2nd Grade Math Curriculum

Addition Within 100

Unit 4 Overview: 10 lessons

Students add two-digit numbers within 100 with strategies built on tens and ones. They add tens and find 10 more and 10 less, jump the tens and then the ones on an open number line, add the tens and the ones, make a new ten with blocks and quick drawings, and make a ten first. Then they add in columns, add three and four numbers, and explain why a way works and find the mistake in a wrong answer. Base-ten blocks carry the unit, so keep them on the tables. Lessons 4.6 (make 100) and 4.10 (estimate to check a sum) are for the states that teach them in 2nd grade.

THE UNIT, DAY BY DAY

Day 1	**Pre-Check**	What students already know, before the first lesson.
Day 2	**4.1** Add tens, 10 more and 10 less	I can add tens and find 10 more and 10 less.
Day 3	**4.2** Add on an open number line	I can add on an open number line.
Day 4	**4.3** Add by place value	I can add the tens and the ones.
Day 5	**4.4** Make a new ten with blocks and drawings	I can make a new ten to add.
Day 6	**4.5** Make a ten first	I can make a ten first to add.
Day 7	**4.6** Make 100 ★	I can find the number that makes 100.
Day 8	**4.7** Add in columns with regrouping	I can add in columns and regroup.
Day 9	**4.8** Add three and four numbers	I can add three or four numbers.
Day 10	**4.9** Explain, check and find the mistake	I can explain how I added.
Day 11	**4.10** Estimate to check a sum ★	I can estimate to check a sum.
Day 12	**Unit Review**	The review, to go over together.
Day 13	**Unit Test**	Form A; Form B (other numbers) is for a retest.

★ Taught in 2nd 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 (rods, unit cubes and a few hundred flats) and a tens and ones mat for each pair
- A hundreds chart and a hundred grid for each student, in a sheet protector to write on
- Blank open number lines (a long line with no marks), ten frames and counters
- Whiteboards and dry erase markers

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

PRINTABLE **Unit Review**: the day before the test

EXIT TICKET **Exit Tickets**: one a lesson, four to a page

PRINTABLE **Unit Test**: Forms A and B, with keys

© 2026 Eggroll Games

Addition Within 100

Lesson 4.1: Add tens, 10 more and 10 less

GOAL Students add tens to any number by counting on by tens (35 + 40: 45, 55, 65, 75) and find 10 more and 10 less in their heads: only the tens digit changes.

I can add tens and find 10 more and 10 less.

About 45 minutes

THE LESSON

1. **Warm up** (5 min) Count by tens from 7 to 97 while you point down a column of the hundreds chart. Then ask: what is 4 tens and 4 tens? What is 40 + 40?
2. **Teach** (10 min) Build 35 with 3 rods and 5 cubes. Add 4 rods, counting on by tens: 45, 55, 65, 75. Write 35 + 40 = 75 and circle the 5 ones in both numbers. Then build 84: one rod more is 94, one rod fewer is 74. Ask what changed and what stayed the same.

   > **Say:** "When I add tens, only the tens change. Ten more is one more ten. Ten less is one ten fewer."

3. **Try it together** (10 min) Pull a number card. Partners write 10 less and 10 more, then add 20 and 30 to it, and check with blocks or the chart. Include a decade number (60) and a sum with the tens first (40 + 23).
4. **Practice** (15 min) Students count on by tens from a number on sheet 3 of Adding and Subtracting Tens (1st grade review), then do the "in your head" tables on sheet 3 of Ten More and Ten Less. Early finishers do a Base-ten Values sheet of 10 more and 10 less.
5. **Exit ticket** (5 min) Students do **Exit Ticket 4.1** and circle a face beside the "I can" line. Look for 60 for 57 + 30: they added 3 ones, not 3 tens.

Need help? Keep blocks on the desk: build the number, add or take away rods, and read the new number.

Ready for more? Find the missing tens: 26 + ___ = 76 and 14 + ___ = 84.

