

MATH UNIT

Which number counts the groups

Grade 3

8 lessons

8 × 30 minutes

5 source books

240 minutes in all

THE QUESTION THIS UNIT FOLLOWS

The sentence gives you two numbers. Which one says how many groups, and what told you?

ABOUT THIS UNIT

This unit is about getting a division out of a sentence before any counters move. One book asks how many in each twelve times and names the groups with a different noun every time: flowers, lines, directions, puddles, pens. Children collect the noun that follows the second number from six verses, find that no two are the same word, and say what all six are doing. Then they test the small words that carry the work — each, groups, into, round — by predicting what the word tells them to do and only writing an answer once the counters agree, and they swap each for all in a question and discover the swapped question needs no arithmetic at all because the answer was already printed in the verse.

The middle lessons turn a division into something you can see and argue about. Fifteen paper circles are laid as five rows of three, rebuilt as three rows of five and then spread as fifteen single circles, with the equation written under each arrangement. A character says out loud that he could divide fifteen by five, stops himself and divides by fifteen instead; children build both results on labelled mats and argue for one divisor in a frame that will not accept better, easier or faster without a number attached. Then the count-off arrives as a second way of making equal teams, done with the voice rather than the eyes.

The last three lessons are about what a sentence leaves out. Six pizza slices dealt two to a plate say how many people are eating, the sentence says two friends, and the two-plate arrangement leaves slices over — so the reader has to be counted and the leftover has to be accounted for. A book that answers none of its twelve questions is worked in a fixed order: read the funding

line aloud, then deal, then say the number. The unit closes on a share whose size is decided by a phrase, proved by swapping three ways for six ways and dealing the same thirty-six cubes again.

THE MATHEMATICAL ARC

Each lesson does one job the lesson before it made possible.

- 1 Six different nouns, all naming the number of groups
- 2 The small word does the work, and you can prove it by swapping it
- 3 Draw the arrangement, and write the equation that says the same thing
- 4 Two divisors for the same fifteen, and a reason with numbers in it
- 5 Counting off makes the teams with your voice
- 6 The plates say how many people, and the sentence forgot one
- 7 Read the line that funds it, then deal, then say the number
- 8 A phrase sets the number of shares, and swapping it moves the answer

SOURCE BOOKS

Every lesson in this unit is already published under Math lessons. Nothing here asks you to teach anything you cannot open today.



The Great Divide

3 lessons in this unit



The Multiplying Menace Divides: A Math Adventure

2 lessons in this unit



Jump, Kangaroo, Jump!

1 lesson in this unit



Pizza Counting

1 lesson in this unit



Everybody Wins!

1 lesson in this unit

HOW TO USE THIS GUIDE

Open the source lesson before you teach.

Each day names one lesson that already exists under Math lessons, with its book, its number and its title. This guide says what that lesson is doing in the sequence and what to collect from it; the lesson itself carries the steps, the printables and the answers.

Thirty minutes a day.

Five minutes to connect to yesterday, the twenty-minute source lesson, five minutes to close on something you can see. A day that runs long should lose the close, never the core.

Teach a lesson on its own if you need to.

Every day carries a one-sentence opening for a teacher who is using that lesson outside the sequence.

Stop after a checkpoint.

The unit holds together if you stop after either checkpoint and come back to it. Stopping between a checkpoint and the next one leaves a lesson without the evidence it was built on.

WHERE THIS FITS IN YOUR YEAR

When to teach it

After the unit on sharing into equal groups, which establishes the three numbers and the dealing. This one is the language half of the same topic and assumes children can already deal one at a time.

What students need first

Children can deal a total into a stated number of equal groups, count a pile of thirty-six, and read a short verse aloud.

What this unit develops

Finding the number of groups in a sentence that never says the word; testing what each, into, groups and round do to a pile; writing the equation for an arrangement and saying which number counts the rows; arguing for a divisor with both numbers in the sentence; counting off; noticing who a sentence leaves out; reading the funding line before producing a number.

What it prepares them for

Word problems in Grade 4, where the sentence decides the operation; and any later work where a quantity has to be justified by the line that funds it.

