

Within 100

Unit 9 Overview: 12 lessons

Students use tens and ones to add and subtract within 100. They find 10 more and 10 less on the hundreds chart and then in their heads, add and subtract tens, add tens to any number, and add a one-digit number with and without making a new ten, with blocks, drawings and number lines. Subtraction only takes away tens ($86 - 30$), as 1st grade does; two-digit minus two-digit waits for 2nd grade. The unit ends with story problems, chart puzzles and explaining how you added.

THE UNIT, DAY BY DAY

Day 1	Pre-Check	What students already know (page 1 of the test pack).
Day 2	9.1 10 more and 10 less on a hundreds chart	I can find 10 more and 10 less on a chart.
Day 3	9.2 10 more and 10 less in your head	I can find 10 more and 10 less in my head.
Day 4	9.3 Add and subtract tens	I can add and subtract tens.
Day 5	9.4 Add tens to any number	I can add tens to any number.
Day 6	9.5 Add a one-digit number, no new ten	I can add ones with no new ten.
Day 7	9.6 Add a one-digit number, making a new ten	I can make a new ten to add.
Day 8	9.7 Add with base-ten drawings	I can draw tens and ones to add.
Day 9	9.8 Add on a number line	I can add on a number line.
Day 10	9.9 Subtract tens by breaking apart	I can take away tens by breaking a number apart.
Day 11	9.10 Story problems within 100	I can solve story problems within 100.
Day 12	9.11 Hundreds chart puzzles	I can fill in pieces of the hundreds chart.
Day 13	9.12 Explain how you added	I can explain how I added.
Day 14	Unit Review	The review pages, with a tip beside every question.
Day 15	Unit Test	Form A; Form B (other numbers) is for a retest.

GET READY FOR THE UNIT

- A hundreds chart and a 120 chart for each student, in a sheet protector to write on with a dry erase marker
- Base-ten blocks (ten rods and unit cubes) for each pair, and a tens and ones mat for each student
- Two ten frames and 20 counters for each student, and blank number lines
- 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

EXIT TICKET

1st Grade Add and Subtract Within 100 Exit Tickets: one for every lesson, four to a page

PRINTABLE

1st Grade Add and Subtract Within 100 Test: the Pre-Check, the Unit Review and the Unit Test (Forms A and B), with keys

Within 100

Lesson 9.1: 10 more and 10 less on a hundreds chart

GOAL Students find 10 more and 10 less than a number on the hundreds chart by moving one row down or up, and see that only the tens digit changes (15, 25, 35).

About 45 minutes

I can find 10 more and 10 less on a chart.

THE LESSON

- 1 Warm up** (5 min) Count by tens from 10 to 100 while you point down the last column of the chart. Then count by tens from 4: 4, 14, 24, 34.
- 2 Teach** (10 min) Put a counter on 25 and count on ten ones: 26, 27, up to 35. The count lands right under 25. Do it again from 35 to 45, then go up a row from 25 to 15. Write 15, 25, 35, 45 in a column and circle the tens digits.
Say: "Down one row is 10 more. Up one row is 10 less. Only the tens change."
- 3 Try it together** (10 min) Partners take turns: one puts a counter on a number, the other says 10 more and 10 less, and both check by moving the counter down and up. Include a ten (40), then 8 and 92, where one move runs off the chart.
- 4 Practice** (15 min) Students fill in the chart pieces on sheet 2 of Ten More and Ten Less (pieces 5 and 6 go past 100: have the 120 chart out), then follow the arrows on sheet 5. Early finishers make a column piece for a partner.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.1** and circle a face beside the "I can" line. Watch for 37 circled as the number under 36: that is one more, not ten more.

Need help? Count on ten ones with a finger on the chart each time to see where the count lands, then move straight down.

Ready for more? Find 20 more and 20 less, or 10 more than a number in the 90s on the 120 chart.

GET READY

- Hundreds charts and counters
- The Hundreds Chart tool on the board
- Column pieces cut from a spare chart

WORDS TO USE

10 more: ten more than a number; on the chart, the box just below it

10 less: ten less than a number; on the chart, the box just above it

column: numbers going up and down the chart

ASK

- What number is just below 47? How do you know without counting?
- What changes when you go down a row? What stays the same?

WATCH FOR

Writes 54 under 53. They counted on by one. Move the counter straight down and read the number it lands on.

Confuses up and down. Count on ten ones from the number: the count ends one row down, so down is 10 more.

Moves ten boxes to the right. Show that the row ends and the count goes on in the next row: it lands under the start.