GET READY

- Base-ten blocks for each pair
- A hundreds chart for each student
- Number cards 21 to 89 in a bag
- Whiteboards and markers

WORDS TO USE

10 more: one more ten

10 less: one ten fewer

count on by tens: say 10 more each time: 35, 45, 55

ASK

- What is 10 more than 47? How do you know without counting?
- Which digit changes when you add 30? Why?
- How does 4 + 3 help with 42 + 30?

WATCH FOR

Writes 48 for 10 more than 47. Build it: 10 more is one more rod, not one more cube. Say "one more ten."

Writes 39 for 36 + 30. Read 30 as 3 tens and add 3 rods; the 6 ones stay.

Counts on by ones to add tens. Put a finger on the number on the chart and move down one row for each ten.

ON ANIMAL MATH

- PRINTABLE — **Adding and Subtracting Tens**: sheet 3, for review
- PRINTABLE — **Ten More and Ten Less**: sheet 3, for review
- MAKER — **Base-ten Values**: Mode 10 More and 10 Less, Number Range 10 to 100
- TOOL — **Hundreds Chart**: Click a Number To: See 10 More and 10 Less
- QUIZ — **Add and Subtract Within 100 Quiz**: the 10 More, 10 Less level
- EXIT TICKET — **2nd Grade Addition Within 100 Exit Tickets**: Exit Ticket 4.1

© 2026 Eggroll Games

Addition Within 100

Lesson 4.2: Add on an open number line

GOAL Students add two two-digit numbers on an open number line: they start at the first number, jump the tens of the second number one ten at a time, then jump the ones (63 + 28: 73, 83, then 8 more to 91).

I can add on an open number line.

About 45 minutes

THE LESSON

1. **Warm up** (5 min) Count on by tens from 63 to 93, then by ones from 83 to 91. Ask how many ones we counted.
2. **Teach** (10 min) Draw a long line and put a dot at 63. To add 28, jump 10 to 73 and 10 more to 83: the 2 tens. Then jump 8 to 91: the ones. Write +10, +10 and +8 over the jumps and 63 + 28 = 91. The line is not to scale; a small jump can be drawn short.

   > **Say:** "I start at the first number. I jump the tens, then the ones. Where I land is the sum."

3. **Try it together** (10 min) Partners draw each problem on a blank line and compare: 51 + 34 (no new ten), then 29 + 44 and 67 + 26 (they pass a ten). Then draw a line with the jumps already on it (+10, +10, +4 from 68) and ask what sum it shows.
4. **Practice** (15 min) Students jump by tens and then the ones on sheet 3 of 2-Digit Addition Strategies. Students who are not ready to draw their own line start with a Number Line maker sheet (a line marked by ones).
5. **Exit ticket** (5 min) Students do **Exit Ticket 4.2** and circle a face beside the "I can" line. On question 2, the number added is 26 (10 + 10 + 6). Look for 3, the number of jumps, or 16, a jump of ten left out.

Need help? Use a number line marked by ones from 60 to 100 first, then make the same jumps on an open line.

Ready for more? Jump the ones first and then the tens and compare, or add 29 by jumping 30 and back 1.

GET READY

- Blank open number lines for each student
- A floor number line
- Whiteboards and markers

WORDS TO USE

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

jump: a hop along the line

land: the number a jump ends on

ASK

- How many tens are in 28? How many jumps of ten will you make?
- Where did you land after the tens? How far is left to jump?
- How can you check where you landed?

WATCH FOR

Jumps 28 by ones. Say the tens first: 28 is 2 tens and 8 ones, so two jumps of ten, then 8.

Labels the jumps but not where they land. Write the landing number under each jump; the last one is the sum.

Jumps the first number too. Put the dot on 63 first. Only the second number is jumped.

ON ANIMAL MATH

- PRINTABLE — **2-Digit Addition Strategies**: sheet 3
- MAKER — **Number Line**: Mode Addition on Number Line, Number Range 1 to 100
- TOOL — **Number Line**: Start 60, End 100, then Jump
- QUIZ — **Addition Within 100 Quiz**: the Strategies level
- EXIT TICKET — **2nd Grade Addition Within 100 Exit Tickets**: Exit Ticket 4.2

© 2026 Eggroll Games

Addition Within 100

Lesson 4.3: Add by place value

GOAL Students add two two-digit numbers by adding the tens to the tens and the ones to the ones, then putting them together (43 + 45: 40 + 40 = 80, 3 + 5 = 8, 80 + 8 = 88), when the ones do not make a new ten.

