has two numbers. Act it out: is the total given? Then divide.

Writes the divisor first. The total, the dividend, comes first.

Leaves off the unit. Read the question again: how many what?

ON ANIMAL MATH

PRINTABLE

Multiplication and Division Word Problems: sheet 3

PRINTABLE

Division: Sharing and Grouping: sheet 5

MAKER

Word Problems: Division only, Number Range 1-10

QUIZ

Word Problems Quiz: the Multiply and Divide level

EXIT TICKET

3rd Grade Division Exit Tickets: Exit Ticket 2.9