ON ANIMAL MATH

PRINTABLE

Ten More and Ten Less: sheets 2 and 5

MAKER

Hundreds Chart: Mode Puzzle Pieces, Chart Size 1 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

1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.1



Find worksheets, teacher tools, and more at [animalmath.com](https://www.animalmath.com)

© 2026 Eggroll Games

Within 100

Lesson 9.2: 10 more and 10 less in your head

GOAL Students find 10 more and 10 less than a two-digit number without a chart and without counting by ones: the tens digit goes up or down one and the ones stay (37, 47, 57).

About 45 minutes

I can find 10 more and 10 less in my head.

THE LESSON

- 1 Warm up** (5 min) Show 3 rods and 6 cubes. Students write the number (36). Add a rod: what is it now? Take two rods away: now?
- 2 Teach** (10 min) Build 47 with 4 rods and 7 cubes. Add one rod: 5 tens 7 ones, 57. Take it away and one more: 3 tens 7 ones, 37. Write 37, 47 and 57 one under the other and ask what changed and what stayed the same.
Say: "Ten more is one more ten. The tens digit goes up one and the ones stay the same."
- 3 Try it together** (10 min) Pull a card and point up for 10 more or down for 10 less. Students write the answer on whiteboards without blocks, then a pair checks with blocks. Include a ten (60) and one in the 90s (94: 10 more is 104).
- 4 Practice** (15 min) Students do sheet 1 of Ten More and Ten Less (write the number in blocks, then 10 less and 10 more), the tables on sheet 3, and count by tens on sheet 4. Early finishers write two numbers 1 or 10 apart for a partner to tell how it changed.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.2** and circle a face beside the "I can" line. Watch for 72 circled as 10 less than 73: that is one less.

Need help? Keep the blocks on the desk: build the number, add or take away one rod, then read the new number.

Ready for more? Find 10 more and 10 less past 100 (108, 115), or follow a chain: 10 more, 10 more, then 10 less.

GET READY

- Base-ten blocks for each pair
- Number cards 11 to 99 in a bag
- Whiteboards and markers

WORDS TO USE

tens digit: the digit that tells how many tens; the 4 in 47

ones digit: the digit that tells how many ones; the 7 in 47

in your head: without a chart and without counting by ones

ASK

- What is 10 more than 68? How do you know?
- Which digit changes when you find 10 less? Why?

WATCH FOR

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

Counts on ten ones to find 10 more. Cover the ones digit and change only the tens; then check by counting.

Gets stuck on 10 more than 94. Ten tens is 100, so 10 more than 94 is 104. Show it on the 120 chart.

ON ANIMAL MATH

PRINTABLE

Ten More and Ten Less: sheets 1, 3 and 4

MAKER

Base-ten Values: Mode 10 More and 10 Less, Number Range 10-100

MAKER

Skip Counting: Skip Count By 10s, Range 10 to 100, Starting Number Any Number

TOOL

Base Ten Blocks

QUIZ

Add and Subtract Within 100 Quiz: the 10 More, 10 Less level

EXIT TICKET

1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.2



Find worksheets, teacher tools, and more at [animalmath.com](https://www.animalmath.com)

© 2026 Eggroll Games

Within 100

Lesson 9.3: Add and subtract tens

GOAL Students add and subtract tens by thinking of them as tens: 3 tens and 4 tens make 7 tens, so $30 + 40 = 70$. A fact they know ($3 + 4 = 7$) gives the tens fact.

About 45 minutes

I can add and subtract tens.

THE LESSON

- 1 Warm up** (5 min) Say facts within 10 ($5 + 3$, $9 - 4$, $6 + 4$). Students say each answer, then say the fact again in tens: 5 tens and 3 tens make 8 tens.
- 2 Teach** (10 min) Show 3 rods and 4 rods. Count them by tens: 10, 20, 30, 40, 50, 60, 70. Write $3 + 4 = 7$ above $30 + 40 = 70$. Then show 7 rods, cross out 4, and write $70 - 40 = 30$ under $7 - 4 = 3$.
| Say: "Three tens and four tens make seven tens. That is 70."
- 3 Try it together** (10 min) Partners build each problem with rods, then write the fact and the tens fact: $20 + 50$, $60 + 30$, $90 - 50$, $80 - 60$. Finish with $50 + 50$ and $40 + 60$: 10 tens make 100.
- 4 Practice** (15 min) Students count rods on sheet 1 of Adding and Subtracting Tens and use the fact they know on sheet 2. Early finishers make a tens fact for a partner and draw the rods.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.3** and circle a face beside the "I can" line. Look for 9 written for $20 + 70$: they added the tens digits and left off the zero.

Need help? Use rods for every problem, with the facts within 10 on a card.

