

Add and Subtract to 1,000

Unit 6 Overview: 9 lessons

Students become fluent adding and subtracting within 1,000. They add by place value with partial sums, then in columns, regrouping ones, tens or both. They subtract by breaking apart the number taken away and by counting up on an open number line, then in columns, trading a ten, a hundred or both, and across zeros. Mental math with a friendly hundred and one- and two-step story problems, checked with an estimate from the last unit, finish the lessons every class teaches. In some states the unit adds four-digit numbers and deciding whether two sums or differences are equal.

THE UNIT, DAY BY DAY

Day 1	Pre-Check	What students already know, before the first lesson.
Day 2	6.1 Add with place value: partial sums	I can add each place, then add the parts.
Day 3	6.2 Add in columns with regrouping	I can add in columns and regroup when I need to.
Day 4	6.3 Subtract: break apart or count up	I can break apart or count up to subtract.
Day 5	6.4 Subtract in columns with regrouping	I can subtract in columns and trade when I need to.
Day 6	6.5 Subtract across zeros	I can subtract from a number with zeros.
Day 7	6.6 Mental math with a hundred	I can use a hundred to add and subtract in my head.
Day 8	6.7 Story problems within 1,000	I can solve one-step and two-step story problems.
Day 9	6.8 Add and subtract four-digit numbers ★	I can add and subtract four-digit numbers.
Day 10	6.9 Equal or not equal ★	I can tell if two sums or differences are equal.
Day 11	Unit Review	The review, to go over together.
Day 12	Unit Test	Form A; Form B (other numbers) is for a retest.

★ Taught in 3rd grade in some states. Skip these lessons if yours teaches them in another grade; animalmath.com/standards shows your state's list.

GET READY FOR THE UNIT

- Base-ten blocks and a place value mat for each pair
- Whiteboards and dry erase markers
- Blank open number lines (a line with no marks) to draw on
- Grid paper for lining up digits
- Chart paper for anchor charts: partial sums, regrouping, across zeros, friendly hundreds

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



Add and Subtract to 1,000

Lesson 6.1: Add with place value: partial sums

GOAL Students add three-digit numbers by place value: they add the hundreds, the tens and the ones ($465 + 378$: 700, 130 and 13), then add the parts (843).

About 45 minutes

I can add each place, then add the parts.

THE LESSON

- 1 Warm up** (5 min) Students write 538, 702 and 690 in expanded form on whiteboards. Then they add $70 + 60$ and $8 + 5$ in their heads.
- 2 Teach** (10 min) Write $465 + 378$. Add the hundreds: $400 + 300 = 700$. The tens: $60 + 70 = 130$. The ones: $5 + 8 = 13$. Add the parts: $700 + 130 + 13 = 843$. Show it with blocks: 13 ones make a new ten and 13 tens make a new hundred. Then do $286 + 539$: $700 + 110 + 15 = 825$.
Say: "I add hundreds to hundreds, tens to tens and ones to ones. Then I add the parts."
- 3 Try it together** (10 min) Partners solve $354 + 472$, $618 + 257$ and $149 + 386$ by partial sums on whiteboards. One partner adds the parts; the other checks with blocks. Talk about adding $400 + 120 + 15$.
- 4 Practice** (15 min) Students fill in the table and trade on sheet 2 of 3-Digit Addition with Regrouping, then add each place and the parts on sheet 3. Early finishers add three numbers by partial sums.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 6.1** and circle a face beside the "I can" line. On question 1, look at the tens line of $578 + 264$: $70 + 60 = 130$, not 13, and the sum 842. On question 2, look for 653; 32 means the parts 5, 14 and 13 were added as digits.

Need help? Build both numbers with blocks and push each place together before writing its line.

Ready for more? Add $215 + 340 + 168$ by partial sums, or a three-digit and a two-digit number.

GET READY

- Base-ten blocks for each pair
- Whiteboards and markers
- An anchor chart of one partial sums problem

WORDS TO USE

partial sums: the sum of each place, added at the end

expanded form: $465 = 400 + 60 + 5$

parts: the hundreds, tens and ones sums

ASK

- What is $60 + 70$? How many hundreds is that?
- How do you add $700 + 130 + 13$?
- Why does each place get its own line?