I can add the tens and the ones.

About 45 minutes

THE LESSON

1. **Warm up** (5 min) Say a number and have students say it as tens and ones: 56 is 50 and 6, 83 is 80 and 3. Then ask: what is 40 + 40? What is 6 + 2?
2. **Teach** (10 min) Build 43 and 45 on a mat, the rods on the tens side and the cubes on the ones side. Push the rods together: 40 + 40 = 80. Push the cubes together: 3 + 5 = 8. Fill in tens, ones and total on the chart: 80 + 8 = 88. Then do 21 + 16 with only the chart.

   > **Say:** "I add the tens to the tens and the ones to the ones. Then I put them together."

3. **Try it together** (10 min) Partners fill in tens, ones and total on whiteboards for 31 + 26, 32 + 15 and 24 + 43, then build one with blocks to check. Ask why 30 + 10, and not 3 + 1, goes on the tens line.
4. **Practice** (15 min) Students fill in the tens, the ones and the total on sheet 1 of 2-Digit Addition Strategies, then do a Column Math Equations maker sheet of two two-digit numbers with no new ten, writing the tens and the ones beside each. Early finishers write two sums with no new ten that make 79.
5. **Exit ticket** (5 min) Students do **Exit Ticket 4.3** and circle a face beside the "I can" line. Look for 7 on the tens line of 53 + 24: the tens are 50 + 20 = 70. On question 2, 61 + 27 is 80 + 8, then 88.

Need help? Build every problem with blocks first and write each line as you push the blocks together.

Ready for more? Add three numbers the same way (13 + 21 + 34), or find two numbers whose tens make 70 and whose ones make 9.

GET READY

- Base-ten blocks and a mat for each pair
- A chart on the board with three rows: tens, ones, total
- Whiteboards and markers

WORDS TO USE

place value: what a digit is worth: 4 in 43 is 40

tens and ones: the parts: 43 is 40 and 3

total: the tens and the ones put together

ASK

- What are the tens in 43? What are the ones?
- Why do you add the tens to the tens?
- How can you check your total?

WATCH FOR

Writes 4 + 4 = 8 on the tens line. Ask what the 4 in 43 is worth: 4 tens, 40. Write 40 + 40.

Adds a tens digit to a ones digit (4 + 5). Line the numbers up on the mat: rods with rods, cubes with cubes.

Writes 808 for 80 and 8. Say it: 80 and 8 more is 88. Build it with 8 rods and 8 cubes.

ON ANIMAL MATH

PRINTABLE **2-Digit Addition Strategies**: sheet 1

MAKER **Column Math Equations**: Operations +, Range Within 100, Set Digit Count, Digits 2 digits, Regrouping / Borrowing off

TOOL **Base Ten Blocks**

QUIZ **Addition Within 100 Quiz**: the No Regrouping level

EXIT TICKET **2nd Grade Addition Within 100 Exit Tickets**: Exit Ticket 4.3

© 2026 Eggroll Games

Addition Within 100

Lesson 4.4: Make a new ten with blocks and drawings

GOAL Students add when the ones make 10 or more: they trade 10 ones for a ten and write the sum (49 + 36: 7 tens 15 ones is 8 tens 5 ones, 85), with blocks and with quick drawings.

I can make a new ten to add.

About 45 minutes

THE LESSON

1. **Warm up** (5 min) Show 1 rod and 12 cubes. Ask how many in all, then trade 10 cubes for a rod: 2 tens 2 ones, 22. Repeat with 3 rods and 15 cubes.
2. **Teach** (10 min) Build 49 and 36 on a mat. Count: 7 tens and 15 ones. There are more than 9 ones, so trade 10 ones for a rod: 8 tens 5 ones, 85. Then draw 49 + 36 as a quick drawing, 7 sticks and 15 circles, and loop 10 circles as the new ten.