Ready for more? Find the missing tens: $30 + \underline{\quad} = 80$ and $90 - \underline{\quad} = 40$, or every tens fact that makes 100.

GET READY

- About 10 ten rods for each pair
- Whiteboards and markers
- A hundreds chart for each student

WORDS TO USE

tens: groups of ten; 40 is 4 tens

take away: take some out and see how many are left

fact: a small sum you know, like $3 + 4 = 7$

ASK

- How does $4 + 3$ help you with $40 + 30$?
- How many tens are left when you take 4 tens from 7 tens?

WATCH FOR

Writes 7 for $30 + 40$. Ask what the 7 stands for: 7 tens. Build it with rods and count by tens.

Writes 3040 or 700. Say the problem in tens, 3 tens and 4 tens, and count the rods by tens.

Adds when the sign says take away. Read the sign aloud, then cross out rods instead of adding them.

ON ANIMAL MATH

PRINTABLE Adding and Subtracting Tens: sheets 1-2

MAKER Horizontal Math Equations: Operations + and -, Tens Only, Numbers Both Numbers ($30 + 40$)

MAKER Number Line: Mode Addition on Number Line, Number Range 1-100 (tens on a line by tens)

TOOL Base Ten Blocks

QUIZ Add and Subtract Within 100 Quiz: the Tens level

EXIT TICKET 1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.3



Within 100

Lesson 9.4: Add tens to any number

GOAL Students add tens to a two-digit number by counting on by tens ($43 + 30 = 53, 63, 73$), and see that the tens change and the ones stay the same.

About 45 minutes

I can add tens to any number.

THE LESSON

- 1 Warm up** (5 min) Count on by tens from 6 to 96, then from 23 to 83, while you point down a column of the chart.
- 2 Teach** (10 min) Build 43 with blocks and add 3 rods. Count on by tens: 43, 53, 63, 73. Show it on the chart too: start on 43 and go down three rows. Write $43 + 30 = 73$ and circle the 3 ones in both numbers.
Say: "I start at 43 and count on three tens: 53, 63, 73. The ones stay the same."
- 3 Try it together** (10 min) Partners solve $25 + 30$, $61 + 20$ and $47 + 40$ with blocks and on the chart, and check that the two ways agree. Then try $20 + 36$, tens first: start at 36 and count on.
- 4 Practice** (15 min) Students count on by tens with blocks on sheet 3 of Adding and Subtracting Tens, then do a maker sheet of tens added to any number. Early finishers write the missing tens: $36 + \underline{\quad} = 76$.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.4** and circle a face beside the "I can" line. Look for 58 for $56 + 20$: they added 2 ones, not 2 tens.

Need help? Use the hundreds chart only: start on the number and move down one row for each ten.

Ready for more? Add tens past 100 on the 120 chart ($75 + 40 = 115$), or add tens in two steps: $52 + 20 + 10$.

GET READY

- Base-ten blocks for each pair
- A hundreds chart and a counter for each student
- Whiteboards and markers

WORDS TO USE

count on by tens: start at a number and say 10 more each time: 43, 53, 63

ones stay: the ones digit does not change when you add tens

ASK

- What stays the same when you add tens? Why?
- How many tens do you count on for $+ 40$?

WATCH FOR

Writes 45 for $43 + 20$. Read 20 as 2 tens. Add 2 rods, not 2 cubes.

Counts on by ones from 43 and loses count. Count on by tens: put a finger on 43 and go down a row for each ten.

Says 43, 53, 63 and stops a ten short. They counted the start as a ten. Say 43, then one ten for each rod: 53, 63, 73.

ON ANIMAL MATH

PRINTABLE Adding and Subtracting Tens: sheet 3

MAKER Horizontal Math Equations: Operations +, Tens Only, Numbers Second Number ($34 + 20$)

MAKER Column Math Equations: the same settings

TOOL Hundreds Chart: Click a Number To: See 10 More and 10 Less

TOOL Base Ten Blocks

QUIZ Add and Subtract Within 100 Quiz: the Tens level

EXIT TICKET 1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.4



Within 100

Lesson 9.5: Add a one-digit number, no new ten

GOAL Students add a one-digit number to a two-digit number when the ones do not make a new ten ($42 + 5 = 47$): they add the ones to the ones and keep the tens.

About 45 minutes

I can add ones with no new ten.