WATCH FOR

Writes $6 + 7 = 13$ on the tens line. Say the values: $60 + 70 = 130$.

Leaves the ones out: $700 + 130 = 830$. Tick each line as you add it. Three lines, three parts.

Adds $700 + 130 + 13$ as $7 + 13 + 13$. Say each part as a number and add the hundreds first: 800, then 43.

ON ANIMAL MATH

PRINTABLE

3-Digit Addition with Regrouping: sheets 2-3

TOOL

Base Ten Blocks: select 10 ones and Put Together

QUIZ

Add and Subtract Within 1,000 Quiz: the Add level

EXIT TICKET

3rd Grade Add and Subtract Within 1,000 Exit Tickets: Exit Ticket 6.1



Add and Subtract to 1,000

Lesson 6.2: Add in columns with regrouping

GOAL Students add three-digit numbers in columns, ones first: when a place makes 10 or more, they write its ones digit and carry the 1 to the top of the next place.

About 45 minutes

I can add in columns and regroup when I need to.

THE LESSON

- 1 Warm up** (5 min) Ask “Do they make a new ten?” for $7 + 6$, $3 + 4$, $9 + 8$ and $5 + 5$. Students show thumbs up or down.
- 2 Teach** (10 min) Write $376 + 258$ in columns. Ones: $6 + 8 = 14$; write 4 and carry 1. Tens: $1 + 7 + 5 = 13$; write 3 and carry 1. Hundreds: $1 + 3 + 2 = 6$. The sum is 634. Check by partial sums: $500 + 120 + 14$. Then $427 + 391$ regroups only in the tens: 818.
Say: “I start with the ones. If a place makes 10 or more, I write the ones digit and carry the 1.”
- 3 Try it together** (10 min) Partners solve $156 + 327$ (ones), $283 + 461$ (tens) and $395 + 248$ (both) on whiteboards. Before each one they say where it will regroup. One adds; the other checks by partial sums.
- 4 Practice** (15 min) Students do the twelve column problems on sheet 4 of 3-Digit Addition with Regrouping, then find who is right on sheet 5. Early finishers make a maker sheet for a partner.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 6.2** and circle a face beside the “I can” line. On question 1, look for 383, 833 and 847 with each small 1 over the right column. On question 2, 722 is right; 612 means the 1s were not carried and 732 means a 1 was added twice.

Need help? Build the problem with blocks beside the written one and trade on the mat at each step.

Ready for more? Find the missing digits: $3_8 + 24_ = 615$, or write a problem that regroups in the tens only.

GET READY

- Grid paper for lining up digits
- Base-ten blocks for checking
- Whiteboards and markers

WORDS TO USE

column: digits of the same place, one under another

regroup: trade 10 of one place for 1 of the next

carry the 1: write the new ten or hundred at the top of the next column

ASK

- Do the ones make a new ten? Where does the 1 go?
- Why do we start with the ones?
- How can you check your sum?

WATCH FOR

Writes both digits of 14 under the ones. Only one digit fits in a place. Write the 4 and carry the 1 ten.

Forgets the carried 1. Circle the carried 1 and say it first: $1 + 7 + 5$.

Lines up a two-digit number under the hundreds. Line up the ones first, one digit to a square of grid paper.

ON ANIMAL MATH

PRINTABLE

3-Digit Addition with Regrouping: sheets 4-5

MAKER

Column Math Equations: Operations +, Range Within 1,000, Set Digit Count, Digits 3 digits, Regrouping / Borrowing on, Mix All

QUIZ

Add and Subtract Within 1,000 Quiz: the Add level

EXIT TICKET

3rd Grade Add and Subtract Within 1,000 Exit Tickets: Exit Ticket 6.2



Add and Subtract to 1,000

Lesson 6.3: Subtract: break apart or count up

GOAL Students subtract by breaking apart the number they take away (743 – 318: take away 300, then 10, then 8) and by counting up from it on an open number line (702 – 267: 33 to 300, 400 to 700, 2 to 702, so 435).

About 45 minutes

I can break apart or count up to subtract.

