

Count Equal Groups and Skip-Count

Grade 2 | 8 curated lessons | Arizona

WHEN TO TEACH IT

During place-value, skip-counting, comparison, and equal-group work.

Where This Fits in Your Year

This pack fits naturally within Arizona Grade 2 during place-value, skip-counting, comparison, and equal-group work.

Students count efficiently, compare values, organize equal groups, and explain how a representation proves a numerical claim.

The regional label identifies curriculum placement. It does not claim that every lesson completes an entire regional expectation, and no standards code is assigned on the basis of a title or topic alone.

Teach each lesson for the mathematical actions students actually perform and explain. Add locally required notation, algorithms, display forms, or problem types when they are not explicitly taught.

PLACEMENT PRINCIPLE

Use what the lesson substantively teaches. Do not infer additional coverage from the regional edition label.

Count Equal Groups and Skip-Count

Grade 2 5 skill lessons · 3 math-through-reading

Skill lessons

5 lessons on the mathematics the book carries, each with a printable workbook and a separate

teacher key.

1. Count the Onions by Twos Fluency · Skip counting by twos and fives Pablo counts forty onions by twos and a hundred peppers by fives, and the book prints both counts in full. Students build the same counts with paired and grouped counters, using the book's own count lines as the script, and finish by counting to a called target without the script.

Full lesson — 20 minutes

1. Pairs on the table (4 min) Each pair of students snaps twelve counters into six pairs, the way Abuela ties two onions together. Count the pairs aloud by twos to twelve, touching a pair on each number word. The rule is one touch, one number.

Word preview: pairs, twos First, we have to wash these onions, and tie them in pairs like this. Abuela made a knot with the tops of two onions.

2. The onion count (6 min) Grow the pile to twenty pairs. Students read Pablo's onion count from the printed passage while touching pairs, all the way to forty. Then hide the passage and count the same pairs again from memory. Anyone who loses the chain restarts at the last number both partners agree on.

Two, four, six, eight, ten, twelve, fourteen, sixteen, eighteen, twenty, twenty-two, twenty-four, twenty-six, twenty-eight, thirty, thirty-two, thirty-four, thirty-six, thirty-eight, forty.

3. Faster: fives (6 min) Regroup the forty counters into cups of five, like peppers going into bags. Count by fives to forty, then keep the count going without objects, following the book's pepper count line to one hundred. Students whisper-count in pairs first, then the class counts once together, steady and unhurried.

5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100.

4. Count to my number (4 min) The teacher calls a target under one hundred that the twos or the fives can land on exactly, and names the count to use. Students count aloud to the target with no objects and no script. Finish with one target each way: by twos to a number within forty, by fives to a number within one hundred.

Short version — 9 minutes

1. Pairs on the table (4 min) Each pair of students snaps twelve counters into six pairs, the way Abuela ties two onions together. Count the pairs aloud by twos to twelve, touching a pair on each number word.

Word preview: pairs, twos First, we have to wash these onions, and tie them in pairs like this. Abuela made a knot with the tops of two onions.

2. The onion count (5 min) Grow the pile to twenty pairs and read Pablo's onion count from the printed passage while touching pairs, to forty. Count once more with the passage hidden.

Two, four, six, eight, ten, twelve, fourteen, sixteen, eighteen, twenty, twenty-two, twenty-four, twenty-six, twenty-eight, thirty, thirty-two, thirty-four, thirty-six, thirty-eight, forty.

THREE LEVELS

The mathematics is identical at all three levels: forty counted by twos, one hundred counted by fives, and called targets counted without the script. What changes is the text the student works from.

Support

Use the supported text. The teacher or an audio read reads the passage first, and the printed count line stays face up on the table through every step, including step 4, so the student counts to called targets with the chain in view. A student who loses the count rejoins at the last number the partners agree on rather than starting over.

At Grade

Use the grade-level text, read independently in step 2. The count line is available in steps 2 and 3 and removed in step 4, so the called targets are counted from memory.

Extension

Use the unadapted book text. The student reads the passage cold, without preview, and in step 4 restates the target and the named count in a full sentence before counting to it. Same targets, same counts, no script at any step.

ENGLISH LEARNERS

The count words themselves are the vocabulary of this lesson, and the objects carry the meaning: one touch, one number word, in any language first. Invite students to count the pairs in their strongest language before counting in English; the pairing under their hands is identical, so the English count attaches to something already understood.

MATERIALS

- 40 counters per pair of students
- Printed source passage in this step
- 8 small cups per pair of students
- Word cards: pairs, twos

WORKBOOK

Count Cards: onions and peppers — card set Count on Pablo — Count the Onions by Twos Card 1:

Pairs on the table First, we have to wash these onions, and tie them in pairs like this. Abuela made a knot with the tops of two onions.

