

Counting to 100

Unit 10 Overview: 8 lessons

Children count to 100 by tens and by ones, see that the hundreds chart is ten rows of ten, and start a count at any number instead of at 1. The hard spot is counting over a ten (29, 30, never “twenty-ten”), so it has a lesson of its own. Count out loud every day, with movement and a big class hundreds chart, and with real things snapped or poured into groups of ten. Lesson 10.8 can move to the 100th day of school. Lesson 10.7 (counting a big group by tens and ones) is for the states that teach it in Kindergarten.

THE UNIT, DAY BY DAY

Day 1	Pre-Check	What children already know (page 1 of the test pack).
Day 2	10.1 Count by tens	I can count by tens to 100.
Day 3	10.2 The hundreds chart	I can fill in rows of the hundreds chart.
Day 4	10.3 Count by ones to 100	I can count by ones to 100.
Day 5	10.4 Count on from any number	I can count on from any number.
Day 6	10.5 Count over a ten	I can count on to the next ten, like 29, 30.
Day 7	10.6 Hundreds chart puzzles	I can finish a piece of the hundreds chart.
Day 8	10.7 Count by tens and ones ★	I can count a big group by tens and ones.
Day 9	10.8 The 100th day	I can show 100 as ten groups of ten.
Day 10	Unit Review	The review pages, with a tip beside every question.
Day 11	Unit Test	Form A, read aloud to small groups; Form B (other pictures and numbers) is for a retest.

★ Taught in Kindergarten 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

- A big class hundreds chart (a pocket chart with number cards is best) and a hundreds chart for each child
- About 100 linking cubes for each table, to snap into towers of ten
- Number cards 1 to 100 in a bag, counters, sticky notes and crayons
- Ten frames or cups and 100 small things to count (beans, buttons, cereal) for the 100th day

HOW EACH LESSON GOES

- 1. Warm up** (5 min)
- 2. Teach** (10 min)
- 3. Try it together** (5 min)
- 4. Practice** (10 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	Kindergarten Counting to 100 Exit Tickets: one for every lesson, two to a page
PRINTABLE	Kindergarten Counting to 100 Test: the Pre-Check, the Unit Review and the Unit Test (Forms A and B), with keys



Counting to 100

Lesson 10.1: Count by tens

GOAL Children count by tens to 100 and see that each ten is a tower of 10 cubes, so counting the towers by tens tells how many cubes.

About 35 minutes

I can count by tens to 100.

THE LESSON

- 1 Warm up** (5 min) Count by tens to 100 together, flashing ten fingers for each ten. Count again, starting crouched low at 10 and growing a little taller with each ten until you stretch high at 100.
- 2 Teach** (10 min) Count the cubes in one tower by ones: 10. Stand a second tower beside it: 20. Add towers one at a time, counting by tens, up to 100. Then point down the last column of the class chart: the same numbers.
Say: "Each tower has 10 cubes. I count the towers by tens: 10, 20, 30."
- 3 Try it together** (5 min) Hold up 3 to 9 towers. Children count them by tens and say how many cubes. Then each pair snaps cubes into towers of 10 and counts their towers by tens.
- 4 Practice** (10 min) Children count the rows of ten pictures by tens on sheet 3 of Fall Skip Counting and write each total, then fill in the next two tens on a sheet of Skip Counting by 10s.
- 5 Exit ticket** (5 min) Read **Exit Ticket 10.1** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. The towers ask how many cubes: a child who writes 6 counted the towers, not the cubes.

Need help? Count by tens to 50 first, touching a tower for each ten.

Ready for more? Count 4 towers and 3 loose cubes: 10, 20, 30, 40, then 41, 42, 43.

GET READY

- Ten towers of 10 linking cubes, made before the lesson
- The class hundreds chart

WORDS TO USE

a ten: a group of 10, like a tower of 10 cubes

count by tens: say 10, 20, 30, one ten at a time

ASK

- How many cubes in one tower? In two towers?
- What comes after 40 when we count by tens?
- How many tens make 100?