   > **Say:** "When the ones make 10 or more, I trade 10 ones for a new ten. The amount stays the same."

3. **Try it together** (10 min) Partners build and trade for 27 + 54, 58 + 34 and 18 + 64, then do 39 + 26 with a quick drawing only. Mix in one with no new ten (42 + 35) and ask how they can tell.
4. **Practice** (15 min) Students count, trade 10 ones for a ten and add on sheet 2 of 2-Digit Addition Strategies, then make a quick drawing for two of its problems. Early finishers do a Base-ten Values maker sheet of numbers shown two ways (2 tens 14 ones = 3 tens 4 ones).
5. **Exit ticket** (5 min) Students do **Exit Ticket 4.4** and circle a face beside the "I can" line. In question 2, circling 714 means they wrote 7 tens 14 ones without trading, and 74 means they forgot the new ten.

Need help? Count the ones into a ten frame: when it is full, trade it for a rod.

Ready for more? Show 63 as 6 tens 3 ones and as 5 tens 13 ones, or add 48 + 37 + 5 and trade twice.

GET READY

- Base-ten blocks and a mat for each pair
- Whiteboards and markers
- A chart: a stick is a ten, a circle a one

WORDS TO USE

new ten: ten ones made into one ten

trade: swap 10 ones for 1 ten

quick drawing: sticks for tens, circles for ones

ASK

- Are there enough ones for a new ten?
- After the trade, how many tens and ones?
- Is 7 tens 15 ones the same as 85?

WATCH FOR

Writes 715 for 7 tens 15 ones. Trade 10 ones for a rod first. 8 tens 5 ones is 85.

Forgets the new ten: 49 + 36 = 75. Point to the traded ones: where did that ten go?

Trades when there are fewer than 10 ones. Count the ones first. Trade only when there are 10 or more.

ON ANIMAL MATH

- PRINTABLE — **2-Digit Addition Strategies**: sheet 2
- MAKER — **Base-ten Values**: Mode Many Ways, Number Range 10 to 100
- TOOL — **Base Ten Blocks**: select ten ones and press Put Together
- QUIZ — **Addition Within 100 Quiz**: the Regrouping level
- EXIT TICKET — **2nd Grade Addition Within 100 Exit Tickets**: Exit Ticket 4.4

© 2026 Eggroll Games

Addition Within 100

Lesson 4.5: Make a ten first

GOAL Students make a ten first: they move part of the second number to the first to reach the next ten, then add what is left (38 + 25: 38 + 2 = 40, and 25 – 2 = 23, so 40 + 23 = 63).

I can make a ten first to add.

About 45 minutes

THE LESSON

1. **Warm up** (5 min) Ask how many more make the next ten: 38 (2), 57 (3), 69 (1), 44 (6). Students show the answer on their fingers.
2. **Teach** (10 min) Write 38 + 25. Ask how many 38 needs to make 40: 2. Break 25 into 2 and 23 with a number bond. Move the 2 to 38: 38 + 2 = 40. Then 40 + 23 = 63. Show it with blocks: 2 cubes slide over to fill the ten, and 23 is left.

   > **Say:** "38 needs 2 to make 40. I take 2 from 25, so 25 becomes 23. 40 + 23 is 63."

3. **Try it together** (10 min) Partners solve 59 + 24, 47 + 35 and 68 + 16 with a number bond, saying how many make the next ten each time. Ask why 59 + 24 is the same as 60 + 23.
4. **Practice** (15 min) Students make a ten first on sheet 4 of 2-Digit Addition Strategies. Early finishers choose which number to make a ten with in 18 + 49 and explain why 49 is easier.
5. **Exit ticket** (5 min) Students do **Exit Ticket 4.5** and circle a face beside the "I can" line. In question 2, 45 is right: 3 comes from 48 to make 30. Look for 48 in the box: they moved 3 to 27 but did not take it from 48.

Need help? Use first numbers that need only 1 or 2 (29 + 33, 48 + 23), and show each move with counters in a ten frame.

Ready for more? Make a ten with either number (18 + 49 as 20 + 47 or as 17 + 50) and tell which is easier, or write a sum where making a ten first is the quickest way.