THE LESSON

- 1 Warm up** (5 min) Break numbers apart out loud: 527 is 500, 20 and 7. Then count up to the next hundred: from 362 to 400 is 38, from 715 to 800 is 85.
- 2 Teach** (10 min) Write $743 - 318$. Break 318 into 300, 10 and 8 and take them away one at a time: 443, 433, 425. Then write $702 - 267$ and count up instead: jump from 267 to 300 (33), from 300 to 700 (400), from 700 to 702 (2). Add the jumps: $33 + 400 + 2 = 435$. Check: $435 + 267 = 702$.
Say: "I can take away the number one part at a time, or count up from it and add my jumps."
- 3 Try it together** (10 min) Partners solve $856 - 423$ by breaking apart and $805 - 378$ by counting up, then swap methods and compare. Ask which way was easier for which problem.
- 4 Practice** (15 min) Students count up and check on sheet 3 of Addition and Subtraction Strategies Within 1,000, then break apart on sheet 1 of Decompose to Subtract, 3-Digit Guided (a first step). Early finishers make a maker sheet.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 6.3** and circle a face beside the "I can" line. On question 1, any jumps that add up to 354 are right (the key shows one way); 446 means the smaller digit was taken from the bigger. On question 2, look for 26 in the blank and 425; 435 means they took 1 from 6 in the ones.

Need help? Use blocks to break apart, and write each jump's size above it when counting up.

Ready for more? Solve $900 - 457$ both ways and say which was faster, or count up with only two jumps.

GET READY

- Blank open number lines
- Whiteboards and markers
- Base-ten blocks to check with

WORDS TO USE

break apart: 318 is 300, 10 and 8

count up: jump from the smaller number to the bigger one

open number line: a line with only the numbers you need

ASK

- How will you break apart 318?
- Where is the first friendly hundred when you count up from 267?
- How can you check your answer?

WATCH FOR

Breaks apart the first number instead. Break apart only the number you take away.

Counts up but writes the last stop (702) as the answer. The answer is the jumps added together: $33 + 400 + 2$.

Loses track when a step crosses a ten (443 – 18). Take the tens, then the ones: $443 - 10 = 433$, then $433 - 8 = 425$.

ON ANIMAL MATH

PRINTABLE

Addition and Subtraction Strategies Within 1,000: sheet 3

PRINTABLE

Decompose to Subtract - 3-Digit Guided: sheet 1, a first step (two-digit parts)

MAKER

Decompose to Subtract: Digit Mode 3-Digit, Decomposition Style Open-Ended (All Blanks)

TOOL

Number Line: Start 200, End 800, Interval 100, then Jump

EXIT TICKET

3rd Grade Add and Subtract Within 1,000 Exit Tickets: Exit Ticket 6.3

Add and Subtract to 1,000

Lesson 6.4: Subtract in columns with regrouping

GOAL Students subtract three-digit numbers in columns, ones first, trading a ten for 10 ones, a hundred for 10 tens, or both, and check by adding. **About 45 minutes**

I can subtract in columns and trade when I need to.

THE LESSON

- 1 Warm up** (5 min) Show 6 flats, 3 rods and 2 cubes (632). Ask how to take away 7 ones. Trade a rod: 6 hundreds, 2 tens, 12 ones.
- 2 Teach** (10 min) Write $632 - 457$ in columns. Ones: 2 is not enough for 7, so trade a ten: $12 - 7 = 5$. Tens: 2 is not enough for 5, so trade a hundred: $12 - 5 = 7$. Hundreds: $5 - 4 = 1$. The answer is 175. Check: $175 + 457 = 632$. Then $548 - 263$ trades only a hundred: 285.
Say: "I check each place, ones first. If the top digit is not enough, I trade one from the next place."
- 3 Try it together** (10 min) Partners solve $471 - 236$ (a ten), $725 - 382$ (a hundred) and $924 - 576$ (both) on whiteboards and check each by adding. Before each one they say where they will trade.
- 4 Practice** (15 min) Students do the twelve column problems on sheet 3 of 3-Digit Subtraction with Regrouping, then check by adding and find who is right on sheet 5. Early finishers make a maker sheet for a partner.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 6.4** and circle a face beside the "I can" line. On question 1, look for 327, 374 and 265 with the traded digits over the crossed ones. On question 2, 355 is right; 445 means the smaller digit was taken from the bigger, and 465 means they traded but did not take 1 from the next place.