Card 2: The onion count Two, four, six, eight, ten, twelve, fourteen, sixteen, eighteen, twenty, twentytwo, twenty-four, twenty-six, twenty-eight, thirty, thirty-two, thirty-four, thirty-six, thirty-eight, forty.

Card 3: The pepper count 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100.

Word Cards — card set Count on Pablo — Count the Onions by Twos pairs twos

TEACHER KEY

Count on Pablo — Count the Onions by Twos

- Six pairs counted by twos: 2, 4, 6, 8, 10, 12. Twelve counters.
- Twenty pairs counted by twos: the printed onion count, ending at forty. Forty counters.
- Forty counters in cups of five: eight cups. Counted by fives: 5, 10, 15, 20, 25, 30, 35, 40.
- The pepper count continues the same fives to one hundred: twenty numbers in the line, twenty bags.
- Called targets by twos within forty: any even number up to forty.
- Called targets by fives within one hundred: any multiple of five up to one hundred.
- A target such as twenty-two cannot be reached by fives, and a target such as thirty-five cannot be reached by twos. If a student is handed one of these, the correct answer is to say so.

2. Five in Each Bag Concept · Counting equal groups — groups and items Abuela's instruction is precise: put five peppers in each plastic bag, then say how many peppers there are. Two different numbers live in that job, the number of bags and the number of peppers, and confusing them is the central error this lesson attacks. Students build bags, answer both questions about the same objects, and learn to hear which question a number answers.

Full lesson — 20 minutes

1. What did Abuela ask (4 min) Read the printed passage together. Ask what Pablo has to do first, and what he has to say at the end.

Draw out that the job makes groups, and the answer counts items. Do not resolve the difference yet; name it as the question of the day.

Word preview: each, groups, items I need you to wash these peppers. Put five in each plastic bag.

Then tell me how many peppers we have.

2. Make the bags (6 min) Each pair of students gets twenty counters and four cups. Fill every cup with exactly five, the way the passage says, five in each. Then answer both questions out loud in turn: how many bags, how many peppers. Count the peppers by fives, touching a cup per number word.
3. Groups or items (6 min) The teacher fires alternating questions at the built bags. How many bags? How many peppers? How many in this one bag? If I pour two bags together, how many in the pile? Students answer with the number and the word, four bags, twenty peppers, never a bare number. Wrong-word answers get rebuilt, not corrected verbally.

4. One more bag (4 min) Add a fifth cup and fill it with five. Before counting, students predict both new answers, bags and peppers, and say which number grew by one and which grew by five. Verify by counting by fives to twenty-five. Close with the sentence: one more bag means five more peppers.

Short version — 9 minutes

1. What did Abuela ask (3 min) Read the printed passage together and name the two numbers hiding in the job: the number of bags and the number of peppers.

Word preview: each, groups, items I need you to wash these peppers. Put five in each plastic bag. Then tell me how many peppers we have.

2. Make the bags (6 min) Fill four cups with exactly five counters each. Answer both questions out loud in turn, how many bags and how many peppers, counting the peppers by fives with a touch per cup.

THREE LEVELS

The mathematics is identical at all three levels: four bags of five, both questions answered about the same objects, and a fifth bag predicted before it is counted. What changes is the text the student works from and how much of the answer is framed for them.

Support

Use the supported text, read aloud before students see it. The two nouns are pre-taught with the real objects in hand, and the answer frame is given and left visible: there are ____ bags and there are ____ peppers. The student fills the frame; the build, both questions, and the fifth-bag prediction are unchanged.

At Grade

Use the grade-level text, read independently. Students answer with number plus word from memory, with no frame on the table.

Extension

Use the unadapted book text, read cold. In step 3 the student also says which question each of the teacher's questions was asking, groups or items, before answering it, and in step 4 states the prediction as a rule before verifying: one more bag means five more peppers.

ENGLISH LEARNERS

The trap in this lesson is English, not mathematics: bags and peppers are both answers to how many.

Pre-teach the two nouns with the real objects, and accept the two answers in any language as long as the noun comes with the number. The habit of answering with number plus word is exactly the support an English learner needs, and it is the same habit the whole class is being taught.

MATERIALS

- Printed source passage in this step
- 20 counters per pair of students
- 4 cups per pair of students
- 5 extra counters per pair of students
- 1 extra cup per pair of students
- Word cards: each, groups, items

WORKBOOK

What did Abuela ask — half page Count on Pablo — Five in Each Bag What did Abuela ask I need you to wash these peppers. Put five in each plastic bag. Then tell me how many peppers we have.