GET READY

- Ten frames and counters
- Base-ten blocks for each pair
- Whiteboards and markers

WORDS TO USE

next ten: the ten you reach first when you count on: 40 after 38

break apart: split a number: 25 is 2 and 23

make a ten: reach a number that ends in 0

ASK

- How many does 49 need to make the next ten?
- You took 2 from 25. What is left?
- Why is 40 + 23 easier than 38 + 25?

WATCH FOR

Moves 2 but keeps 25 whole: 40 + 25 = 65. Take the 2 cubes from the 25 and count what is left: 23.

Says 38 needs 3 to make 40. They counted 38 too. Count on from 39: 39, 40 is 2.

Breaks the second number into its tens and ones instead. Ask how many the first number needs to make a ten, and break off exactly that many.

ON ANIMAL MATH

- PRINTABLE — **2-Digit Addition Strategies**: sheet 4
- TOOL — **Ten Frames**: add frames with + 10-Frame
- TOOL — **Base Ten Blocks**
- QUIZ — **Addition Within 100 Quiz**: the Strategies level
- EXIT TICKET — **2nd Grade Addition Within 100 Exit Tickets**: Exit Ticket 4.5

© 2026 Eggroll Games

Addition Within 100

Lesson 4.6: Make 100

GOAL Students find the number that makes 100 with a given number (63 + 37 = 100): they count on to the next ten, then by tens to 100, and check on a hundred grid.

I can find the number that makes 100.

About 45 minutes

★ Taught in 2nd grade in some states

THE LESSON

1. **Warm up** (5 min) Pairs that make 10: say 2, students say 8; say 9, they say 1. Then tens that make 100: 20 and 80, 60 and 40.
2. **Teach** (10 min) Shade 63 squares on a hundred grid. Count the empty squares: 7 to finish the row, then 3 more rows of ten, 37. Show it on an open line too: 63 to 70 is 7, 70 to 100 is 30, and 7 + 30 = 37. Write 63 + 37 = 100. Point out that the ones make 10 and the tens make 9.

   > **Say:** "I count to the next ten, then by tens to 100. The ones make 10, so the tens make 9."

3. **Try it together** (10 min) Partners find what makes 100 with 83, 74, 25 and 50, one on the grid and the rest on a line. Then they play a quick match: one says a number, the other says what makes 100.
4. **Practice** (15 min) Students count the empty squares on sheet 1 of Make 100 and count the blocks on sheet 2. Early finishers join the pairs that make 100 on sheet 4.
5. **Exit ticket** (5 min) Students do **Exit Ticket 4.6** and circle a face beside the "I can" line. Watch for 42 for 68 + ___ = 100: the ones make 10, so the tens should make 9, and 68 + 42 is 110.

Need help? Use the hundred grid for every problem, and start with tens (40 + ___ = 100), then numbers that end in 5.

Ready for more? Find three numbers that make 100 (25 + 35 + ___), or explain why the number that makes 100 with 41 ends in 9.

GET READY

- A hundred grid (10 by 10) for each student, and crayons
- Base-ten blocks with a hundred flat
- A hundreds chart for each student

WORDS TO USE

make 100: find the number that adds to a number to give 100

hundred: 10 tens, or 100 ones

count on: start at a number and count up: 63, 70, 80, 90, 100

ASK

- How many to the next ten? Then how many tens to 100?
- Why do the tens make 9 and not 10?
- How can you check that your two numbers make 100?

WATCH FOR

Writes 47 for 63: makes each digit add to 10. Count it on the grid: 63 + 47 is 110. The ones make 10, so one ten is already used.

Counts the shaded squares instead of the empty ones. Point to the empty squares: they are what is still needed to make 100.

Stops at the next ten: 63 + 7 = 100. Write each jump: 7 to 70, then 30 to 100. Add the jumps.