CURRICULUM CONNECTIONS

None claimed. The lessons in this unit carry their own standards classifications on their own pages, checked lesson by lesson. A unit-level expectation is a different claim, and none has been verified for this unit, so none is printed here. Use the placement guide above to site the unit in your year, and the individual lesson pages for the codes.

UNIT AT A GLANCE

#	MATHEMATICAL MOVE	SOURCE LESSON	COLLECT
1	Six different nouns, all naming the number of groups	The Great Divide lesson 2, The Word After the Second Number	Six nouns collected and read aloud, and the hummingbirds, the goats and the toads built — three verses that all use four, with the number on one plate written under each.
2	The small word does the work, and you can prove it by swapping it	The Great Divide lesson 5, The One Word That Sends You Inside a Group	Four words tested on their own verses, each with a prediction made before the dealing and an answer written after it.
3	Draw the arrangement, and write the equation that says the same thing <i>Checkpoint after this lesson</i>	The Multiplying Menace Divides: A Math Adventure lesson 2, Five Rows of Three: Drawing Peter's Fifteen Holes	Three arrangements of the same fifteen circles, each drawn and each with its own equation written underneath.
4	Two divisors for the same fifteen, and a reason with numbers in it	The Multiplying Menace Divides: A Math Adventure lesson 4, Divide by Five or by Fifteen? Peter Chooses	Both results built and left standing, both equations written, and the reason frame completed aloud with both numbers in it by each partner in turn.
5	Counting off makes the teams with your voice	Jump, Kangaroo, Jump! lesson 2, Count Off Without Losing Your Place	Three count-offs run to the end, one plate counted after each, and both numbers said aloud for every run.
6	The plates say how many people, and the sentence forgot one <i>Checkpoint after this lesson</i>	Pizza Counting lesson 5, The Person the Sentence Forgot to Count	Three plates from the dealing set against the two people the sentence names, with the two-plate arrangement built as well and the slices left over counted.

#	MATHEMATICAL MOVE	SOURCE LESSON	COLLECT
7	Read the line that funds it, then deal, then say the number	The Great Divide lesson 6, The Answer the Book Never Prints	Three numbers produced for three verses, each written beside its verse with the funding line read aloud before it, and a partner's check that the order held.
8	A phrase sets the number of shares, and swapping it moves the answer	Everybody Wins! lesson 5, The words that decide the number	Both deals of the same thirty-six cubes — three trays and six trays — with the deciding phrase underlined and both answers said in one sentence.

UNIT VOCABULARY

Words students say, not words they are taught to define.

how many groups	The number the sentence names with a noun — flowers, pens, puddles. Lesson 1 collects six of them.
each	The word that sends you inside one group. Lesson 2 swaps it for all and watches the arithmetic disappear.
rows of, groups of	Two ways of saying one arrangement. Lesson 3 writes the equation for both.
divisor	The number you divide by. Lesson 4 has two of them for the same fifteen and asks which one to choose.
count off	One number word to each child in turn, round and round. Lesson 5's procedure.
left over	What the dealing cannot place. Lesson 6 finds some and will not let them be tidied away.

MATERIALS

From the source lessons

Each day's materials are listed on that day's page below and on the source lesson itself. Nothing is duplicated here.

New for this unit

- Checkpoint 1 page, one per child
- Checkpoint 2 page, one per child
- Performance task set: a verse card written for the task, twenty-two counters, six paper plates, a leftovers tray, a recording strip with boxes for the total, the number of groups, one group's share and the leftover, and a pencil, one set per pair
- Performance task page, one per child

ASSESSMENT PLAN

Daily evidence

Keep the sticky notes from lesson 1 — the six nouns that all name the number of groups. Put them back on the table at the start of every later lesson in the unit and ask which word is doing that job today. It costs thirty seconds and it is the thing children stop doing first.

Checkpoint 1, after lesson 3: Read it before you deal it

Two sentences, neither containing the word groups: fifteen frogs at three ponds, and twenty beetles under five stones. The child sets out the plates from the sentence, deals, and says which number counted the creatures, which counted the groups, and which one they produced.