Word Cards — card set Count on Pablo — Five in Each Bag each groups items

TEACHER KEY

Count on Pablo — Five in Each Bag

- Four cups of five: four bags, twenty peppers. Counted by fives: 5, 10, 15, 20.
- One bag holds five peppers.
- Two bags poured together: ten peppers.
- Adding a fifth bag: five bags, twenty-five peppers. The bag count grew by one, the pepper count grew by five.
- Both answers must carry the noun. A bare “twenty” is not yet an answer to either question.

3. Is Tens Always Fastest Reasoning · Choosing a skip count that fits the grouping Pablo escalates through the book, calling twos fast, fives faster, and tens very fast. Students put the claim under test: they count the same quantity three ways, tally how many number words each way costs, and then meet a quantity where the fastest count does not land exactly. The lesson ends with a rule the class words itself: a skip count only works when the groups come out even.

Full lesson — 20 minutes

1. Pablo's three claims (4 min) Read the three printed claim lines. Ask the class what Pablo means by fast, and collect predictions: is counting by tens always the fastest way to count anything. Record the yes and no votes on the board for the end of the lesson.

Word preview: claim, leftover That's a fast way to count, said Pablo. That's a faster way to count.

That's a very fast way to count.

2. Race the counts (6 min) Each pair counts the same forty counters three times: grouped in twos, regrouped in fives, regrouped in tens. For each way they make one tally mark per number word spoken and write the tally total:

twenty words, eight words, four words. The board collects the three totals under the headings twos, fives, tens.

3. When tens break (6 min) Add five counters so the pile is forty-five, and try the three counts again. Tens leaves five strays that the count cannot name; fives lands exactly; twos leaves one. Students record which counts landed and which left something over, and mark the leftover counters where everyone can see them.

4. Word the rule (4 min) Return to the votes from the opening. Each pair completes the sentence frame aloud: counting by tens is fastest when, and it does not work when. The class settles a shared wording, something like: a skip count works when the pile splits into equal groups with nothing left over. Write the class rule on the board under the tally table.

Short version — 9 minutes

1. Race the counts (6 min) Each pair counts the same forty counters by twos, then fives, then tens, tallying one mark per number word spoken, and writes the three totals: twenty, eight, four.

2. When tens break (3 min) Add five counters to make forty-five and count by tens once more.

Name the five strays the count cannot reach, and say when a fast count is allowed to be called fast.

THREE LEVELS

The mathematics is identical at all three levels: three counts of forty, three tally totals, the forty-five case, and a worded rule. What changes is the text the student works from and how much language scaffolding carries the argument.

Support

Use the supported text. The three claim lines are read aloud and stay displayed as strips through the lesson. The rule frame is given complete — counting by tens is fastest when , and it does not work when — and the student fills it from their own tally sheet. All three counts on forty and all three on forty-five are run in full.

At Grade

Use the grade-level text, read independently. Students run all three counts, tally the word costs, and word the rule with the class after the forty-five case.

Extension

Use the unadapted book text, read cold, and state what the comparative words fast, faster, very fast are claiming before any counting. In step 4 the student writes the rule as a single sentence of their own, without the frame, and tests it aloud against both piles.

ENGLISH LEARNERS

Fast, faster, and very fast are the comparison words this lesson turns into mathematics, and the tally makes their meaning visible: fewer marks is faster. Model the frame counting by ____ took ____ words with the tally sheet in hand. A student can argue the whole lesson through the tally totals while the English comparative forms are still settling.

MATERIALS

- Printed source passage in this step
- 40 counters per pair of students
- Tally sheet per pair of students
- 5 extra counters per pair of students
- Word cards: claim, leftover

WORKBOOK

Claim Cards and Word Cards — card set Count on Pablo — Is Tens Always Fastest Card 1 That's a fast way to count, said Pablo.

Card 2 That's a faster way to count.

Card 3 That's a very fast way to count.

claim leftover Tally Sheet: racing the counts — full page Count on Pablo — Is Tens Always Fastest Race the counts Make one tally mark for each number word you say. Then write how many number words the count took.

Counting by twos Tally marks: _____
_____ How many number words: _____

Counting by fives Tally marks: _____
_____ How many number words: _____

Counting by tens Tally marks: _____
_____ How many number words: _____ When tens break Count the forty-five counters each way again.