ON ANIMAL MATH

PRINTABLE **Make 100**: sheets 1-2, and sheet 4 for early finishers

TOOL **Hundreds Chart**: Click a Number To: Color It

TOOL **Base Ten Blocks**: add a hundred, select it and press Break Apart

EXIT TICKET **2nd Grade Addition Within 100 Exit Tickets**: Exit Ticket 4.6

© 2026 Eggroll Games

Addition Within 100

Lesson 4.7: Add in columns with regrouping

GOAL Students add two-digit numbers in columns: they add the ones first, and when the ones make 10 or more they write the ones and carry the new ten to the top of the tens (47 + 38: 7 + 8 = 15, write 5 and carry 1; 1 + 4 + 3 = 8 tens; 85).

I can add in columns and regroup.

About 45 minutes

THE LESSON

1. **Warm up** (5 min) Add the ones only: 7 + 8, 9 + 4, 4 + 5. For each, students say whether it makes a new ten.
2. **Teach** (10 min) Write 47 + 38 in a column, tens under tens. Build both on a mat. Add the ones: 7 + 8 = 15. Trade 10 of the cubes for a rod and move it to the tens: write 5 under the ones and a small 1 over the tens. Add the tens: 1 + 4 + 3 = 8. The sum is 85. Then do 51 + 36, where the ones make only 7 and there is no 1 to carry.

   > **Say:** "I start with the ones. If they make 10 or more, I carry a new ten to the tens."

3. **Try it together** (10 min) Partners do 36 + 29, 54 + 18, 63 + 24 and 27 + 57 on whiteboards, building the first one with blocks. Before each, they say whether the ones will make a new ten.
4. **Practice** (15 min) Students do a Column Math Equations maker sheet where every problem adds two two-digit numbers and makes a new ten. Then they do the addition problems on sheet 4 of Column Math to 100, saying first which make a new ten: 45 + 19, 24 + 59 and 19 + 29 do; the other three have a one-digit number.
5. **Exit ticket** (5 min) Students do **Exit Ticket 4.7** and circle a face beside the "I can" line. Look for the small 1 over the tens in 38 + 45 and 57 + 29, and none in 26 + 52. A sum of 713 or 73 for 38 + 45 means the new ten was written down whole or lost.

Need help? Build each problem on the mat next to the column and make the trade with blocks before writing the 1.

Ready for more? Write a column problem that makes a new ten and has a sum of 92, or add three two-digit numbers in a column.

GET READY

- Base-ten blocks and a tens and ones mat for each pair
- Grid paper or a tens and ones column chart
- Whiteboards and markers

WORDS TO USE

column: tens over tens, ones over ones

regroup: trade 10 ones for a new ten

carry: write the new ten as a small 1

ASK

- Do the ones make a new ten? How do you know?
- What does the small 1 stand for?
- Why do you start with the ones?

WATCH FOR

Writes 715 for 47 + 38. Only one digit goes under the ones. The 10 ones are a new ten: carry it.

Carries the 1 and forgets to add it. Point to the 1 and say it first: 1 ten and 4 tens and 3 tens.

Starts with the tens. Build it: you only know about a new ten after you add the ones, so start there.

ON ANIMAL MATH

MAKER **Column Math Equations**: Operations +, Range Within 100, Set Digit Count, Digits 2 digits, Regrouping / Borrowing on, Mix All

PRINTABLE **Column Math to 100**: the addition problems on sheet 4

TOOL **Base Ten Blocks**: select ten ones and press Put Together

QUIZ **Addition Within 100 Quiz**: the Regrouping level

EXIT TICKET **2nd Grade Addition Within 100 Exit Tickets**: Exit Ticket 4.7

© 2026 Eggroll Games

Addition Within 100

Lesson 4.8: Add three and four numbers

GOAL Students add three and four two-digit numbers: they add a pair that makes a ten first (24 + 15 + 36: 24 + 36 = 60, then 75), and add them in columns.

I can add three or four numbers.

About 45 minutes

THE LESSON

1. **Warm up** (5 min) Students do the first problems on sheet 4 of Adding Three Numbers (1st grade review, within 20): circle the ten or the double, then add that pair first.
2. **Teach** (10 min) Write 24 + 15 + 36. Point out that 4 and 6 make 10, so add 24 + 36 first: 60. Then 60 + 15 = 75. Then write 13 + 22 + 31 + 18 in a column: add all the ones, 3 + 2 + 1 + 8 = 14, write 4 and carry 1; add the tens, 1 + 1 + 2 + 3 + 1 = 8; the sum is 84.

