

Compare to 10

Unit 4 Overview: 8 lessons

Children compare groups and numbers to 10. They match two groups one to one to see which has more and which has fewer, count to compare, find groups with the same number, and tell which of two numbers is greater. Then they say greater than, less than and equal to, and write the signs $>$, $<$ and $=$. Everything starts with real things (bears, cubes, cube towers), then pictures, then numbers. Read every question aloud. Lessons 4.4 (make a group with more, fewer or the same), 4.7 (put numbers in order) and 4.8 (first to tenth) are for the states that teach them in Kindergarten.

THE UNIT, DAY BY DAY

Day 1	Pre-Check	What children already know (page 1 of the test pack).
Day 2	4.1 More and fewer by matching	I can match to find more and fewer.
Day 3	4.2 Count to compare	I can count to compare two groups.
Day 4	4.3 The same number	I can find groups with the same number.
Day 5	4.4 Make more, fewer or the same ★	I can make a group with more, fewer or the same.
Day 6	4.5 Which number is greater	I can find the greater number.
Day 7	4.6 Greater than, less than, equal to	I can use greater than, less than and equal to.
Day 8	4.7 Put numbers to 10 in order ★	I can put numbers to 10 in order.
Day 9	4.8 First to tenth ★	I can find first to tenth in a line.
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

- Counting bears or linking cubes in two colors, 10 of each for every pair, and two ten frame mats
- Number cards 0 to 10 and dot cards 1 to 10, two sets
- A floor number path 0 to 10 made with tape on the rug
- Big $>$, $<$ and $=$ cards, and ten toy animals for a line

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 Compare to 10 Exit Tickets: one for every lesson, two to a page
PRINTABLE	Kindergarten Compare to 10 Test: the Pre-Check, the Unit Review and the Unit Test (Forms A and B), with keys

Compare to 10

Lesson 4.1: More and fewer by matching

GOAL Children match the things in two groups one to one. The group with some left over has more; the group that runs out first has fewer.

About 35 minutes

I can match to find more and fewer.

THE LESSON

- 1 **Warm up** (5 min) Set out 4 chairs and call 5 children to sit. Is there a chair for everyone? One child is left standing, so there are more children than chairs.
- 2 **Teach** (10 min) Put 5 red bears in a row and 3 blue bears spread far apart, so the blue row looks longer. Ask which has more. Then match them, one red bear under each blue bear: two red bears have no partner.
Say: "I match one to one. Red has some left over, so red has more. Blue runs out first, so blue has fewer."
- 3 **Try it together** (5 min) Pairs each grab a small handful of bears, line them up one across from one, and say who has more and who has fewer. If every bear has a partner, they grab again.
- 4 **Practice** (10 min) Children draw a line from each picture to one in the other group, then circle the group the direction asks for, on sheets 1 and 2 of Comparing Groups, Objects to 5. Read each direction: some ask for fewer.
- 5 **Exit ticket** (5 min) Read **Exit Ticket 4.1** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. The rows are drawn the same length, so only matching tells: watch for a line that joins one picture to two.

Ready for more? Match groups of up to 10 on sheets 1 and 2 of Fall Comparing Numbers, then count how many are left over.

GET READY

- Bears in two colors, up to 10 for each pair
- Four chairs for the warm up

WORDS TO USE

match: put one with one

more: the group with some left over

fewer: the group that runs out first

ASK

- Which group has some left over?
- Which group ran out first?
- Does the longer row always have more?

WATCH FOR

Picks the longer or bigger row. Push the things together and match again: the one with some left over has more.

Matches one picture to two. Cross off each picture as it gets its line.

Says "more" for the group with fewer. Ask "Who has some left over?" Left over means more.

Need help? Match groups of 2 to 5 real bears on a two-row mat before matching pictures.

ON ANIMAL MATH

PRINTABLE **Comparing Groups - Objects to 5:** sheets 1-2: draw lines to match, then circle

PRINTABLE **Fall Comparing Numbers:** sheets 1-2 (more, then fewer)

MAKER

Comparing Groups: Mode Objects, Comparison Mixed, Number Range Within 5 (1-5), Object Layout Neat Rows

TOOL

Ten Frames: two frames, one above the other, to match box by box

EXIT TICKET

Kindergarten Compare to 10 Exit Tickets: Exit Ticket 4.1

Compare to 10

Lesson 4.2: Count to compare

GOAL Children count two groups of up to 10 and use the numbers to tell which has more and which has fewer, even when the things are scattered or bigger.