THE LESSON

- 1 Warm up** (5 min) Quick facts with ones only: $2 + 5$, $3 + 4$, $6 + 3$. Then ask: what is $20 + 7$? What is $50 + 4$?
- 2 Teach** (10 min) Build 42 on the mat: 4 rods, 2 cubes. Add 5 cubes on the ones side and count the ones: 7. The tens do not change. Write $42 + 5 = 47$ and point out the fact inside it, $2 + 5 = 7$. Then show $4 + 53$: start with the bigger number.
| Say: "I add the ones to the ones. The tens stay the same."
- 3 Try it together** (10 min) Partners take turns building a number and adding a few cubes, keeping the ones under 10. Both write the number sentence. Include a ten plus ones ($70 + 6$) and the small number first ($5 + 31$).
- 4 Practice** (15 min) Students count the tens and ones on sheet 1 of 2-Digit Plus 1-Digit Addition, then do a maker sheet with no new ten. Early finishers write three sums that make 58.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.5** and circle a face beside the "I can" line. Watch for 74 for $24 + 5$: the 5 went on the tens.

Need help? Use sums with small ones ($21 + 3$, $52 + 4$) and blocks for every problem.

Ready for more? Find the missing number: $63 + \underline{\quad} = 68$, or every one-digit number you can add to 31 with no new ten.

GET READY

- Base-ten blocks for each pair
- A tens and ones mat for each student
- Whiteboards and markers

WORDS TO USE

ones: single cubes; the ones digit tells how many

add the ones: put the ones together and count them

sum: the answer when you add

ASK

- Which digit changes when you add 5 ones? Why?
- How does $2 + 5$ help with $42 + 5$?
- Why start with 53 for $4 + 53$?

WATCH FOR

Adds the ones to the tens: $24 + 5 = 74$. Build it: the 5 cubes go with the ones. Read the 5 as 5 ones.

Counts the start and gets one too few: 42, 43, 44, 45, 46. Start counting with the next number: 43, 44, 45, 46, 47.

Counts all 47 from 1. Count the rods by tens first, 10, 20, 30, 40, then count on the ones.

ON ANIMAL MATH

PRINTABLE

2-Digit Plus 1-Digit Addition: sheet 1

MAKER

Horizontal Math Equations: Operations +, Number Overrides: First Number 10 to 99, Second Number 1 to 9, Maximum Answer 100, Regrouping / Borrowing off

TOOL

Base Ten Blocks

QUIZ

Add and Subtract Within 100 Quiz: the Add Within 100 level

EXIT TICKET

1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.5



Find worksheets, teacher tools, and more at animalmath.com

© 2026 Eggroll Games

Within 100

Lesson 9.6: Add a one-digit number, making a new ten

GOAL Students add a one-digit number when the ones make a new ten: they fill the ten first, then add the rest ($37 + 6$: $37 + 3 = 40$, $40 + 3 = 43$).

About 45 minutes

I can make a new ten to add.

THE LESSON

- 1 Warm up** (5 min) Show 8 dots in a ten frame: how many more make 10? Then 6, 9 and 7. Then ask what comes after 39, and after 59.
- 2 Teach** (10 min) Build 37: 3 rods, and 7 counters in a ten frame. Add 6 counters: 3 fill the frame and 3 start the next one. Trade the full frame for a rod: 4 tens 3 ones, 43. Write $37 + 6 = 43$, and under it $37 + 3 = 40$ and $40 + 3 = 43$.
Say: "37 needs 3 more to make 40. 6 is 3 and 3, so 40 and 3 more is 43."
- 3 Try it together** (10 min) Partners solve $29 + 5$, $58 + 6$ and $66 + 9$ with ten frames, saying how many make the next ten each time. Mix in one with no new ten ($52 + 4$) and ask how they can tell before adding.
- 4 Practice** (15 min) Students draw the new dots on sheet 2 of 2-Digit Plus 1-Digit Addition and break apart the second number on sheet 3. Early finishers solve $67 + 9$ and show the steps.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.6** and circle a face beside the "I can" line. Look for 52 for $58 + 4$: the new ten was forgotten.

Need help? Start with numbers ending in 8 or 9 and small numbers to add ($29 + 3$, $48 + 4$), with counters in ten frames.

Ready for more? Explain why $26 + 4$ makes a new ten and $26 + 3$ does not, or find every number that makes a new ten with 35.

GET READY

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

WORDS TO USE

new ten: ten ones that become one ten

next ten: the ten you reach first: 40 after 37

break apart: split a number in two: 6 is 3 and 3

ASK

- How many does 58 need to make a ten?
- How can you tell before adding that you will make a new ten?

WATCH FOR

Forgets the new ten: $37 + 6 = 33$. Fill the frame first and trade it for a rod.

Writes 313 for $37 + 6$. Ten ones make a new ten: trade them for a rod. 4 tens 3 ones is 43.