Book-free. Two sentence cards, counters and plates, no book.

Look for. The plates counted out before the dealing starts, from the noun in the sentence. A child who deals into any number of piles and then counts the piles has answered a different question.

Checkpoint 2, after lesson 6: Two each, and the ones left in the box

Thirteen counters and a sentence saying every child gets two. The child finds how many children can be given two, keeps the leftover visible, and says what the sentence did and did not settle.

Book-free. Counters, plates and a tray, no book.

Look for. Six children and one left over, with the leftover named as a result. Watch for a seventh plate holding one — the sentence said two each, so a plate of one is not a child who got their share.

Culminating task: A sentence that never says groups, and a total that will not go round

Each pair is handed a verse-style sentence carrying two numbers and no use of the word groups. They underline both numbers, circle the noun after the second one, and set out that many plates before dealing anything. They deal one at a time until no complete round is possible, read one plate, and put what is left in the tray. Then they fill all four boxes on the strip and say the whole thing as one sentence naming what each number counts — and finally say which word in the sentence told them how many plates, and what the sentence does not settle about the leftover.

Collect. The sentence with both numbers underlined and the noun circled, the plates and tray as dealt, the strip with four boxes filled, and the spoken sentence naming what each number counts.

What it assesses. A division read out of words, carried out, and reported with the leftover inside the answer — plus the word that decided the number of groups named out loud, which is the thing this unit exists to teach.

DAILY LESSON PAGES

Lesson 1 Six different nouns, all naming the number of groups

SKILL LESSON **The Great Divide** (/math-library/460.html) · lesson 2, The Word After the Second Number · Grade 3 · 20 minutes

Reading which number tells you how many groups to make

I CAN	I can find the number that says how many groups, whatever word comes after it.
BIG IDEA	Flowers, lines, directions, puddles and pens are all doing one job: naming how many piles the animals go into. Deciding what counts as a group is the reader's job, not the book's.
SUCCESS	The child collects the noun after the second number from six verses, says what all six have in common though no two are the same word, and builds three verses that share the number four.
CONNECT 5 MIN	First lesson. Read one verse aloud and ask how many plates the table will need, without saying the word groups yourself. Take every answer and ask what in the verse decided it.
TAUGHT ON ITS OWN	The book almost never says the word groups where a reader needs it — it says flowers, lines, directions, puddles and pens instead.
SOURCE CORE 20 MIN	Children underline the two numbers in a verse and circle the noun right after the second one, then read the six verse cards at their table and write that noun on a sticky note, one per note, putting all six notes together and reading them out.
COLLECT	Six nouns collected and read aloud, and the hummingbirds, the goats and the toads built — three verses that all use four, with the number on one plate written under each.

CLOSE | 5 MIN

Children read the pelican verse, where the noun after the second number is fish and the fish are not a place the pelicans stand, deal fourteen counters onto two plates anyway, and say whether the number they get still answers the question the verse asks.

From the source lesson: Verse cards, one verse per card; Pencils; Sticky notes, six per table; Counters, at least twenty per pair; Paper plates, five per pair; Word cards: divide, groups, flock

Watch for: The second number taken as the answer. Ask what that number counts and have the child point at the plates it decided.

Lesson 2

The small word does the work, and you can prove it by swapping it

MATH THROUGH THE READING

The Great Divide (/math-library/460.html) · lesson 5, The One Word

That Sends You Inside a Group · Grade 3 · 20 minutes

Students test four book words by building the verse two ways, then swap each for all in a book question and find that the swapped question needs no arithmetic at all.