Need help? Do each problem with blocks beside it, trading on the mat, and start with problems that trade a ten only.

Ready for more? Write a problem that trades a hundred but not a ten, and one that trades both, for a partner.

GET READY

- Base-ten blocks for checking
- Grid paper
- Whiteboards and markers

WORDS TO USE

trade: take 1 from the next place and make 10

enough: the top digit is as big as the bottom one, or bigger

check by adding: the answer plus the number taken away gives the first number

ASK

- Are there enough ones? Enough tens?
- What did the 3 in the tens become after you traded?
- How can you check your answer?

WATCH FOR

Takes the smaller digit from the bigger:

$632 - 457 = 225$. Read each place top to bottom: 2 take away 7. Not enough, so trade.

Trades but does not lower the next place.

Cross out the 3 and write 2 as soon as a ten goes to the ones.

Trades when there are enough. Check each place first: if the top digit is as big, no trade is needed.

ON ANIMAL MATH

PRINTABLE

3-Digit Subtraction with Regrouping: sheets 3 and 5

MAKER

Column Math Equations: Operations –, Range Within 1,000, Set Digit Count, Digits 3 digits, Regrouping / Borrowing on, Mix All

QUIZ

Add and Subtract Within 1,000 Quiz: the Subtract level

EXIT TICKET

3rd Grade Add and Subtract Within 1,000 Exit Tickets: Exit Ticket 6.4



Add and Subtract to 1,000

Lesson 6.5: Subtract across zeros

GOAL Students subtract from numbers with zeros: in $500 - 274$ there are no tens to trade, so they trade a hundred for 10 tens, then a ten for 10 ones (4 hundreds, 9 tens, 10 ones).

About 45 minutes

I can subtract from a number with zeros.

THE LESSON

- 1 Warm up** (5 min) Show 5 flats (500). Ask how to take away 4 ones when there are no rods and no cubes. Trade a flat for 10 rods, then a rod for 10 cubes.
- 2 Teach** (10 min) Write $500 - 274$ in columns. Ones: 0 is not enough, and there are no tens, so trade a hundred: 4 hundreds, 10 tens. Then trade a ten: 9 tens, 10 ones. $10 - 4 = 6$, $9 - 7 = 2$, $4 - 2 = 2$. The answer is 226. Check: $226 + 274 = 500$. Then $703 - 158$: 6 hundreds, 9 tens, 13 ones, so 545.
Say: "When the next place is a zero, I trade a hundred for 10 tens first. Then I can trade a ten for 10 ones."
- 3 Try it together** (10 min) Partners solve $400 - 162$, $908 - 359$ and $600 - 85$ on whiteboards and check each by adding. Ask what the 0 in the tens became each time.
- 4 Practice** (15 min) Students do the twelve problems across a zero on sheet 4 of 3-Digit Subtraction with Regrouping. Early finishers solve $1,000 - 365$ the same way.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 6.5** and circle a face beside the "I can" line. On question 1, look for 442, 257 and 224 with a 9 over each zero in the tens. On question 2, 368 is right; 468 means the hundred was kept across the zero and 432 means the smaller digit was taken from the bigger.

Need help? Do every problem with blocks, trading on the mat, and start with a zero in the ones ($630 - 214$) before a zero in the tens.

Ready for more? Solve $1,000 - 365$ and $900 - 9$, or write a problem across zeros for a partner.

GET READY

- Base-ten blocks for each pair
- Whiteboards and markers
- An anchor chart of $500 - 274$

WORDS TO USE

across a zero: the next place is 0, so trade from the place after it

trade: take 1 from the next place and make 10

9 tens: what 10 tens become after a ten goes to the ones

ASK

- Are there any tens to trade?
- What does the 0 in the tens become?
- How can you check your answer?

WATCH FOR

Takes the smaller digit from the bigger:

$500 - 274 = 374$. Read each place top to bottom: 0 take away 4. Not enough, so trade.

Trades across the zero but keeps the hundred:

$500 - 274 = 326$. Cross out the 5 and write 4 when the hundred becomes 10 tens.