Breaks 6 into 1 and 5. Ask how many 37 needs to make 40: 38, 39, 40 is 3.

ON ANIMAL MATH

PRINTABLE

2-Digit Plus 1-Digit Addition: sheets 2-3

MAKER

Horizontal Math Equations: Operations +, Number Overrides: First Number 10 to 99, Second Number 1 to 9, Maximum Answer 100, Regrouping / Borrowing on, Mix All

TOOL

Ten Frames: add frames with + 10-Frame

TOOL

Base Ten Blocks: select ten ones and Put Together

QUIZ

Add and Subtract Within 100 Quiz: the Add Within 100 level

EXIT TICKET

1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.6



Find worksheets, teacher tools, and more at animalmath.com

© 2026 Eggroll Games

Within 100

Lesson 9.7: Add with base-ten drawings

GOAL Students add with quick drawings, a stick for each ten and a circle for each one: they count the sticks by tens, then the circles, and loop ten circles as a new ten.

About 45 minutes

I can draw tens and ones to add.

THE LESSON

- 1 Warm up** (5 min) Show 4 sticks and 6 circles; students write the number (46). Then they draw 72 on whiteboards and hold them up.
- 2 Teach** (10 min) Draw 35 as 3 sticks and 5 circles, then 4 more circles. Count the sticks, 10, 20, 30, then the circles, 31, 32, up to 39. Then draw $46 + 7$: 4 sticks, 6 circles and 7 more circles. Loop ten circles to make a new ten: 5 tens 3 ones, 53.
Say: "Sticks are tens and circles are ones. Ten circles make a new ten."
- 3 Try it together** (10 min) Students draw each problem on whiteboards and hold them up: $23 + 5$, $61 + 8$, $57 + 5$ and $38 + 7$. Check one with blocks. Ask who looped ten circles, and why.
- 4 Practice** (15 min) Students read the blocks on sheet 1 of 2-Digit Plus 1-Digit Addition, then make a quick drawing for each sum on sheet 5, problems 1-6, before circling yes or no for a new ten.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.7** and circle a face beside the "I can" line. In the drawing for $62 + 4$, look for 6 sticks and 6 circles: sticks drawn for the 4 mean the 4 was taken for tens.

Need help? Build each sum with blocks first, then draw exactly what is on the desk.

Ready for more? Draw 43 two ways (4 tens 3 ones, and 3 tens 13 ones), or solve $58 + 9$ with a drawing and explain the loop.

GET READY

- Whiteboards and markers
- Base-ten blocks to check with
- A chart on the board: a stick is a ten, a circle is a one

WORDS TO USE

quick drawing: a fast picture of a number, with sticks and circles

stick: a line that stands for a ten

loop: a ring around ten circles: a new ten

ASK

- How many sticks will you draw for 61? How many circles?
- When do you draw a loop? What does it stand for?

WATCH FOR

Draws 62 as 62 circles, or as 6 circles and 2 sticks. Say it as 6 tens and 2 ones first, then draw a stick for each ten.

Counts the sticks by ones: 1, 2, 3. Touch each stick and say 10, 20, 30, then count on the circles.

Writes 413 for 4 sticks and 13 circles. Loop ten circles: that is a new ten. Count the sticks and the loop by tens.

ON ANIMAL MATH

PRINTABLE

2-Digit Plus 1-Digit Addition: sheet 1, and sheet 5 problems 1-6

MAKER

Column Math Equations: Operations +, Number Overrides: First Number 10 to 99, Second Number 1 to 9, Maximum Answer 100, Regrouping / Borrowing on, Mix 50%

TOOL

Base Ten Blocks

QUIZ

Add and Subtract Within 100 Quiz: the Add Within 100 level

EXIT TICKET

1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.7



Find worksheets, teacher tools, and more at [animalmath.com](https://www.animalmath.com)

© 2026 Eggroll Games

Within 100

Lesson 9.8: Add on a number line

GOAL Students add on a number line: they hop to the next ten, then hop the rest ($47 + 5$: 3 to 50, then 2 to 52), and add tens with hops of ten ($36 + 20$: 46, 56).

About 45 minutes

I can add on a number line.