I CAN	I can say what each, into, groups and round tell me to do, and show what changes when a word is swapped.
BIG IDEA	One word decides whether a question needs any arithmetic at all. Each sends you inside a single group; all sends you back to a number already printed on the page.
SUCCESS	The child predicts what the underlined word tells them to do before dealing, writes an answer only once the counters agree, and says which single word was carrying the division in their verse.
CONNECT 5 MIN	Yesterday the noun said how many plates. Ask what the word each is doing in the same sentence, and hold the question open until the counters answer it.
TAUGHT ON ITS OWN	The book's questions turn on four small words — groups, into, round and each — and never remark on any of them.
SOURCE CORE 20 MIN	Children read four verse cards and underline each, groups, into and round where they find them, then for each verse say aloud what the underlined word tells them to do to the pile, deal the counters onto plates, read one plate, and write the answer only after the counters agree with what they said.
COLLECT	Four words tested on their own verses, each with a prediction made before the dealing and an answer written after it.
CLOSE 5 MIN	Children reread the turtle question with all the bails in place of each bail, try to build it, find there is nothing to deal, and say the answer to the swapped question and where in the verse that number was

already sitting — then tell another pair which single word was carrying the division.

From the source lesson: Verse cards, one verse per card; Counters, at least twenty per pair; Paper plates, five per pair; Pencils; The turtle verse written out large with each circled; The swapped question written underneath it

Watch for: An answer written before the counters move. Cover the recording strip until the plates are dealt; the prediction is the lesson.

Lesson 3

Draw the arrangement, and write the equation that says the same thing

SKILL LESSON

The Multiplying Menace Divides: A Math Adventure (/math-library/96.html) · lesson

2, Five Rows of Three: Drawing Peter's Fifteen Holes · Grade 3 · 20 minutes

Showing a division of fifteen as rows and groups

I CAN

I can build a division as rows, draw it, and write the equation for what I built.

BIG IDEA

An arrangement and an equation are two records of one thing. The numbers in the equation each point at something on the desk — one counts the rows, one counts what a row holds.

SUCCESS

The child builds, draws and writes the equation for three arrangements of the same fifteen, and says which number in each equation counts the rows.

CONNECT | 5 MIN

The words have decided how many plates twice now. Lay fifteen circles out in five rows of three and ask what could be written down that would say exactly this.

TAUGHT ON ITS OWN

Peter finds fifteen covered holes and counts them as five rows of holes in groups of three, which is the one place in the book where a division is already drawn.

SOURCE CORE | 20 MIN

Children lay fifteen paper circles flat in five rows of three and count by threes with one touch per number word, write the division that matches what is on the desk, slide each row into a heap to check that every heap holds three, then move the same fifteen into three rows of five and draw and write that one too.

COLLECT

Three arrangements of the same fifteen circles, each drawn and each with its own equation written underneath.

CLOSE | 5 MIN

Children spread the fifteen circles so each one stands alone as its own group, draw the fifteen single circles in a line, write the equation for fifteen groups of one and ring the single hole the character kept, reading the equation aloud while a partner points at the ringed circle.

From the source lesson: Fifteen paper circles per pair; Equation strip, one per student; Blank drawing paper, one sheet per student; Crayon or marker per student; Word cards: groups of, remained, rows of

Watch for: An equation whose numbers do not match the desk. Ask the child to point at what each number counts before the next arrangement is built.

Checkpoint after this lesson: Read it before you deal it. The page is at the end of this guide.

Lesson 4 Two divisors for the same fifteen, and a reason with numbers in it

SKILL LESSON **The Multiplying Menace Divides: A Math Adventure** (/math-library/96.html) · lesson

4, Divide by Five or by Fifteen? Peter Chooses · Grade 3 · 20 minutes

Comparing what different divisors do to fifteen

I CAN	I can build two divisions of the same total and argue for one with both numbers in my sentence.
BIG IDEA	The same total divides more than one way, and choosing between them is an argument. An argument without a number in it is not one.
SUCCESS	The child builds both results side by side, writes both equations, and completes the reason frame with both numbers while a partner argues the other divisor with its own numbers.
CONNECT 5 MIN	Fifteen was arranged three ways yesterday and nobody had to choose. Today the character chooses, and so does the class.
TAUGHT ON ITS OWN	Peter says out loud that he could divide fifteen by five to get three holes, stops himself, and divides by fifteen instead, and one hole remains.
SOURCE CORE 20 MIN	Children build fifteen counters as five groups of three on the left mat and the same fifteen as fifteen groups of one on the right, count what a single group holds on each, lift one group off each mat and set them side by side, and write both equations under the mats.
COLLECT	Both results built and left standing, both equations written, and the reason frame completed aloud with both numbers in it by each partner in turn.
CLOSE 5 MIN	Children build the same fifteen as three groups of five, count what one group holds, say where that result sits between the other two naming all three numbers, and decide with a partner whether it changes the argument they just made. Better, easier and faster may not be said without a number attached.