WATCH FOR

Says thirteen for thirty, or fifteen for fifty. Say the tens slowly and stretch the end, thir-ty. Show 3 towers: thirty is 3 tens.

Counts the towers by ones and says 6. Touch each tower and say its ten: 10, 20, 30. The last number tells how many cubes.

Skips a ten, or stops at 90. Point down the last column of the chart while counting: after 90 comes 100.

ON ANIMAL MATH

PRINTABLE

Fall Skip Counting: sheet 3 (rows of ten pictures to count by tens)

PRINTABLE

Skip Counting by 10s: sheets 1-3

MAKER

Skip Counting: Skip Count By 10s, Range 10 to 100, Starting Number Multiples, Style Boxes

TOOL

Hundreds Chart: Skip Count Highlight 10s

EXIT TICKET

Kindergarten Counting to 100 Exit Tickets: Exit Ticket 10.1

Counting to 100

Lesson 10.2: The hundreds chart

GOAL Children read the hundreds chart row by row, see that every row has ten numbers and ends with a ten, and fill in missing numbers by counting along a row.

About 35 minutes

I can fill in rows of the hundreds chart.

THE LESSON

- 1 Warm up** (5 min) Count by tens to 100 while you point down the last column of the class chart. Then count by ones from 1 to 20, pointing to each box.
- 2 Teach** (10 min) Count the first row by ones, pointing to each box: ten numbers, and it ends at 10. Count the second row: it ends at 20. Show that every row ends with a ten. Take two cards out of a row and find what goes in each pocket by counting along the row from its start.
Say: “Each row has ten numbers and ends with a ten. Then the count goes on at the start of the next row, like reading.”
- 3 Try it together** (5 min) Children close their eyes while you take out a few cards, some at the ends of rows. They find each empty pocket, count along its row and tell you which card goes back.
- 4 Practice** (10 min) Children fill in the tens at the ends of the rows on a Hundreds Chart maker sheet (Count by 10s), then the few missing numbers on sheet 2 of Hundreds Chart Missing Numbers, with sheet 1 (the full chart) to look at.
- 5 Exit ticket** (5 min) Read **Exit Ticket 10.2** aloud, one question at a time. Children answer, then circle a face as you read the “I can” line. Three rows, 71 to 100: check the ends of the rows, 80, 90 and 100.

Need help? Put number cards 1 to 30 on a chart with three empty rows, matching each card to a full chart above it.

Ready for more? Fill in a whole empty row with no chart to look at, or tell what is the same about every number in the 5 column.

GET READY

- The class hundreds chart, with a few cards taken out
- A hundreds chart for each child
- A strip of paper to hold under a row

WORDS TO USE

hundreds chart: the numbers 1 to 100 in rows of ten

row: numbers going across, like children in a line

the end of the row: the last box, where a ten is

ASK

- How many numbers are in each row?
- What number ends this row? What starts the next one?
- Which numbers are in the last column?

WATCH FOR

Reads down a column when filling a row. Hold a strip of paper under the row and count along it from its first number.

Says “seventy-ten” at the end of the 71 row. Count by tens down the last column: after 70 comes 80. Lesson 10.5 practices this.

ON ANIMAL MATH

PRINTABLE

Hundreds Chart Reference: one for each child, to keep

PRINTABLE

Hundreds Chart Missing Numbers: sheets 2–3 (a few blanks; sheet 1 is the full chart)

MAKER

Hundreds Chart: Mode Count by 10s, Chart Size 1 to 100

TOOL

Hundreds Chart: Click a Number To: Hide or Show It

EXIT TICKET

Kindergarten Counting to 100 Exit Tickets: Exit Ticket 10.2

Counting to 100

Lesson 10.3: Count by ones to 100

GOAL Children count by ones to 100, pointing to each number on the hundreds chart, and find a missing number by counting along its row.

About 35 minutes

I can count by ones to 100.