Forty-five, counting by twos Did the count land on the last counter? _____ How many counters were left over? _____ Forty-five, counting by fives Did the count land on the last counter? _____ How many counters were left over? _____

Forty-five, counting by tens Did the count land on the last counter? _____ How many counters were left over? _____ Sentence Frames: the count and the rule — strip set Count on Pablo — Is Tens Always Fastest Counting by _____ took _____ words.

Counting by tens is fastest when _____ It does not work when _____

TEACHER KEY

Count on Pablo — Is Tens Always Fastest

- Forty counters. By twos: twenty words. By fives: eight words. By tens: four words. Fewer words is faster, so the book's ladder holds for forty.
- Forty-five counters. By twos: the count reaches forty-four, one left over. By fives: the count lands exactly on forty-five, nine words. By tens: the count reaches forty, five left over.
- On forty-five, the fastest count that lands exactly is fives. Tens is faster in words but does not finish the pile.
- Class rule. A skip count works when the pile splits into equal groups of that size with nothing left over. Wordings will vary; accept any that names the leftover.

4. Two Bowls of Salsa Application · Adding equal groups within 20 The book states Pablo's recipe outright: ten tomatoes, five peppers, two onions, one lime for a bowl of salsa. Students build one bowl from the stated quantities, then double the order and find what two bowls need, adding each ingredient to itself and saying the four new totals. The recipe keeps every sum honest, because a wrong total makes a wrong bowl.

Full lesson — 20 minutes

1. Read the recipe (4 min) Read the printed recipe passage. Students repeat the four quantities back with their ingredient names and set out one ingredient card per kind. Check that everyone can say the recipe without looking: ten, five, two, one.

Word preview: recipe You need 10 tomatoes, 5 peppers, 2 onions, 1 lime.

2. Build one bowl (5 min) Using counters in four colors, each pair builds one bowl. Ten red for tomatoes, five green for peppers, two white for onions, one yellow for the lime. Put each pile on its ingredient card. Partners cross-check each other's piles against the recipe before anything moves.
3. Build the second bowl (7 min) A second customer wants a bowl too. Students build a second identical set next to the first. Then find what two bowls need in all, one ingredient at a time. Ten

and ten, five and five, two and two, one and one. For each ingredient they say the addition aloud and write the total on the ingredient card.

4. Say the order (4 min) Each pair says the two-bowl shopping order as a complete sentence: two bowls need twenty tomatoes, ten peppers, four onions, and two limes. The teacher collects the written ingredient cards as the record of the four sums.

Short version — 9 minutes

1. Read the recipe (3 min) Read the printed recipe passage and have students say the four quantities back with their ingredient names: ten, five, two, one.

Word preview: recipe You need 10 tomatoes, 5 peppers, 2 onions, 1 lime.

2. Build the second bowl (6 min) With one bowl already drawn on the board by the teacher, students build the second bowl in counters and find what two bowls need, saying each addition aloud: ten and ten, five and five, two and two, one and one.

THREE LEVELS

The mathematics is identical at all three levels: one bowl built to the stated recipe, a second bowl built beside it, and all four doubles produced and spoken. What changes is the text the student works from and how much of the closing sentence is framed for them.

Support

Use the supported text, read aloud, with the four quantities pre-labelled on the ingredient cards. The closing frame is printed and left in front of the student — two bowls need ___ tomatoes, ___ peppers, ___ onions, and ___ limes — and the doubles are said aloud with the counters touching as they combine. All four sums are still the student's own.

At Grade

Use the grade-level text, read independently. Students build both bowls, produce all four sums with counters, and deliver the complete spoken order with every total in it.

Extension

Use the unadapted book text, read cold, and reconstruct the recipe from the reading before the cards come out. The four doubles are produced and the closing order is delivered without the frame, then repeated back with the ingredients in a different sequence to show the totals are attached to the nouns and not to the order.

ENGLISH LEARNERS

The recipe is a list, and lists are friendly to new English: number plus noun, four times. Let students name the ingredients in their strongest language while keeping the numbers in the build, then attach the English nouns from the ingredient cards. The closing sentence has a fixed frame, two bowls need, which students can rehearse in pairs before saying it to the class.

MATERIALS

- Printed source passage in this step
- 4 ingredient cards per pair of students
- Counters in four colors per pair of students
- Pencil per student
- Word cards: recipe

WORKBOOK

Recipe Card and Word Card — card set Count on Pablo — Two Bowls of Salsa Read the recipe You need 10 tomatoes, 5 peppers, 2 onions, 1 lime.

recipe Ingredient Cards — card set Count on Pablo — Two Bowls of Salsa Tomatoes Total for two bowls Peppers Total for two bowls Onions Total for two bowls Lime Total for two bowls Sentence Frame: the two-bowl order — strip set Count on Pablo — Two Bowls of Salsa Two bowls need _____ tomatoes, _____ peppers, _____ onions, and _____ limes.