From the source lesson: Fifteen counters per pair; Two labelled mats per pair, one marked five groups and one marked fifteen groups; Dry-erase marker per pair; Reason frame strip: I would divide by ___ because it leaves ___ holes; Word cards: divided by, reduce, remained

Watch for: A bare preference — I like the second one. Point at the frame and wait for both numbers.

Lesson 5**Counting off makes the teams with your voice****SKILL LESSON****Jump, Kangaroo, Jump!** (</math-library/575.html>) · lesson 2, Count Off Without Losing

Your Place · Grade 3 · 20 minutes

Counting off around a group of twelve to make two, three or four equal teams

I CAN

I can count off round a ring and end with teams that match.

BIG IDEA

There is more than one way to reach equal groups. The count-off gives one number word to each in turn, and the teams only come out matching if nothing was skipped and nothing took two numbers.

SUCCESS

The child runs the count-off into two, three and four teams without losing the count and says both numbers — how many teams and how many on each — for every run.

CONNECT | 5 MIN

Every group so far has been dealt onto plates. Ask how a class actually splits into teams in the playground, and try that on counters in a ring.

TAUGHT ON ITS OWN

Three times the book says the same thing about how the teams got made: they counted off.

SOURCE CORE | 20 MIN

Children set twelve counters in a ring and go round saying one, two, one, two, sliding each counter to the plate whose number they just said with a partner watching that nothing is skipped and nothing takes two numbers, then return the counters and run it again into three teams and again into four.

COLLECT

Three count-offs run to the end, one plate counted after each, and both numbers said aloud for every run.

CLOSE | 5 MIN

Children hold their plates beside the book's lines for the pool and the canoes, say whether the two agree, and say what happens to the size of a team every time a plate is added.

From the source lesson: Twelve counters in a ring per pair of students; Five paper plates per pair, numbered 1 to 5; Printed card carrying the book's three team-size lines; Team number cards, six each of 1 and 2, per pair; Word cards: count off, equal, team

Watch for: A lost place halfway round. Put every counter back in the ring and start again rather than guessing where the count had reached.

Lesson 6 The plates say how many people, and the sentence forgot one

MATH THROUGH THE READING **Pizza Counting** (/math-library/88.html) · lesson 5, The Person the Sentence Forgot to Count · Grade 3 · 20 minutes

Students deal out the six slices of the book's target pizza at two per person to find how many people are eating, then check that number against the party the book names and explain why the reader has to be counted too.

I CAN

I can find how many groups a total makes at a stated size, and say what is left over.

BIG IDEA

Dealing at so many to a plate answers a different question from dealing onto a fixed number of plates: it tells you how many plates. And what the plates say can disagree with what the sentence says.

SUCCESS

The child deals the six slices at two to a plate, counts the plates, reads the number of people out of the sentence, and states in one sentence who the phrase two friends leaves out.

CONNECT | 5 MIN

Until now the sentence has said how many plates. Cut a paper pizza into six and say two slices each, and ask what the question has become.

TAUGHT ON ITS OWN

The book gives the target pizza six equal slices and a sharing sentence naming two friends.

SOURCE CORE | 20 MIN

Pairs cut a paper circle into the six equal slices the book gives and deal them onto plates at two slices a plate until the slices run out, count the plates and write that number down without saying it aloud, then decide from the words alone how many people are at this pizza and point at the part of the sentence they used.

COLLECT

Three plates from the dealing set against the two people the sentence names, with the two-plate arrangement built as well and the slices left over counted.

CLOSE | 5 MIN

Children who read two people set out two plates and say what happens to the slices left over, then each pair states in one sentence who the phrase two friends leaves out and why that person still eats,

using the plates as the evidence.