THE LESSON

- 1 Warm up** (5 min) A student stands on 47 on the floor number line. The class says how many hops to 50. Repeat from 52 to 60 and from 68 to 70.
- 2 Teach** (10 min) Draw a line from 45 to 55. Show $47 + 5$: hop 3 to 50, then 2 more to 52, and write +3 and +2 over the hops. Then show $36 + 20$ on a line marked by tens from 36: two hops of ten, 46, 56.
| Say: "First I hop to the next ten. Then I hop the rest."
- 3 Try it together** (10 min) Partners draw the hops on blank number lines and check each other: $28 + 6$, $64 + 9$, $75 + 7$, then $43 + 30$ by tens. Ask how they knew the first hop each time.
- 4 Practice** (15 min) Students hop to the next ten on sheet 4 of 2-Digit Plus 1-Digit Addition, then hop by tens on sheet 4 of Adding and Subtracting Tens, problems 1, 3 and 5.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.8** and circle a face beside the "I can" line. On $65 + 8$, a first hop of 5 to 70 shows they know the next ten.

Need help? Use a number line with every number written, and sums that need only 1 or 2 to reach the ten ($48 + 3$).

Ready for more? Draw the hops on an open line with only the start written, or solve $89 + 7$ and $95 + 5$.

GET READY

- A floor number line from 40 to 70
- Blank number lines for each student
- Whiteboards and markers

WORDS TO USE

hop: a jump along the number line; the number over it says how far

next ten: the ten you come to first when you count on: 50 after 47

the rest: what is left to add after you reach the ten

ASK

- How far is it from 57 to the next ten?
- You hopped 3. How many are left to hop? How do you know?

WATCH FOR

Counts the start as a hop and lands one short. The first hop lands on the next number. Count the hops, not the marks.

Hops 2 to the ten from 47. Count up from 47 on fingers: 48, 49, 50 is 3 hops.

Hops by ones all the way and loses track. Hop to the ten first and write the hop above it, then the rest.

ON ANIMAL MATH

PRINTABLE **2-Digit Plus 1-Digit Addition:** sheet 4

PRINTABLE **Adding and Subtracting Tens:** sheet 4, problems 1, 3 and 5

PRINTABLE **Number Line Paper: Blank and Labeled Number Lines:** sheet 2, blank lines to number

TOOL **Number Line:** Start 40, End 60, then Jump

QUIZ **Add and Subtract Within 100 Quiz:** the Add Within 100 level

EXIT TICKET **1st Grade Add and Subtract Within 100 Exit Tickets:** Exit Ticket 9.8

Within 100

Lesson 9.9: Subtract tens by breaking apart

GOAL Students take tens away from a two-digit number by breaking it into tens and ones ($63 - 40$: 60 and 3; $60 - 40 = 20$; 20 and 3 is 23). Only the tens change; the ones stay.

About 45 minutes

I can take away tens by breaking a number apart.

THE LESSON

- 1 Warm up** (5 min) Tens facts on whiteboards: $70 - 30$, $90 - 40$, $50 - 20$. Then break numbers apart out loud: 45 is 40 and 5; 82 is 80 and 2.
- 2 Teach** (10 min) Build 63: 6 rods, 3 cubes. Take away 4 rods: 2 rods and 3 cubes are left, 23. Write $63 - 40$ and break 63 apart under it: 60 and 3. Then $60 - 40 = 20$, and 20 and the 3 ones make 23.
Say: "I break 63 into 60 and 3. I take the tens from the tens. The 3 ones stay."
- 3 Try it together** (10 min) Partners build, break apart and cross out rods for $75 - 30$, $92 - 50$ and $48 - 20$. Then they do $81 - 60$ with only the number bond. Ask what happened to the ones each time.
- 4 Practice** (15 min) Students break apart and take away tens on sheet 5 of Adding and Subtracting Tens, then hop back by tens on sheet 4, problems 2, 4 and 6. Early finishers write a take-away-tens problem with the answer 35.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.9** and circle a face beside the "I can" line. Watch for 65 for $67 - 20$: they took away 2 ones, not 2 tens.

Need help? Keep blocks on the desk and start by taking away one ten ($54 - 10$), then two.

Ready for more? Find the missing tens: $86 - \underline{\quad} = 46$, or write a story for $75 - 30$.

GET READY

- Base-ten blocks for each pair
- Whiteboards and markers
- A hundreds chart for each student

WORDS TO USE

break apart: split a number into its tens and its ones: 63 is 60 and 3

take away: cross out or remove some; what is left is the answer

difference: the answer when you subtract

ASK

- What does 63 break into? Which part do you take the tens from?
- Why do the ones stay the same?
- Is the answer more or less than 63? How do you know?

WATCH FOR

Takes away ones: $67 - 20 = 65$. Read 20 as 2 tens and cross out 2 rods, not 2 cubes.

Forgets the ones: $63 - 40 = 20$. Point to the bond: the 3 ones are still there. 20 and 3 is 23.

Adds instead: $67 - 20 = 87$. Read the sign aloud. Should the answer be more or less than 67?