Two bowls need _____ tomatoes, _____ peppers, _____ onions, and _____ limes.

TEACHER KEY

Count on Pablo — Two Bowls of Salsa

- One bowl. 10 tomatoes, 5 peppers, 2 onions, 1 lime.
- Two bowls. Tomatoes $10 + 10 = 20$. Peppers $5 + 5 = 10$. Onions $2 + 2 = 4$. Limes $1 + 1 = 2$.
- Spoken order. Two bowls need twenty tomatoes, ten peppers, four onions, and two limes.
- Every total must arrive with its ingredient name. A list of four bare numbers is not the order.

5. Show One Hundred Fast Representation · Representing a quantity as equal groups One hundred peppers is too many to see all at once, which is exactly why Pablo bags them in fives.

Students take the same quantity through three representations they make themselves: real groups of five, a drawing of those groups, and the written skip-count list to one hundred. The point is that all

three show the same hundred, and that a good representation is the one that lets someone else check you fastest.

Full lesson — 20 minutes

1. The pepper count (4 min) Read the printed pepper count line together, tracking each number with a finger. Ask what each spoken number stands for, another bag of five going into the pile, and how many bags the line hides, twenty.

5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100.

2. Build it together (6 min) As a class, build one hundred for real. The front table needs twenty cups of five, so distribute the cups to reach exactly twenty: with ten pairs of students, two cups each. Adjust the per-pair share to your class size before you begin. Count on by fives as each cup lands, until the count reaches one hundred. Count the cups afterward to find the twenty the count line was hiding.

3. Draw it small (6 min) Each student draws the hundred without drawing a hundred things. Use a small mark standing for one bag of five. Arrange them so a stranger could count the drawing by fives. Students trade drawings and check each other by counting the partner's marks aloud by fives to one hundred.

4. Write the count (4 min) Students write the fives list to one hundred from memory under their drawing, then check it against the printed passage line by line. The three versions now sit together on one page: the passage they read, the drawing they made, the list they wrote, all saying one hundred.

Short version — 9 minutes

1. The pepper count (3 min) Read the printed pepper count line together, tracking each number with a finger, and name what each spoken number stands for: another bag of five.

5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100.

2. Draw it small (6 min) Each student draws one hundred as twenty five-marks a stranger could count by fives, then trades and checks a partner's drawing by counting it aloud to one hundred.

THREE LEVELS

The mathematics is identical at all three levels: one hundred carried through cups, a drawing, and a written fives list, and a partner's drawing checked by counting it aloud. What changes is the text the student works from and how much of the count line stays in view.

Support

Use the supported text, read aloud, with the pepper count line left face up through every step including step 4, where the student writes the list with the card beside them and then covers it and reads their own list back. The hundred is built, drawn, and written in full.

At Grade

Use the grade-level text, read independently. The count line is available in steps 1 and 2 and put away for step 4, so the fives list is written from memory and checked against the passage afterwards.

Extension

Use the unadapted book text, read cold. Before the build, the student says how many bags the count line hides and how they know, then carries the hundred through all three representations and explains to a partner which of the three lets someone else check them fastest.

ENGLISH LEARNERS

This lesson's product is visible thinking: a drawing that counts and a list that matches it. Neither needs English sentences to be right, so an English learner can be fully correct all lesson while the spoken fivescount rides along. Encourage counting a partner's drawing aloud in English, since the count words are a fixed chant the class rehearses together anyway.

MATERIALS

- Printed source passage in this step
- 10 counters per pair of students
- 2 cups per pair of students (adjust so the front table receives twenty cups in total)
- Paper per student
- Pencil per student

WORKBOOK

The Pepper Count — half page Count on Pablo — Show One Hundred Fast The pepper count 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100.

Show One Hundred — full page Count on Pablo — Show One Hundred Fast Draw it small Use one small mark for one bag of five. Arrange your marks so someone else can count them by fives.

Write the count Write the fives list to one hundred from memory. Then check it against the pepper count card.

_____ Show One Hundred in Tens Extension — full

page Count on Pablo — Show One Hundred Fast Draw the same hundred in tens Use one small mark for one group of ten.

Write both count lists

Thefiveslisttoonehundred: _____

_____ The tenslisttoonehundred: _____

TEACHER KEY

Count on Pablo — Show One Hundred Fast

- The pepper count line has twenty numbers, so it hides twenty bags. Each spoken number is one more bag of five landing in the pile.
- Drawing. Twenty marks, one mark per bag of five. Arrangements in rows of five or ten are easiest for a stranger to check; a scatter is not wrong but is slower to verify, which is the point of

step 3.