   > **Say:** "I can add in any order. I look for a ten first. In a column, I add all the ones, then all the tens."

3. **Try it together** (10 min) Partners pull three number cards, add them in two different orders and check that the sums match. Then they do one four-card sum in a column. Ask which order was easiest and why.
4. **Practice** (15 min) Students do a Horizontal Math Equations maker sheet of three numbers (Three Numbers, Within 100: the numbers go up to 50, and some have one digit). Then they add four of the number cards in a column. No Animal Math sheet adds four two-digit numbers yet.
5. **Exit ticket** (5 min) Students do **Exit Ticket 4.8** and circle a face beside the "I can" line. Look for 63 for 16 + 23 + 34: the carried 1 was left off. On question 2, adding 27 + 13 first makes 40.

Need help? Add the numbers two at a time with blocks: add the first two, then add the third to that sum.

Ready for more? Find four two-digit numbers with a sum of 100, or add the same four numbers in two orders in columns.

GET READY

- Base-ten blocks for each pair
- Number cards 11 to 25 (four of them make at most 94)
- Whiteboards and markers

WORDS TO USE

addend: a number that is added

any order: the sum is the same in any order

make a ten: ones that add to 10, like 4 and 6

ASK

- Which two would you add first? Why?
- Is there a new ten in the ones?
- Does the order change the sum?

WATCH FOR

Adds only two of the numbers. Touch each number as you add it.

Carries 1 when the ones make 20 or more. Say the ones total: 23 ones is 2 tens 3 ones, so carry 2.

Forgets the carried 1. Write the 1 over the tens first, and say it first.

ON ANIMAL MATH

- MAKER — **Horizontal Math Equations**: Operations +, Range Within 100, Three Numbers, Numbers Any Numbers
- PRINTABLE — **Adding Three Numbers**: sheet 4, for the warm up
- TOOL — **Base Ten Blocks**
- QUIZ — **Addition Within 100 Quiz**: the 3 or 4 Numbers level
- EXIT TICKET — **2nd Grade Addition Within 100 Exit Tickets**: Exit Ticket 4.8

© 2026 Eggroll Games

Addition Within 100

Lesson 4.9: Explain, check and find the mistake

GOAL Students explain why a way of adding works, using tens and ones, check a sum a second way, and find the mistake in a wrong answer (57 + 28 = 75 forgot the new ten).

I can explain how I added.

About 45 minutes

THE LESSON

1. **Warm up** (5 min) Students solve 33 + 48 on whiteboards any way they like. Three students share three ways: blocks, a number line and making a ten first.
2. **Teach** (10 min) Show two answers to 57 + 28: Owl says 85, Bear says 75. Solve it by making a ten first, 57 + 3 = 60 and 60 + 25 = 85, and check with tens and ones: 70 + 15 = 85. Bear forgot the new ten from 7 + 8. Then show 35 + 49 = 714: the 14 ones were written without trading.

   > **Say:** "I show why my way works with tens and ones. I check it another way. If two ways agree, I can be sure."

3. **Try it together** (10 min) Partners each solve 58 + 26 a different way, explain it to each other and check that the sums match. Then they judge two on the board: is 64 + 29 equal to 93 or 83? Is 52 + 36 equal to 88 or 61?
4. **Practice** (15 min) Students add any way and show the work, then find who is right and show how they know on sheet 5 of 2-Digit Addition Strategies. Early finishers write a "Who is right?" with a real mistake for a partner.
5. **Exit ticket** (5 min) Students do **Exit Ticket 4.9** and circle a face beside the "I can" line. In the "Show how you know" box any way that reaches 75 is right; the key shows making a ten first. On question 2, 18 + 67 is 85, so the answer is no.

Need help? Explain with blocks: build it, make the trade, and say each step while moving the blocks.

Ready for more? Solve one sum three ways and tell which was fastest, or write three wrong answers for 37 + 48, one for each mistake.