ON ANIMAL MATH

PRINTABLE

Adding and Subtracting Tens: sheet 5, and sheet 4 problems 2, 4 and 6

MAKER

Horizontal Math Equations: Operations $-$, Tens Only, Numbers Second Number ($34 + 20$)

TOOL

Base Ten Blocks

QUIZ

Add and Subtract Within 100 Quiz: the Tens level

EXIT TICKET

1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.9



Find worksheets, teacher tools, and more at [animalmath.com](https://www.animalmath.com)

© 2026 Eggroll Games

Within 100

Lesson 9.10: Story problems within 100

GOAL Students solve add-to and take-from stories within 100: they find what they know and what is asked, show it with blocks, a drawing or a number line, and write a number sentence ($46 + 7 = 53$; $85 - 40 = 45$).

About 45 minutes

I can solve story problems within 100.

THE LESSON

- 1 Warm up** (5 min) Tell a story within 20 and have students solve it on whiteboards: "8 birds sit on a fence. 5 more come. How many birds now?"
- 2 Teach** (10 min) Read: "Fox has 46 shells. Fox finds 7 more. How many shells now?" Underline the numbers and circle the question. Show it with 4 rods and 6 cubes plus 7 cubes, make the new ten, and write $46 + 7 = 53$. Then: "There are 85 seeds. Birds eat 40. How many are left?" Take away 4 rods: $85 - 40 = 45$.
Say: "I find what I know and what the story asks. Then I show it and write a number sentence."
- 3 Try it together** (10 min) Read three stories aloud. Partners choose blocks, a drawing or a number line, solve, and write the number sentence: $34 + 5$ (no new ten), $58 + 20$ (add tens) and $90 - 30$ (take away tens). Pairs who solved it different ways share.
- 4 Practice** (15 min) Students solve the stories on the chart paper and two more you write, then write their own stories with two-digit numbers on sheet 5 of Write Your Own Word Problems, problems 1 and 2, and trade.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.10** and circle a face beside the "I can" line. Look at the number sentences: $76 + 30$ for the grapes story means they added when Bear ate some.

Need help? Read the story aloud with the student, act it out with blocks, then write the number sentence together.

Ready for more? Write a story for $64 + 30$ and another for $64 - 30$, or solve a two-step story: $25 + 4$, then 10 more.

GET READY

- Base-ten blocks for each pair
- Four story problems written on chart paper
- Whiteboards and markers

WORDS TO USE

story problem: a short story that asks a math question

now, in all: words that ask how many after some are added

left: a word that asks how many are still there after some go away

ASK

- What do you know? What does it ask?
- Does the number get bigger or smaller? Which word tells you?
- How can you check your answer?

WATCH FOR

Adds every time, even when some are eaten.

Act it out with blocks: are some taken away? Then the answer is less.

Writes only the answer. Ask for the number sentence and the word: 53 what? 53 shells.

Takes away 4 ones for "eat 40". Read 40 as 4 tens and take away 4 rods.

ON ANIMAL MATH

PRINTABLE

Write Your Own Word Problems: sheet 5, problems 1-2, with two-digit numbers

PRINTABLE

Draw to Solve Word Problems: sheet 5 (number lines within 20), to review the models

QUIZ

Add and Subtract Within 100 Quiz: the Add Within 100 level

QUIZ

Add and Subtract Within 100 Quiz: the Tens level

EXIT TICKET

1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.10



Find worksheets, teacher tools, and more at [animalmath.com](https://www.animalmath.com)

© 2026 Eggroll Games

Within 100

Lesson 9.11: Hundreds chart puzzles

GOAL Students fill in pieces cut from the hundreds chart from one number they are given, using its patterns: right is 1 more, left 1 less, down 10 more, up 10 less.

About 45 minutes

I can fill in pieces of the hundreds chart.

THE LESSON

- 1 Warm up** (5 min) Pairs put together a hundreds chart cut into jigsaw pieces, and tell how they knew where a piece goes.
- 2 Teach** (10 min) Draw a plus-shaped piece with 46 in the middle. Fill in around it: left 45, right 47, up 36, down 56. Then draw a step piece with only its bottom number, 68, and work back: left 67, up 57, left 56. Check each on the chart.
| Say: "Right is 1 more, left is 1 less. Down is 10 more, up is 10 less."
- 3 Try it together** (10 min) Hand out the small pieces. Partners fill them in, then trade and check on the chart. Include a piece on the right edge (with 60 and 70) and one in the top row.
- 4 Practice** (15 min) Students fill in the row and column pieces on sheet 3 of Counting to 120, then a maker sheet of puzzle pieces. Early finishers color a Halloween Hundreds Chart mystery picture.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.11** and circle a face beside the "I can" line. The second piece gives only 85: look for 84 beside it, 74 above 84, then 73.