- Fives list. 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100. Twenty numbers.
- Tens list (extension page). 10, 20, 30, 40, 50, 60, 70, 80, 90, 100. Ten numbers, ten marks. The tens drawing is faster to check because there are half as many marks; the hundred does not change.

Math through the reading

The mathematics is reached through a sentence the book prints: change one word in the reading and the numbers change with it. These carry their own standards, matched against these lessons rather than inherited from the skill ones.

6. The Little Word That Moves the Peppers Integrated · Students discover that one small word in Abuela's instruction decides whether Pablo bags five peppers or twenty, then prove it with counters both ways.

Full lesson — 20 minutes

1. Hear the little word (4 min) Listen to three of Abuela's instructions read aloud, then vote with hands on which single word in the pepper sentence tells how many bags get five. Students say the candidate word and what they think it orders before any counters move.

2. Build the each (6 min) Build the sentence as written: four cups, five counters in each, then count the peppers by fives to twenty, touching a cup per number word. Say what each made them do: put five in every single bag.
3. The swap (6 min) Rebuild the sentence with the in place of each: one bag, five counters, the rest of the cups empty.

Count again, landing on five. Pairs state both totals and point at the word that moved fifteen peppers: with each it was twenty, with the it is five.

4. Your own each sentence (4 min) Each student arranges their own small build, two or three cups with the same count in every cup, and says one sentence using each that is true of it, with both numbers in it: there are three in each cup, two cups make six.

Short version — 9 minutes

1. Build the each (5 min) Build the sentence as written: four cups, five counters in each, then count the peppers by fives to twenty, touching a cup per number word. Say what each made them do: put five in every single bag.
2. The swap (4 min) Rebuild the sentence with the in place of each: one bag, five counters, the rest of the cups empty. Count again, landing on five. Pairs state both totals and point at the word that moved fifteen peppers.

THREE LEVELS

The mathematics is identical at all three levels: four cups of five counted to twenty, the swapped reading counted to five, and an original each-sentence carrying two correct numbers. What changes is the text the student works from and how much language scaffolding carries the sentence work.

Support

Use the supported text, read aloud, with both sentence strips displayed side by side from the start rather than revealed at step 3. The frame five in each bag means five here, five here, five here is given and spoken while pointing cup to cup, and the closing sentence is produced with the frame *there are ___ in each cup, ___ cups make ___*. Both builds and both totals are the student's own count, at four cups.

At Grade

Use the grade-level text. Students build both readings, produce both totals, and close with an original spoken each-sentence carrying two correct numbers, without a frame.

Extension

Use the unadapted book text, read cold, and locate the deciding word without the vote. In step 4 the student produces two true sentences about their own build, one using each and one using the, and says which of the two numbers each sentence leaves unstated.

ENGLISH LEARNERS

The number work transfers whole: five, ten, fifteen, twenty is the same in any language of schooling, and the cups make the meaning of each visible before the word is secure. Teach each, the, and pairs as pointing words with the cups in hand, and let students say the closing sentence in their strongest language first, then in English with the frame in each. Never require a student to explain the grammar; the build is the explanation.

MATERIALS

- 20 counters per pair
- 4 cups per pair
- Printed sentence card with the original instruction
- Two sentence strips: the original sentence and the swapped sentence, displayed side by side from segment 3

WORKBOOK

The Instruction Card — half page Count on Pablo — The Little Word That Moves the Peppers What Abuela said I need you to wash these peppers. Put five in each plastic bag. Then tell me how many peppers we have.

Two Sentence Strips — strip set Count on Pablo — The Little Word That Moves the Peppers Strip 1 — as written Put five in each plastic bag.

Strip 2 — the swap Put five in the plastic bag.

Sentence Frame: your own each sentence — strip set Count on Pablo — The Little Word That Moves the Peppers There are _____ in each cup.

_____ cups make _____.

TEACHER KEY

Count on Pablo — The Little Word That Moves the Peppers

- The deciding word is each.
- As written. Four cups, five in each: 5, 10, 15, 20. Twenty peppers.
- The swap. One cup with five, the others empty. Five peppers.

- The word moved fifteen peppers.
- Closing sentences vary and must carry two numbers, the count in one group and the total.

Examples: three in each cup, two cups make six; four in each cup, three cups make twelve.

7. The Number the Book Never Says Integrated · The book tells how many peppers and how many fit a bag, but never how many bags; students find the missing number and must produce the lines that prove it.