From the source lesson: Paper circles, one per pair; Scissors; Small plates, three per pair; The book's sharing sentence written large

Watch for: The leftover slices quietly put on a plate that already holds two. Count every plate aloud; two to a plate was the rule.

Checkpoint after this lesson: Two each, and the ones left in the box. The page is at the end of this guide.

Lesson 7 Read the line that funds it, then deal, then say the number

MATH THROUGH THE READING **The Great Divide** (/math-library/460.html) · lesson 6, The Answer the Book Never Prints · Grade 3 · 20 minutes

Students find that every one of the book's twelve questions goes unanswered, then produce three of the missing numbers and read aloud the exact line that made each one the only possible answer.

I CAN I can produce a number a book never prints and read out the line that made it the only answer.

BIG IDEA A produced number needs its evidence. The order matters: the sentence that fixes the answer is read aloud before the counters move, not after the answer is known.

SUCCESS The child works three verses in the read-then-deal order, saying the funding line aloud each time before the number is spoken or written.

CONNECT | 5 MIN Point out that nobody in this unit has ever found an answer printed in the book. Hand out four verse cards and ask the class to hunt for one anywhere.

TAUGHT ON ITS OWN Every one of the book's twelve questions goes unanswered: each card ends in a question and no card carries a third number.

SOURCE CORE | 20 MIN Children read four verse cards and report that nothing is answered, then for the leatherback verse read aloud the sentence giving the animals and the sentence giving the groups with a finger on each in turn and say which number counts which — dealing nothing yet — before dealing ten counters onto five plates and reading one plate.

COLLECT Three numbers produced for three verses, each written beside its verse with the funding line read aloud before it, and a partner's check that the order held.

CLOSE | 5 MIN Children repeat the read-then-deal order for the leopards and the gorillas, with a partner checking each time that the line was read aloud before the counters moved and that the written number sits beside the right verse.

From the source lesson: Verse cards, one verse per card; Counters, at least twenty per pair; Paper plates, five per pair; Recording strips, one per student; Pencils; The leatherback verse written out large; A blank space where an answer would go, left blank for the whole lesson

Watch for: The line read after the answer. It is easy to slip and it empties the lesson; have the partner hold the counters until the line has been read.

Lesson 8**A phrase sets the number of shares, and swapping it moves the answer****MATH THROUGH THE READING****Everybody Wins!** ([/math-library/379.html](http://math-library/379.html)) · lesson 5, The words that

decide the number · Grade 3 · 20 minutes

Students find the four words in this book that decide what a share comes to, and prove it by swapping one and dealing the cubes again.

I CAN

I can find the phrase that says how many shares there are and show what changing it does.

BIG IDEA

The numerals alone cannot tell you how many shares there are. A phrase does it, and swapping that phrase changes the answer without changing a single numeral in the total.

SUCCESS

The child deals the original and the swapped share, names the deciding phrase, and says in one sentence what the word changed and what the answer became.

CONNECT | 5 MIN

The unit began with a noun deciding the plates. End it with a phrase doing the same job, and test it by changing the phrase rather than the numbers.

TAUGHT ON ITS OWN

The book's sentence names three ways of splitting the prize, and prints two lines for the same thirty-six.

SOURCE CORE | 20 MIN

Pairs take thirty-six cubes and the sentence naming three ways, deal the cubes into three trays and count one tray, then underline the one phrase that says how many shares there are and say aloud why the numerals alone could not have told them.

COLLECT

Both deals of the same thirty-six cubes — three trays and six trays — with the deciding phrase underlined and both answers said in one sentence.

CLOSE | 5 MIN

Children swap each for the in the payment sentence and say what the ticket would then cost one child, then say which of the two words they tested made the bigger difference to the answer and why.

From the source lesson: 36 cubes per pair; Six labelled trays per pair; The book's sentence on a strip; A pencil for underlining; The two printed lines for thirty-six; The swapped sentence beside the original

Watch for: The swap treated as a new problem. Keep the first deal on the table so both answers can be seen at once.