About 35 minutes

I can count to compare two groups.

THE LESSON

- 1 Warm up** (5 min) Clap 4 times and stomp 6 times while children count. Did we clap more or stomp more? How do you know?
- 2 Teach** (10 min) Lay 3 big animal cards far apart and 6 small mouse cards close together. Which has more? Count each group and hold up its number card. Find both numbers on the floor path: 6 comes after 3.
Say: "I count each group. Six mice is more than three animals, even though the animals are bigger."
- 3 Try it together** (5 min) Partners spill their cups, count their own cubes and hold up the number card. Who has more? They check by lining the cubes up to match.
- 4 Practice** (10 min) Children count each group, write how many beside it, and circle the group the direction asks for on sheets 1 and 2 of Comparing Groups, Objects to 10. Read each direction: some ask for fewer.
- 5 Exit ticket** (5 min) Read **Exit Ticket 4.2** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. The groups are scattered: watch who touches or dots each picture while counting.

Need help? Count groups to 5 with real cubes, then line them up to check.

Ready for more? Count each kind of animal on sheet 5 of Count the Animals, then say which kind has the most and which the fewest.

GET READY

- A cup of up to 10 cubes for each child
- Number cards 1 to 10
- Three big animal cards and six small mouse cards

WORDS TO USE

count: say one number for each thing

more: the bigger number; more things

fewer: the smaller number; not as many things

ASK

- How many in this group? And in that one?
- Which number is more? How do you know?
- Do bigger pictures mean more?

WATCH FOR

Picks the group with bigger pictures. Count both groups: the number tells which has more, not the size.

Loses count in a scattered group. Put a dot or a counter on each picture as it is counted.

Counts right but circles the smaller number. Find both numbers on the floor path: the one farther along is more.

ON ANIMAL MATH

PRINTABLE

Comparing Groups - Objects to 10: sheets 1-2

PRINTABLE

Comparing Groups - More to 10: any sheet; every row asks for more

PRINTABLE

Count the Animals: Counting 1 to 10: sheet 5, for more

MAKER

Comparing Groups: Mode Objects, Comparison Mixed, Number Range Within 10 (1-10), Object Layout Scattered

EXIT TICKET

Kindergarten Compare to 10 Exit Tickets: Exit Ticket 4.2

Compare to 10

Lesson 4.3: The same number

GOAL Children find two groups with the same number, by matching or by counting, and make a group with the same number as another.

About 35 minutes

I can find groups with the same number.

THE LESSON

- 1 **Warm up** (5 min) Clap 3 times; children clap the same number back. Then clap 5, 2 and 7.
- 2 **Teach** (10 min) Build two towers of 4 cubes in different colors: they stand just as tall. Count each: 4 and 4. Then spread 4 bears out beside 4 cubes in a row, and match them one to one: nothing is left over.
Say: "Every one has a partner and none are left over. Four and four are the same number."
- 3 **Try it together** (5 min) Give each child a dot card. Children find the classmate whose card has the same number and sit down together. Count both cards to check.
- 4 **Practice** (10 min) Children count a dot card and build a tower with the same number, a few times. Then on sheet 1 of Comparing Numbers to 10 they find the 2 rows where both sides have the same number of dots and color those circles.
- 5 **Exit ticket** (5 min) Read **Exit Ticket 4.3** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. The second question asks for as many dots as giraffes: count the dots with each child, one for each giraffe.

Ready for more? Make three towers with the same number of cubes, each a different color, and check that they stand just as tall.

GET READY

- Linking cubes, 10 for each child
- Dot cards 1 to 10, two of each number
- A ten frame mat and counters for each child

WORDS TO USE

the same: just as many; every one has a partner

equal: another way to say the same number

ASK

- How do you know they are the same?
- Is anything left over?
- If I spread these out, is it still the same number?

WATCH FOR

Thinks a longer row has more. Match the two rows one to one: nothing is left over, so they are the same.