Full lesson — 20 minutes

1. What the book never says (4 min) Listen to the packing scene and the sold-everything ending, then answer a hunt question: does the book ever say how many bags Pablo made. Students search their passage cards and report back that the number is not there, naming what is there instead: five in each bag, one hundred peppers.
2. Gather the evidence (5 min) Pairs choose, from four candidate sentences on cards, the two that pin the bag count down, and read them aloud to another pair. The evidence must be settled before any counting is allowed: the rule sentence and the total sentence, and why the other two candidates do not constrain bags.
3. Compute the missing number (7 min)

Count by fives to one hundred, making one tally mark per spoken number, then count the tallies: twenty. Pairs verify by building four sample bags of five and confirming the count pattern, five, ten, fifteen, twenty for four bags, before trusting the tally to one hundred.

4. Number plus line (4 min) Deliver the two-part answer aloud: twenty bags, because it says five in each bag, and it says they sold one hundred peppers. A number without its lines is sent back for the lines; lines without the number are sent back for the number.

Short version — 9 minutes

1. Gather the evidence (4 min) Pairs choose, from four candidate sentences on cards, the two that pin the bag count down, and read them aloud to another pair. The evidence must be settled before any counting is allowed.
2. Compute the missing number (5 min) Count by fives to one hundred, making one tally mark per spoken number, then count the tallies:

twenty. Pairs verify by building four sample bags of five and confirming the count pattern, five, ten, fifteen, twenty for four bags, before trusting the tally to one hundred.

THREE LEVELS

The mathematics is identical at all three levels: the fives tallied to one hundred, twenty tallies counted, four sample bags built to verify the pattern, and a two-part answer delivered. What changes is the text the student works from and how much support carries the evidence selection.

Support

Use the supported text, read aloud. The four candidate cards are cut to two obvious contrasts rather than four near-misses, and the delivery frame is printed and left in view — ___ bags, because it says , and it says . The tally to one hundred and the twenty count are run in full; nothing in the arithmetic is reduced.

At Grade

Use the grade-level text. Students establish the evidence from all four candidates, tally the fives to one hundred, and deliver the two-part answer with both sentences read aloud.

Extension

Use the unadapted book text, read cold. Students also say, for each of the two rejected candidates, what question that sentence would answer, and deliver the two-part answer with the evidence stated before the number rather than after it.

ENGLISH LEARNERS

The evidence sentences are short and concrete, and they can be located by their numbers, five and one hundred, before every word in them is understood. Let pairs read the evidence in whatever mix of languages gets the meaning across, but keep the two-part answer's shape fixed: number first is forbidden for everyone, so the English learner is practicing the same evidence-first delivery as the class, with the frame because it says.

MATERIALS

- Four candidate sentence cards per pair
- 40 counters per pair
- 8 small cups per pair
- Tally sheet per pair
- The packing sentence and the sold-everything sentence, revealed at segment 4 for the delivery check

WORKBOOK

Four Candidate Sentences — card set Count on Pablo — The Number the Book Never Says Card 1
Put five in each plastic bag.

Card 2 [EDITOR: paste the verified sold-everything line from the book. Not quoted in the source package; do not reconstruct.] Card 3 You need 10 tomatoes, 5 peppers, 2 onions, 1 lime.

Card 4 First, we have to wash these onions, and tie them in pairs like this.

Tally Sheet: the fives to one hundred — full page Count on Pablo — The Number the Book Never Says Count by fives to one hundred Make one tally mark for each number you say.

Tally marks: _____

_____ How many tally marks:

_____ Check it with four bags Build four bags of five and count them by fives.

5, _____, _____, _____ How many bags did you build? _____ Sentence Frame:

number plus line — strip set Count on Pablo — The Number the Book Never Says

_____ bags, because it says _____

and it says _____

TEACHER KEY

Count on Pablo — The Number the Book Never Says

- The book never states the number of bags. It states the rule and the total.
- The two evidence sentences. Card 1, the rule: five in each plastic bag. Card 2, the total: the sold-everything line. Cards 3 and 4 do not constrain the bag count — the recipe answers what goes in one bowl, and the onion line answers how the onions are tied.
- The tally. Counting by fives to one hundred takes twenty spoken numbers, so twenty tally marks:

twenty bags.

- The four-bag check. 5, 10, 15, 20 for four bags — four numbers, four bags. The pattern that holds for four holds to one hundred.
- Accepted answer. Twenty bags, because it says five in each bag, and it says they sold one hundred peppers. Both parts required.
- Extension note: the tomatoes run the same way, ten in each box and two hundred sold, giving twenty boxes. Limes, onion pairs, pepper bags and tomato boxes all come out to twenty groups because the recipe uses one bowl's worth of each and the market sold twenty bowls' worth.