Writes 10 tens and forgets it became 9. Cross

out the 10 and write 9 as a ten goes to the ones.

ON ANIMAL MATH

PRINTABLE

3-Digit Subtraction with Regrouping: sheet 4

TOOL

Base Ten Blocks: select a flat and Break Apart

QUIZ

Add and Subtract Within 1,000 Quiz: the Subtract level

EXIT TICKET

3rd Grade Add and Subtract Within 1,000 Exit Tickets: Exit Ticket 6.5



Add and Subtract to 1,000

Lesson 6.6: Mental math with a hundred

GOAL Students add and subtract in their heads with a friendly hundred: they make a hundred ($299 + 436 = 300 + 435$), take away a hundred and add back the extra ($725 - 199 = 725 - 200 + 1$), and add the pair that makes a hundred first ($35 + 248 + 65$).

About 45 minutes

I can use a hundred to add and subtract in my head.

THE LESSON

- 1 Warm up** (5 min) How far to the next hundred? Say 398, 597, 196 and 495; students show 2, 3, 4 and 5 on their fingers.
- 2 Teach** (10 min) Write $299 + 436$. Move 1 from 436 to 299: $300 + 435 = 735$. Then $725 - 199$: take away 200, which is 1 too many, so add 1 back: $525 + 1 = 526$. Last, $35 + 248 + 65$: add 35 + 65 first to make 100, then $100 + 248 = 348$.
Say: "I look for a friendly hundred. I change the numbers to make it easy, then I fix what I changed."
- 3 Try it together** (10 min) Partners solve $498 + 275$, $632 - 297$ and $42 + 316 + 58$ in their heads, then write how they did it. Ask who moved a number and who added back.
- 4 Practice** (15 min) Students make a hundred on sheet 1 of Addition and Subtraction Strategies Within 1,000, adjust on sheet 2 and add three numbers in an easier order on sheet 4. Early finishers write two problems that are easy in your head.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 6.6** and circle a face beside the "I can" line. On question 1, look for 465 and 765; 469 means they added the 2 to 467 instead of taking it away. On question 2, look for 3 and 417; 411 means they took the 3 away instead of adding it back.

Need help? Show each move on the number line, or with blocks: move 1 cube to make the hundred.

Ready for more? Find two ways to solve $397 + 298$ in your head, or make up three numbers where two make 200.

GET READY

- Whiteboards and markers
- A number line from 0 to 1,000 by hundreds
- An anchor chart of the three moves

WORDS TO USE

friendly number: a number easy to add or take away, like 300

make a hundred: move a little from one number to the other

add back: fix the answer after taking away too much

ASK

- How far is 299 from the next hundred?
- You took away 200 for 199. Too much or too little?
- Which two numbers make a hundred?

WATCH FOR

Makes 300 but leaves 436 the same: 736. What one number gets, the other gives: 436 gives 1, so 435.

Takes the 1 away again after taking 200: 524. Taking 200 took 1 too many, so add 1 back: 526.

Adds the three numbers in order and loses track. Look for two numbers that make 100 first: $35 + 65$.

ON ANIMAL MATH

PRINTABLE

Addition and Subtraction Strategies Within 1,000: sheets 1, 2 and 4

PRINTABLE

2-Digit Addition Strategies: sheet 4, to make a ten with two-digit numbers, for help

TOOL

Number Line: Start 0, End 1000, Interval 100, then Jump

EXIT TICKET

3rd Grade Add and Subtract Within 1,000 Exit Tickets: Exit Ticket 6.6

Add and Subtract to 1,000

Lesson 6.7: Story problems within 1,000

GOAL Students solve one-step and two-step story problems within 1,000: they find what they know and what is asked, draw a bar model, write a number sentence for each step and check the answer with an estimate.

About 45 minutes

I can solve one-step and two-step story problems.