THE LESSON

- 1 Warm up** (5 min) Count from 1 to 100 together while you point, clapping on every ten (10, 20, 30). Stand up and stretch at 50, then keep going.
- 2 Teach** (10 min) Cover three numbers in one row of the class chart with sticky notes. Count along the row from its start and stop at each note: what number is hiding? Lift the note to check. Do it again in another row.
Say: "I start at the beginning of the row and count on, one number for each box, to find the hidden number."
- 3 Try it together** (5 min) Children close their eyes while you cover a number in a new row. They count along the row in a whisper, then say the hidden number together.
- 4 Practice** (10 min) Children fill in the missing numbers on sheet 4 of Hundreds Chart Missing Numbers, counting along each row; ready children go on to sheets 5 and 6, which have more blanks.
- 5 Exit ticket** (5 min) Read **Exit Ticket 10.3** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. In the second question the last box is 90, the end of a row, where the count goes on to a new ten.

Need help? Fill in a chart to 50 (a Number Charts maker sheet, Within 50), with a full chart beside it.

Ready for more? Fill in a chart with more blanks (Fill in the Hundreds Chart), or count from 1 to 100 with no chart.

GET READY

- The class hundreds chart and a pointer
- A hundreds chart for each child
- Sticky notes to cover numbers

WORDS TO USE

count by ones: say every number, one after another

missing: not there; we count to find it

ASK

- What number comes next? How do you know?
- Where does this row start?
- Which number is hiding under the note?

WATCH FOR

Loses the place and skips a number. Touch each box while counting, or slide a sticky note along the row.

Writes 62 for 26. Find the number on the full chart and copy it: twenty-six starts with the 2.

Stops at a ten, saying "twenty-nine, twenty-ten". Count the tens column first, then the row again: 28, 29, 30.

ON ANIMAL MATH

PRINTABLE

Hundreds Chart Missing Numbers: sheets 4-6 (more blanks on each sheet)

PRINTABLE

Fill in the Hundreds Chart: any sheet, for children ready for more

MAKER

Hundreds Chart: Mode Fill in the Blank, Chart Size 1 to 100, Blank Percentage ~20%

MAKER

Number Charts: Range Within 50, Mode Fill in the Blank, Missing Number Percentage ~15%

TOOL

Hundreds Chart: Click a Number To: Hide or Show It

EXIT TICKET

Kindergarten Counting to 100 Exit Tickets: Exit Ticket 10.3

Counting to 100

Lesson 10.4: Count on from any number

GOAL Children start a count at any number to 100 and count on by ones, without going back to 1.

About 35 minutes

I can count on from any number.

THE LESSON

- 1 Warm up** (5 min) Pull a card, say 15. Children whisper 1 to 14, say 15 out loud and keep counting to 20. Do it with 35: this time start right at 35, with no whispering.
- 2 Teach** (10 min) Pull a card, say 43. Put a counter on 43 on the class chart and count on, moving it: 44, 45, 46. Then cover the chart and count on from 52: say 52 in your head and keep going.
| **Say:** "I don't start at 1. I start at 43 and keep counting: 44, 45, 46."
- 3 Try it together** (5 min) Pairs pull a card, say the number and count on three more while they move a counter on their charts. The cards end in 1 to 6, so today's counts stay inside one ten.
- 4 Practice** (10 min) Children count on and write the numbers in the boxes on a Skip Counting maker sheet (1s, Any Number), checking on the chart. Count the rows that cross a ten together; they are the next lesson.
- 5 Exit ticket** (5 min) Read **Exit Ticket 10.4** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. The first box comes after the start number: a child who writes 61 again in it is counting the start twice.

Need help? Count on from numbers under 20 with cubes in a line: the rows that count by ones on sheets 1 and 2 of Number Patterns, Count Up.

Ready for more? Count on ten numbers from a card, past the next ten, or count on from a number with no chart.

GET READY

- Number cards 11 to 99 that end in 1 to 6, in a bag
- A hundreds chart and a counter for each child

WORDS TO USE

count on: start at a number and keep counting

start number: the number we begin with

next: the number that comes right after

ASK

- What number do you start on?
- What comes after 64?
- Do you need to start at 1? Why not?