Makes a group one too many or too few. Count both groups out loud, touching each one.

Need help? Match two groups of up to 5 bears one to one before counting them.

ON ANIMAL MATH

PRINTABLE

Comparing Numbers to 10: sheet 1: color the circles of the 2 rows that are the same (the signs come in lesson 4.6)

MAKER

Ten Frames Counting: Mode Fill the Frame, Number Range 1-10: draw as many dots as the number

TOOL

Ten Frames: fill one frame, then make a second one the same

EXIT TICKET

Kindergarten Compare to 10 Exit Tickets: Exit Ticket 4.3

Compare to 10

Lesson 4.4: Make more, fewer or the same

GOAL Children make a group with more, fewer or the same number as a group they are shown, and see that more and fewer have many right answers.

I can make a group with more, fewer or the same.

About 35 minutes

★ Taught in Kindergarten in some states

THE LESSON

- 1 Warm up** (5 min) Show 4 fingers. Children show more fingers, then fewer, then the same. Ask a few children how many they showed.
- 2 Teach** (10 min) Make a train of 5 cubes. Build one with more: match it to the 5 and add one. Build one with fewer: take one off. Then show that 7 and 9 are more too, and 2 is fewer too.
Say: "More than 5 can be 6, 7, 8, 9 or 10. Fewer than 5 can be 4, 3, 2, 1 or even none."
- 3 Try it together** (5 min) Show a dot card and call "more", "fewer" or "the same". Children build that train, then hold it beside a partner's train. Do both fit the word?
- 4 Practice** (10 min) Partners take turns: one builds a train, the other builds one with more, fewer or the same, and both draw them. Then on sheet 3 of Comparing Groups, Objects to 5, children circle, then draw dots beside the smaller group until the two groups are the same.
- 5 Exit ticket** (5 min) Read **Exit Ticket 4.4** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. Many answers are right: any 4 to 10 dots is more than 3 elephants, and any number under 7 is fewer than 7 pineapples.

Need help? Make the same first, then more by adding one cube, with groups up to 5.

Ready for more? Make a group with 2 more, or one that is fewer but not by much. Explain how you know.

GET READY

- Linking cubes for each child
- Dot cards 1 to 9
- Paper and crayons to draw dots

WORDS TO USE

more: some extra; add some

fewer: not as many; take some away

the same: just as many

ASK

- How do you know your group has more?
- Is there another number that is fewer?
- How can you make them the same?

WATCH FOR

Makes the same number when asked for more.

Match the two trains: is anything left over? Add one so there is.

Thinks there is only one right answer. Show two trains that are both more, and ask if both are right.

Mixes up more and fewer. More is taller: hold the trains side by side and look at the tops.

ON ANIMAL MATH

PRINTABLE

Comparing Groups - Objects to 5: sheet 3: circle, then draw dots to make the groups the same

PRINTABLE

Ten Frames Fill to 10: sheet 5 (numbers 1 to 6): fill each frame, then build a train with more

TOOL

Ten Frames: fill a frame, then make one with more, fewer or the same

EXIT TICKET

Kindergarten Compare to 10 Exit Tickets: Exit Ticket 4.4

Compare to 10

Lesson 4.5: Which number is greater

GOAL Children tell which of two numbers from 1 to 10 is greater by thinking of the groups they stand for, or by where the numbers come when we count.

About 35 minutes

I can find the greater number.

THE LESSON

- 1 Warm up** (5 min) Children hop along the floor number path, counting. Call two numbers, such as 3 and 7: which one is farther along?
- 2 Teach** (10 min) Show the 8 and 5 cards. Build a tower for each: 8 is taller, so 8 is greater. Find both on the number path: 8 comes after 5. Then try 10 and 3: is 10 small because it starts with a 1?
Say: "The number we say later when we count is greater. Eight is greater than five."
- 3 Try it together** (5 min) Pairs play Number Card War: each turns over a card, and the greater number wins both cards. For close pairs like 6 and 7 they build towers to check.
- 4 Practice** (10 min) Children circle the greater number in each row on sheets 2 and 3 of Comparing Numbers to 10, using the dots to check. Where both sides are the same, they say "the same."
- 5 Exit ticket** (5 min) Read **Exit Ticket 4.5** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. In the 3 and 10 box, a child who circles 3 may think 10 is small because it starts with 1: count up to 10 on the path together.