THE LESSON

- 1 Warm up** (5 min) Read: "A bakery has 260 rolls. It sells 140. How many rolls are left?" Students solve on whiteboards and say the number sentence.
- 2 Teach** (10 min) Read: "A library has 524 books. It buys 238 more. Then 175 books are checked out. How many books are on the shelves?" Step 1: $524 + 238 = 762$. Step 2: $762 - 175 = 587$ books. Estimate: $500 + 200 - 200 = 500$, close to 587. Then: "Ava has 312 stickers. Ben has 145 more. How many does Ben have?" $312 + 145 = 457$.
Say: "I find what I know and what the story asks. I write a number sentence for each step, then I check with an estimate."
- 3 Try it together** (10 min) Read two stories: "Some birds were in a park. 127 flew away. 348 are left. How many were there at first?" and a two-step story ($415 - 160$, then 225 more). Partners write the number sentences, solve and estimate.
- 4 Practice** (15 min) Students solve the stories on sheets 2-4 of Word Problems Within 1,000. Early finishers check answers with estimates (sheet 3 of Estimate or Exact?).
- 5 Exit ticket** (5 min) Students do **Exit Ticket 6.7** and circle a face beside the "I can" line. On question 1, look for 444 cards ($286 + 158$); 128 means they subtracted. On question 2, look for 367 in Step 1 and 503 in Step 2; 231 means they took away both numbers.

Need help? Read the story together, act it out with blocks and fill in a bar model before writing.

Ready for more? Write a two-step story for $600 - 245 + 130$.

GET READY

- Story problems on chart paper
- Whiteboards and markers
- Paper strips for bar models

WORDS TO USE

two-step: a story you solve with two number sentences

bar model: bars for the parts and the whole

reasonable: makes sense: close to an estimate

ASK

- What do you know? What does the story ask?
- How many steps does this story need?
- Does your answer make sense? How do you know?

WATCH FOR

Subtracts on every "more" story. Draw two bars: Ben has Ava's amount and 145 more, so add.

Stops after the first step of a two-step story. Read the question again: does this answer it?

Writes only the answer, with no unit. Ask for each number sentence and the unit: 587 what? 587 books.

ON ANIMAL MATH

PRINTABLE

Word Problems Within 1,000: sheets 2-4

PRINTABLE

Estimate or Exact? sheet 3

MAKER

Word Problems: Problem Type Two Steps, Addition, Subtraction, Number Range 100-300

QUIZ

Word Problems Quiz: the Two Steps level

EXIT TICKET

3rd Grade Add and Subtract Within 1,000 Exit Tickets: Exit Ticket 6.7

Add and Subtract to 1,000

Lesson 6.8: Add and subtract four-digit numbers

GOAL Students add and subtract four-digit numbers in columns the way they did three-digit numbers, with one more place: they regroup into the thousands and trade from the thousands, across zeros too.

About 45 minutes

★ Taught in 3rd grade in some states

I can add and subtract four-digit numbers.

THE LESSON

- 1 Warm up** (5 min) Solve $685 + 247$ in columns on whiteboards. Ask where each carried 1 went.
- 2 Teach** (10 min) Write $4,738 + 2,594$ in columns. Ones: 12, write 2 and carry 1. Tens: $1 + 3 + 9 = 13$, write 3 and carry 1. Hundreds: $1 + 7 + 5 = 13$, write 3 and carry 1. Thousands: $1 + 4 + 2 = 7$. The sum is 7,332. Then $6,004 - 2,357$: no tens and no hundreds, so trade a thousand: 5 thousands, 9 hundreds, 9 tens, 14 ones. The answer is 3,647. Check by adding.
Say: "Four digits work like three. I start with the ones and regroup or trade in every place that needs it."
- 3 Try it together** (10 min) Partners solve $3,456 + 2,879$, $7,215 - 3,648$ and $5,000 - 1,236$ on grid paper and check the subtractions by adding.
- 4 Practice** (15 min) Students add and subtract four-digit numbers on sheet 5 of Addition and Subtraction Strategies Within 1,000, then a maker sheet. Early finishers solve $10,000 - 4,567$.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 6.8** and circle a face beside the "I can" line. On question 1, look for 8,123 and 4,378, with 9s over the zeros of 8,005. On question 2, No is right: $3,465 + 2,378$ is 5,843, and 5,733 left out the regrouping.

Need help? Do one place at a time with a place value chart beside the problem.

Ready for more? Write two four-digit numbers whose sum is 9,999, or whose difference is 1,111.