WATCH FOR

Starts again at 1. Whisper the count up to the start number, then say it out loud and keep going. Soon, skip the whisper.

Says the start number twice (61, 61, 62). Point to the start number and say it, then move the counter one box before saying the next number.

ON ANIMAL MATH

PRINTABLE **Number Patterns - Count Up (Simple):** sheets 1-2, only the rows that count by ones (cover the rest)

PRINTABLE **Hundreds Chart - Fill in Blanks:** any sheet: start at the number before a blank and count on

MAKER

Skip Counting: Skip Count By 1s, Range 10 to 100, Starting Number Any Number, Style Boxes, Numbers per Sequence 4

TOOL

Number Line: Start 40, End 60; Jump to hop on by ones

EXIT TICKET

Kindergarten Counting to 100 Exit Tickets: Exit Ticket 10.4

Counting to 100

Lesson 10.5: Count over a ten

GOAL Children count on over a ten, from 28 to 31 or 58 to 61, saying the next ten after a number that ends in 9, never “twenty-ten”.

About 35 minutes

I can count on to the next ten, like 29, 30.

THE LESSON

- 1 Warm up** (5 min) Count by tens to 100. Then count by ones from 17 to 23 and from 37 to 43, jumping up on each ten.
- 2 Teach** (10 min) Stand 2 towers of ten and add loose cubes one at a time: 21, 22, up to 29. Add one more and snap the ten loose cubes into a tower: 30, three tens. Show it on the chart: 29, then 30 at the end of the row, then 31 at the start of the next row.
Say: “After 29 comes 30: the ones make a new ten. Then 31 starts a new row.”
- 3 Try it together** (5 min) Pull a card that ends in 7, 8 or 9. The class counts on from it to two past the next ten, jumping up on the ten. Then pairs do the same with a counter on their charts.
- 4 Practice** (10 min) Children count on in the boxes of a Skip Counting maker sheet (1s, Any Number, 6 numbers), circling each row that crosses a ten and checking it on the chart. Then they fill in 29 to 32 on sheet 2 of Hundreds Chart, Fill in Blanks.
- 5 Exit ticket** (5 min) Read **Exit Ticket 10.5** aloud, one question at a time. Children answer, then circle a face as you read the “I can” line. Listen to each child count the second question aloud: 88, 89, then 90, not “eighty-ten”.

Need help? Count over the first tens, 9 to 11 and 19 to 21, with ten frames: fill a frame, then start a new one.

Ready for more? Count on from 97 past 100 to 105 on the Hundreds Chart tool set to 1 to 120.

GET READY

- The class hundreds chart
- Towers of 10 cubes and loose cubes
- Number cards that end in 7, 8 or 9, in a bag

WORDS TO USE

the next ten: the ten that comes after a number ending in 9: after 29 comes 30

new row: on the chart, after a ten the count goes on at the start of the next row

ASK

- What comes after 39? How do you know?
- Where does the count go after 40?
- What is the next ten after 60?

WATCH FOR

Says “twenty-ten” or writes 210 after 29. Snap ten loose cubes into a tower: the next ten, 30. Count down the tens column.

Jumps to the next ten too soon (27, 28, 30).

Touch each box on the chart while counting: 29 comes before 30.

Goes back along the same row after a ten (30, 21). Move the counter down to the start of the next row: after 30 comes 31.

ON ANIMAL MATH

PRINTABLE

Hundreds Chart - Fill in Blanks: sheets 1-2, the blanks across a ten (80, 81 on sheet 1; 29 to 32 on sheet 2)

PRINTABLE

Number Patterns - Count Up (Simple): sheet 1, the row 16, 17, 18, 19

MAKER

Skip Counting: Skip Count By 1s, Range 10 to 100, Starting Number Any Number, Numbers per Sequence 6

TOOL

Hundreds Chart

EXIT TICKET

Kindergarten Counting to 100 Exit Tickets: Exit Ticket 10.5

Counting to 100

Lesson 10.6: Hundreds chart puzzles

GOAL Children finish pieces of the hundreds chart by finding the number they know and counting on and back from it, and color numbers on the chart to find a mystery picture.