Need help? Do the pieces with a full hundreds chart on the desk, or fill in the missing numbers on a whole chart first.

Ready for more? Make a piece with one number given for a partner, or fill in a piece from the 120 chart (101 to 120).

GET READY

- A hundreds chart for each student
- A hundreds chart cut into 6 to 8 jigsaw pieces for each pair
- Small pieces cut from a spare chart, one number on each

WORDS TO USE

puzzle piece: a few boxes cut from the chart

1 more, 1 less: one box to the right, one box to the left

10 more, 10 less: one box down, one box up

ASK

- How do you know what goes above 46?
- Which box did you fill in first? Why that one?

WATCH FOR

Writes 47 below 46. Down is 10 more, not 1 more. Find 46 on the chart and point to the box under it.

Writes 56 above 46. The numbers grow going down. Up is 10 less: 36.

Fills a box far from the given number first and gets it wrong. Fill the boxes that touch the given number first, then the next ones.

ON ANIMAL MATH

PRINTABLE Counting to 120: sheet 3

PRINTABLE Fill in the Hundreds Chart: any sheet, for students who need the whole chart

PRINTABLE Halloween Hundreds Chart: a mystery picture, for early finishers

MAKER Hundreds Chart: Mode Puzzle Pieces, Chart Size 1 to 100

TOOL Hundreds Chart: Click a Number To: Hide or Show It (Hide All first)

QUIZ Add and Subtract Within 100 Quiz: the 10 More, 10 Less level

EXIT TICKET 1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.11



Find worksheets, teacher tools, and more at animalmath.com

© 2026 Eggroll Games

Within 100

Lesson 9.12: Explain how you added

GOAL Students show how they added, with a drawing, a number line or two number sentences ($27 + 7$: $27 + 3 = 30$, $30 + 4 = 34$), and check someone else's answer by finding the mistake.

About 45 minutes

I can explain how I added.

THE LESSON

- 1 Warm up** (5 min) Students solve $45 + 3$ and $45 + 30$ on whiteboards. Two students tell how they knew, one for each.
- 2 Teach** (10 min) Show $27 + 7$ three ways: a quick drawing with ten circles looped, hops on a number line (3 to 30, then 4), and $27 + 3 = 30$, $30 + 4 = 34$. Then show two answers to $49 + 5$: Bear says 54, Fox says 44. Find the mistake together: Fox forgot the new ten.
Say: "I can show how I added with a drawing, a number line or number sentences. Every way gives 34."
- 3 Try it together** (10 min) Partners each solve $38 + 6$ a different way, explain it to each other and check that the answers match. Then they judge two on the board: $57 + 4$ is 61 or 51? $32 + 6$ is 38 or 92?
- 4 Practice** (15 min) Students find who is right and show how they know on sheet 5 of 2-Digit Plus 1-Digit Addition, problems 7-9, then solve one sum from sheet 3 two ways. Early finishers write a "Who is right?" for a partner.
- 5 Exit ticket** (5 min) Students do **Exit Ticket 9.12** and circle a face beside the "I can" line. On $35 + 8$, circling the animal that says 33 means they forgot the new ten too.

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

Ready for more? Solve one sum three ways and tell which was fastest, or write a wrong answer with a mistake for a partner to find.

GET READY

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

WORDS TO USE

explain: tell or show how you got your answer

way: how you solve it, like a drawing

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

ASK

- How did you add? Can you show it another way?
- What did Fox forget? How do you know?
- Which way was fastest for you? Why?

WATCH FOR

Says "I just knew it." Ask them to show it with a drawing or a number line, or to say the steps: first I..., then I...

Picks an answer by guessing. Solve it first, then compare with each answer.

Writes the steps out of order. Ask what they did first. Number the steps 1 and 2.

ON ANIMAL MATH

PRINTABLE

2-Digit Plus 1-Digit Addition: sheet 5 problems 7-9, and sheet 3

MAKER

Horizontal Math Equations: Operations +, Number Overrides: First Number 10 to 99, Second Number 1 to 9, Maximum Answer 100, Regrouping / Borrowing on, Mix 50%

TOOL

Number Line

QUIZ

Add and Subtract Within 100 Quiz: the Add Within 100 level

EXIT TICKET

1st Grade Add and Subtract Within 100 Exit Tickets: Exit Ticket 9.12



Find worksheets, teacher tools, and more at [animalmath.com](https://www.animalmath.com)

© 2026 Eggroll Games