8. Fast, Faster, Very Fast — Prove It Integrated · The book claims twos are fast, fives faster, tens very fast; students test the ladder with tallies, argue both sides with their numbers, and find where tens break.

Full lesson — 20 minutes

1. The book's ladder (4 min) Hear the three claim sentences and restate the claim as a question.

Each student takes a starting position, yes tens always, or only when the groups fit, and holds up one or two fingers to commit to it before any counting.

2. Test with your hands (6 min) Count forty counters three times, regrouped each time: by twos, by fives, by tens. One partner counts aloud, the other makes a tally mark per spoken word. Record the three costs, twenty, eight, four, on the tally sheet.

3. Argue it (6 min)

Face a partner who committed the other way. Each states their position with tally numbers inside it, by tens took four words and by twos took twenty, then the pair tries the forty-five pile: tens strand five, fives land exactly. Students may switch positions and must say the revision aloud with the new evidence.

4. Tell the class (4 min) Selected students give the class their final statement, position, quantity, reason, and the class checks each statement for a number: a statement without a quantity is applauded and sent back for its number.

Short version — 9 minutes

1. Test with your hands (5 min) Count forty counters three times, regrouped each time: by twos, by fives, by tens. One partner counts aloud, the other makes a tally mark per spoken word. Record the three costs, twenty, eight, four, on the tally sheet.
2. Argue it (4 min) Face a partner who committed the other way. Each states their position with tally numbers inside it, then the pair tries the forty-five pile: tens strand five, fives land exactly. Students may switch positions and must say the revision aloud with the new evidence.

THREE LEVELS

The mathematics is identical at all three levels: three counts of forty, three tally costs, the forty-five pile, and a final statement carrying a quantity. What changes is the text the student works from and how much language scaffolding carries the argument.

Support

Use the supported text, with the three claim strips read aloud and kept visible. The argument frame is given and kept in front of the student — I think ____ is fastest because it took ____ words and ____ took ____ words — and filled from their own tally sheet. The counting and tallying are unreduced, on forty and on forty-five.

At Grade

Use the grade-level text. Students run all three counts, argue with tally numbers, meet the forty-five case, and make a final statement carrying a quantity, without a frame.

Extension

Use the unadapted book text, read cold, and state what the ladder claims before committing. In step 3 the student argues the strongest case against their own final position using the other side's best numbers, then names the single fact that settles the question for any pile: whether it splits into that group size with nothing left over.

ENGLISH LEARNERS

The tally sheet is the argument in numbers, so a student can be fully armed for the debate before producing a full English sentence: pointing at twenty and at four while saying fewer words is already a quantified position. Rehearse the because it took frame in pairs first, and welcome positions argued in the strongest language and restated in English by the partner, which gives both students a legitimate reason to say the argument twice.

MATERIALS

- 45 counters per pair
- Tally sheet per pair
- Cups and pair-bands for regrouping
- The three claim sentences on strips, kept visible through the lesson

WORKBOOK

Claim Strips — strip set Count on Pablo — Fast, Faster, Very Fast — Prove It Strip 1 That's a fast way to count, said Pablo.

Strip 2 That's a faster way to count.

Strip 3 That's a very fast way to count.

Tally Sheet: what each count cost — full page Count on Pablo — Fast, Faster, Very Fast — Prove It Forty counters One partner counts aloud. The other makes one tally mark for each number word.

By twos — tally marks: _____ How many words:

_____ By fives — tally marks:

_____ How many words: _____ By

tens — tally marks: _____ How many words:

_____ Forty-five counters Count each way again. Write what was left over.

By twos — left over: _____ By fives — left over: _____ By tens
— left over: _____ Sentence Frames: your position — strip set Count on Pablo
— Fast, Faster, Very Fast — Prove It I think _____ is fastest because it took
_____ words and _____ took _____ words.

I changed my mind because _____

TEACHER KEY

Count on Pablo — Fast, Faster, Very Fast — Prove It

- Forty counters. By twos: twenty words. By fives: eight words. By tens: four words.
- Forty-five counters. By twos: one left over. By fives: none left over, nine words. By tens: five left over.
- Both positions are arguable on forty, where tens is genuinely fastest. Forty-five is the case that separates them: tens is still fewest words but does not finish the pile.
- The settling fact. Whether the pile splits into that group size with nothing left over. A student who reaches this has answered the question for every pile, not just these two.
- Every final statement must contain a quantity. “Tens is fastest” is a position; “tens took four words and twos took twenty” is an argument.