About 35 minutes

I can finish a piece of the hundreds chart.

THE LESSON

- 1 Warm up** (5 min) Play “What’s missing?”: the class reads a row of the class chart, closes their eyes, and you take out a card. Which number is gone?
- 2 Teach** (10 min) Hold up a strip of 4 boxes with 63 in the second box. Find 63 on the class chart: 64 and 65 come after it, and 62 comes just before. Write them in, then lay the strip on the chart to check.
Say: “I find the number I know. I count on for the boxes after it. The box before it is one less.”
- 3 Try it together** (5 min) Each pair gets a strip with one number. They find it on their chart, fill in the other boxes and check by laying the strip on top. Then they swap strips.
- 4 Practice** (10 min) Children color the mystery picture on sheet 1 of Halloween Hundreds Chart. Read each color line aloud: “23 to 28” means color 23, then count on and color each box to 28.
- 5 Exit ticket** (5 min) Read **Exit Ticket 10.6** aloud, one question at a time. Children answer, then circle a face as you read the “I can” line. In the first piece the given number is second: the box before it is the one most often wrong.

Need help? Finish pieces from the first two rows, with a full chart above to match.

Ready for more? Make a piece for a partner, or do a Puzzle Pieces maker sheet, whose pieces go up and down the chart too, with a chart beside it.

GET READY

- Strips of 4 or 5 boxes cut from a spare chart row, one number written in each
- A hundreds chart for each child
- Orange, green and black crayons

WORDS TO USE

puzzle piece: a few boxes cut from the chart
before: the number just before; one less
mystery picture: a picture we find by coloring numbers

ASK

- Which number do you know? Where is it on the chart?
- What comes just before 63?
- How did you find the last box?

WATCH FOR

Writes one more in the box before the given number. Point to the chart: the box on the left is one less. Count up to it from the start of the row.

Colors only the two ends of “23 to 28”. Say “23, 24, 25, 26, 27, 28”, touching each box, then color.

ON ANIMAL MATH

PRINTABLE

Halloween Hundreds Chart: sheets 1-4 (read each color line aloud)

PRINTABLE

Hundreds Chart Reference: to lay the pieces on

MAKER

Hundreds Chart: Mode Puzzle Pieces, Chart Size 1 to 100, for more

TOOL

Hundreds Chart: Click a Number To: Color It

EXIT TICKET

Kindergarten Counting to 100 Exit Tickets: Exit Ticket 10.6

Counting to 100

Lesson 10.7: Count by tens and ones

GOAL Children count a big group of 20 to 60 things by making groups of ten, counting the tens by tens and then counting on the ones.

I can count a big group by tens and ones.

About 35 minutes

★ Taught in Kindergarten in some states

THE LESSON

- 1 Warm up** (5 min) Show full ten frames one at a time while the class counts them by tens. Add 3 loose counters: 30, 31, 32, 33.
- 2 Teach** (10 min) Spill 34 beans and start counting them by ones; lose track on purpose. Then fill ten frames: 3 full frames and 4 left. Count the frames by tens, 10, 20, 30, then count on the ones, 31, 32, 33, 34.
Say: "I make tens first. I count the tens by tens, then I count on the ones."
- 3 Try it together** (5 min) Pairs count a bag into ten frames or cups of ten, count the tens by tens and the ones on, and write the number on a sticky note. They swap bags and check.
- 4 Practice** (10 min) Children circle groups of ten pictures, count the tens by tens and count on the ones on sheet 1 of Bundling Tens and Ones (read the directions aloud).
- 5 Exit ticket** (5 min) Read **Exit Ticket 10.7** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. The towers and loose cubes come first: a child who writes 8 counted every piece by ones.

Need help? Count 2 full ten frames and a few more (20 to 29) before bigger groups.