CULMINATING PERFORMANCE TASK

A sentence that never says groups, and a total that will not go round

Each pair is handed a verse-style sentence carrying two numbers and no use of the word groups. They underline both numbers, circle the noun after the second one, and set out that many plates before dealing anything. They deal one at a time until no complete round is possible, read one plate, and put what is left in the tray. Then they fill all four boxes on the strip and say the whole thing as one sentence naming what each number counts — and finally say which word in the sentence told them how many plates, and what the sentence does not settle about the leftover.

Collect. The sentence with both numbers underlined and the noun circled, the plates and tray as dealt, the strip with four boxes filled, and the spoken sentence naming what each number counts.

What it assesses. A division read out of words, carried out, and reported with the leftover inside the answer — plus the word that decided the number of groups named out loud, which is the thing this unit exists to teach.

TEACHER KEY AND RUBRIC

Key

- Checkpoint 1: five in each pond, four under each stone. Fifteen and twenty count the creatures, three and five count the groups, and five and four are the numbers the child produces.
- Checkpoint 2: six children, one left over. A seventh plate with one counter on it is the answer to send back, because the sentence says two each.

- Task: write the sentence with twenty-two things and six containers, so the deal gives three each with four left over. Four is close enough to six to tempt a child into one more round; let them try it and let the plates disagree.

Rubric

STRAND	SECURE LOOKS LIKE	DEVELOPING	NOT YET
Representation	The plates are set out from the sentence before dealing begins, and an arrangement can be drawn and matched to an equation in which each number is pointed at.	Does it with the arrangement in front of them.	Produces an answer without the arrangement or the reason.
Calculation	The deal goes one at a time until no complete round is possible, every group holds the same number, and one group's share and the leftover are both counted correctly.	Does it with the arrangement in front of them.	Produces an answer without the arrangement or the reason.
Meaning	The number of groups is identified from the words — a noun, or each — rather than from the order of the numbers, and a leftover is treated as part of the answer.	Does it with the arrangement in front of them.	Produces an answer without the arrangement or the reason.
Explanation	A choice of divisor, or a claim about a share, is defended with both numbers in the sentence, and the line that funds a produced number is read aloud before the number is given.	Does it with the arrangement in front of them.	Produces an answer without the arrangement or the reason.

PRINT-READY STUDENT PAGES

CHECKPOINT 1 • GRADE 3

Read it before you deal it

Name

Date

Read this one and set your plates out before you touch a counter. Now deal it.
Which number counted the frogs, which counted the ponds, and which one did you
make yourself?

CHECKPOINT 2 • GRADE 3

Two each, and the ones left in the box

Name

Date

Every child gets two. How many children can you give from these? Tell me about what is left. Does the sentence say what happens to it?

CULMINATING TASK • GRADE 3**A sentence that never says groups, and a total that will not go round**

Name _____

Date _____

Underline the two numbers and circle the word right after the second one. Set out that many plates first. Now deal these one at a time until you cannot go round again. Fill in all four boxes, then tell me the whole thing in one sentence with every number saying what it counts. Which word told you how many plates? What does the sentence not tell you about the ones in the tray?

TEACHER PLANNING AND HANDOFF

- The habit worth keeping is plates before counters. A child who deals first will answer whichever question their piles happen to fit.
- Better, easier and faster are banned in lesson 4 without a number attached. The ban is worth carrying into every later argument lesson; it is the cheapest way to raise the quality of an explanation.

- Jump, Kangaroo, Jump!'s table lesson, where the same twelve goes into two, three and four teams and the second column falls, was left out because the shipped unit on sharing into equal groups already teaches that move with a different book. Use it as a revision lesson, not a new one.
- This unit deliberately follows Division: sharing into equal groups rather than replacing it. The dealing, the equal-groups condition and the remainder are taught there; what is here is the reading. Running this one first will leave lesson 3's equations without anything to stand on.

Known gaps in this unit

- A leftover that forces a decision. Lesson 6 produces one and the sentence says nothing about it, which is honest but incomplete: nothing on this shelf puts a child in a situation where the leftover has to be acted on, such as an extra table for the children who did not fit.

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