GET READY

- Base-ten blocks and blank number lines
- Two answers to one sum on chart paper, one right and one with a mistake
- Whiteboards and markers

WORDS TO USE

explain: tell or show why your way works

check: solve another way to see if the answer is right

mistake: a wrong step; finding it tells you how to fix it

ASK

- How do you know your sum is right?
- What did Bear do? Where is the mistake?
- Which way would you use to check? Why?

WATCH FOR

Says "I just know" or only redoes the same steps. Ask for a second way: blocks, a number line or tens and ones.

Picks the bigger answer as the right one. Solve it first, then compare with each answer.

Finds the wrong answer but cannot say the mistake. Ask what the answer would be with the new ten forgotten, then compare.

ON ANIMAL MATH

- PRINTABLE — **2-Digit Addition Strategies**: sheet 5
- TOOL — **Base Ten Blocks**
- TOOL — **Number Line**
- QUIZ — **Addition Within 100 Quiz**: the Regrouping level
- EXIT TICKET — **2nd Grade Addition Within 100 Exit Tickets**: Exit Ticket 4.9

© 2026 Eggroll Games

Addition Within 100

Lesson 4.10: Estimate to check a sum

GOAL Students estimate a sum by rounding each number to the nearest ten (38 + 44 is about 40 + 40 = 80) and use the estimate to check whether an answer makes sense.

I can estimate to check a sum.

About 45 minutes

★ Taught in 2nd grade in some states

THE LESSON

1. **Warm up** (5 min) Point to numbers on the 0 to 100 line and ask which ten is closer: 23, 68, 81, 49.
2. **Teach** (10 min) Show 38 on the line: it is between 30 and 40, closer to 40. 44 is closer to 40 too. So 38 + 44 is about 40 + 40 = 80. Now Max says 38 + 44 = 712. Is 712 close to 80? No: Max wrote 7 tens 12 ones without trading. The sum is 82, close to 80. Leave numbers that end in 5 for later; they are just as close to both tens.

   > **Say:** "I round each number to the nearest ten and add the tens. If the answer is close to my estimate, it makes sense."

3. **Try it together** (10 min) Partners estimate 53 + 29, 57 + 33 and 64 + 17, then check three answers on the board: 53 + 29 = 82, 57 + 33 = 810 and 64 + 17 = 47. Which make sense?
4. **Practice** (15 min) Students circle the closer ten and add rounded tens on sheet 1 of Estimate to Add & Subtract, then round and add on sheet 2. Early finishers solve the "about how many" stories on sheet 5.
5. **Exit ticket** (5 min) Students do **Exit Ticket 4.10** and circle a face beside the "I can" line. Look for 40 for 46: it is closer to 50. On question 2, the estimate 80 is far from 59, so the answer is no.

Need help? Keep the number line marked by tens on the desk, and round one number at a time before adding.

Ready for more? Estimate three numbers (23 + 38 + 29), or find a sum whose estimate is exactly the answer.

GET READY

- A 0 to 100 number line on the board, marked by tens
- Blank number lines for each student
- Whiteboards and markers

WORDS TO USE

estimate: a number close to the answer, found in your head

round: use the closest ten: 38 rounds to 40

make sense: close to the estimate, so it could be right

ASK

- Which ten is 57 closer to? How do you know?
- Is the answer close to your estimate?
- Why is an estimate useful if it is not the exact answer?

WATCH FOR

Rounds by dropping the ones: 57 to 50. Find 57 on the number line: is it closer to 50 or to 60?

Thinks an estimate must equal the answer. An estimate is about the answer. 82 and 80 are close, so 82 makes sense.

Says every answer makes sense. Compare the answer with the estimate: is it a few away, or tens away?

ON ANIMAL MATH

PRINTABLE **Estimate to Add & Subtract**: sheets 1-2, and sheet 5 for early finishers

MAKER **Rounding Numbers**: Round to Nearest 10, Show Number Line Hint

TOOL **Number Line**: Start 0, End 100, Interval 10

EXIT TICKET **2nd Grade Addition Within 100 Exit Tickets**: Exit Ticket 4.10

© 2026 Eggroll Games