Ready for more? Count a bag of 70 to 100 things by tens and ones, or the full ten frames on sheet 4 of Counting to 120.

GET READY

- A bag of 30 to 60 beans or buttons for each pair
- Ten frames or small cups to hold ten
- Towers of 10 cubes and loose cubes

WORDS TO USE

group of ten: ten things together, like a full ten frame or a tower

ones: the things left over that do not make a ten

ASK

- How many tens? How many ones?
- Why do we make tens first?
- You have 40. What comes after 40 when you count on one more?

WATCH FOR

Counts each tower as one (writes 8 for 53).

Touch each tower and say its ten, then keep going with the ones: 50, 51, 52, 53.

Puts 9 or 11 in a group of ten. Use ten frames or cups: a group is full when every box has one.

Counts the ones first and gets lost. Count the tens first, every time.

ON ANIMAL MATH

PRINTABLE

Bundling Tens and Ones: sheet 1 (circle groups of ten pictures)

PRINTABLE

Counting to 120: sheet 4, for more (numbers past 100)

TOOL

Base Ten Blocks

TOOL

Ten Frames: add frames with + 10-Frame, Fill All, then a few counters in a new frame

EXIT TICKET

Kindergarten Counting to 100 Exit Tickets: Exit Ticket 10.7

Counting to 100

Lesson 10.8: The 100th day

GOAL Children show 100 as ten groups of ten (ten towers, ten full ten frames, ten rows of the chart) and count the groups by tens to 100. This lesson can move to the 100th day of school.

About 35 minutes

I can show 100 as ten groups of ten.

THE LESSON

- 1 Warm up** (5 min) Do 100 moves in ten groups of ten: ten jumping jacks, ten claps, ten stomps and so on, counting by tens after each group.
- 2 Teach** (10 min) Stand ten towers of 10 cubes in a row and count them by tens to 100. Show 100 two more ways: ten full ten frames, and the ten rows of the hundreds chart. Write 100: a 1 and two zeros.
Say: "Ten tens make one hundred. I count the tens: 10, 20, 30, up to 100."
- 3 Try it together** (5 min) Each table counts 100 things into ten cups or ten frames of ten, then counts the groups by tens to 100. Glue them onto the class 100 poster in rows of ten.
- 4 Practice** (10 min) Children put a sticker or a dot in each box of an Empty Chart maker sheet, counting each row of ten by tens as they finish it, then count the tens on sheet 3 of Bundling Tens and Ones.
- 5 Exit ticket** (5 min) Read **Exit Ticket 10.8** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. The sticks question has twelve sticks: a child who circles all twelve did not stop at 100.

Need help? Count 10 cups of 10 with a partner, saying the tens as each cup is set down.

Ready for more? Show 100 a new way, or count on past 100 to 120 on the Hundreds Chart tool set to 1 to 120.

GET READY

- 100 small things for each table (cereal, buttons, stickers) and ten cups or ten frames
- Ten towers of 10 cubes
- A big sheet of paper for a class 100 poster

WORDS TO USE

one hundred: ten tens; we write 100

ten tens: ten groups of ten

ASK

- How many tens make 100?
- How do you know there are 100?
- Is 100 a lot? Is it more than our class?

WATCH FOR

Counts the groups by ones and says 10. Count the groups again by tens, touching each one: the last number tells how many things.

Makes groups that are not ten. Fill ten frames or cups, then count.

Writes 1000 or 10. Write 100 together: a 1 and two zeros, like the last box of the chart.

ON ANIMAL MATH

PRINTABLE **Hundreds Chart - Complete:** count its ten rows by tens

PRINTABLE **Bundling Tens and Ones:** sheet 3 (count the tens)

MAKER **Hundreds Chart:** Mode Empty Chart, Chart Size 1 to 100: a sticker or a dot in each box

TOOL **Hundreds Chart:** Skip Count Highlight 10s

TOOL **Ten Frames:** ten frames and Fill All

EXIT TICKET **Kindergarten Counting to 100 Exit Tickets:** Exit Ticket 10.8