GET READY

- Grid paper
- A place value chart to the thousands
- Whiteboards and markers

WORDS TO USE

thousands place: the fourth place from the right

regroup: 10 hundreds make a thousand

across zeros: trade from the next place that is not 0

ASK

- Where does the 1 go when the hundreds make 13?
- What do the zeros in 6,004 become?
- How can you check a subtraction?

WATCH FOR

Forgets the carry into the thousands. Circle each carried 1 and add it first in its column.

Trades across zeros but leaves a 0 as 0. Each 0 in between becomes 9: cross it out and write 9.

Lines up the digits from the left. Line up the ones on grid paper, one digit to a square.

ON ANIMAL MATH

PRINTABLE

Addition and Subtraction Strategies Within 1,000: sheet 5

MAKER

Column Math Equations: Operations + and -, Range Within 10,000, Set Digit Count, Digits 4 digits, Regrouping / Borrowing on, Mix All

EXIT TICKET

3rd Grade Add and Subtract Within 1,000 Exit Tickets: Exit Ticket 6.8

Add and Subtract to 1,000

Lesson 6.9: Equal or not equal

GOAL

Students decide whether two sums or differences are equal, by finding the value of each side or by seeing how the numbers changed ($246 + 300 = 346 + 200$), write = or $\neq$, and find a missing number that makes both sides equal.

About 45 minutes

★ Taught in 3rd grade in some states

I can tell if two sums or differences are equal.

THE LESSON

- 1 Warm up** (5 min) Is it true? Show $8 + 7 = 15$, $15 = 9 + 6$ and $9 + 6 = 10 + 4$. Students show thumbs up or down.
- 2 Teach** (10 min) Write $246 + 300$ and $346 + 200$. Each side is 546, so write =. A faster way: 100 moved from one number to the other, so the sum stays the same. Then $700 - 250$ and $750 - 300$: both are 450, since 50 was added to both numbers. Then $520 + 130$ and $530 + 140$: 650 and 670, so write $\neq$. Last, $420 + 150 = 410 + \square$: 410 is 10 less than 420, so $\square$ is 160.
Say: "The equal sign means both sides have the same value. I can find each side, or look at how the numbers changed."
- 3 Try it together** (10 min) Partners hold up the = or $\neq$ card for $365 + 200$ and $465 + 100$, $800 - 450$ and $850 - 500$, and $612 + 175$ and $600 + 190$, and say how they know. Then they find the missing number in $330 + 245 = 325 + \square$.
- 4 Practice** (15 min) No Animal Math pack fits this lesson yet. On whiteboards, students write = or $\neq$ for $254 + 300$ and $354 + 200$, $900 - 120$ and $880 - 100$, and $517 + 130$ and $527 + 140$, then find the missing numbers in $510 + 175 = 500 + \square$ and $640 - 230 = \square - 220$. Early finishers write a true sentence with a sum on each side for a partner.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 6.9** and circle a face beside the "I can" line. On question 1, look for = between $436 + 200$ and $536 + 100$, and $\neq$ between $900 - 350$ and $800 - 150$ (550 and 650). On question 2, look for 126 and 610; 475 or 360 means they wrote the value of the other side.

Ready for more? Write three sums equal to $600 + 250$, or find the missing number in $900 - \square = 700 - 150$.

GET READY

- Whiteboards and markers
- Cards with = and $\neq$ for each pair

WORDS TO USE

equal: =: both sides have the same value

not equal: $\neq$: the sides have different values

value: how much a side is worth

ASK

- What does the equal sign mean?
- How did the numbers change from one side to the other?
- Can you tell without adding? How?

WATCH FOR

Writes the left side's value in the box:

$420 + 150 = 410 + 570$. The box makes the right side 570. What plus 410 is 570?

Reads = as "the answer comes next". Read = as "is the same as" and check both sides.

Writes = for $520 + 130$ and $530 + 140$ because they look close. Find each side, or see that both numbers went up.

Need help? Find the value of each side on a whiteboard before writing the sign.

ON ANIMAL MATH

PRINTABLE

Equal and Not Equal: sheets 2-3, the same idea within 20, for help

EXIT TICKET

3rd Grade Add and Subtract Within 1,000 Exit Tickets: Exit Ticket 6.9