Need help? Compare numbers to 5 with cube towers beside the number cards.

Ready for more? Turn over three cards: which is greatest? Which is least?

GET READY

- Number cards 1 to 10 for each pair
- Linking cubes for towers
- The floor number path 0 to 10

WORDS TO USE

greater: more; it comes later when we count

less: not as many; it comes sooner when we count

number path: the numbers in order, one step each

ASK

- Which number is greater? How do you know?
- Which tower would be taller?
- Which comes later when we count?

WATCH FOR

Thinks 10 is less than other numbers. Build both towers, or walk the number path: 10 comes after 9.

Circles the number on the left every time. Switch the cards around and ask again: the place does not matter.

Mixes up greater and less. Greater means more: show both numbers on fingers or towers.

ON ANIMAL MATH

PRINTABLE

Comparing Numbers to 10: sheets 2-3: circle the greater number in each row

MAKER

Comparing Groups: Mode Numbers, Comparison Bigger, Number Range Within 10 (1-10), Wording Formal (Greater/Lesser)

TOOL

Number Line: Start 0, End 10; mark both numbers with Point

EXIT TICKET

Kindergarten Compare to 10 Exit Tickets: Exit Ticket 4.5

Compare to 10

Lesson 4.6: Greater than, less than, equal to

GOAL Children say “greater than”, “less than” and “equal to” to compare two numbers to 10, then write the signs $>$, $<$ and $=$ with the open side toward the greater number.

About 35 minutes

I can use greater than, less than and equal to.

THE LESSON

- 1 Warm up** (5 min) Show two cube towers. Children stretch high for the taller one, crouch low for the shorter one, and hold arms out straight when they are the same.
- 2 Teach** (10 min) Hold up 7 and 4. Say it in words first: 7 is greater than 4. Put the sign card between them, open side toward the 7, and read it left to right. Turn the cards around: 4 is less than 7. Then 5 and 5: equal to.
Say: “The open side faces the greater number. I read it: seven is greater than four.”
- 3 Try it together** (5 min) Pairs flip two number cards, say the sentence in words, and set a sign card between them. Then they read it to each other, left to right.
- 4 Practice** (10 min) Children count the dots and write $>$, $<$ or $=$ in each circle on sheets 4 and 5 of Comparing Numbers to 10. Early finishers count the groups, write both numbers and the sign on sheet 3 of Fall Comparing Numbers.
- 5 Exit ticket** (5 min) Read **Exit Ticket 4.6** aloud, one question at a time. Children answer, then circle a face as you read the “I can” line. The 2 and 2 row needs $=$: a child who writes $>$ or $<$ there thinks every pair has a greater number.

Need help? Say greater than, less than or the same with cube towers before writing any sign.

Ready for more? Greater Than Less Than to 10 has numbers only, with 0: try any sheet.

GET READY

- Number cards 1 to 10 for each pair
- Big cards with $>$, $<$ and $=$
- Linking cubes for towers

WORDS TO USE

greater than: more than; the sign opens toward it

less than: fewer than; the sign points to it

equal to: the same as; we write $=$

ASK

- Read it to me. Which number is greater?
- Which way does the open side face? Why?
- When do we write $=$?

WATCH FOR

Turns the sign the wrong way. Say it in words first, then put the open side next to the greater number.

Writes $>$ or $<$ for two numbers that are the same. Build both towers: just as tall means equal, so write $=$.

Reads the sign from right to left. Read with a finger under it, left to right, like a book.

ON ANIMAL MATH

PRINTABLE

Comparing Numbers to 10: sheets 4-5

PRINTABLE

Fall Comparing Numbers: sheet 3: count the groups, then write the sign

PRINTABLE

Greater Than Less Than to 10: numbers only, with 0; for more

MAKER

Greater Than / Less Than: Number Range 0 to 10, Allow Equals ($=$)

TOOL

Number Line: Start 0, End 10

EXIT TICKET

Kindergarten Compare to 10 Exit Tickets: Exit Ticket 4.6

Compare to 10

Lesson 4.7: Put numbers to 10 in order

GOAL Children put three numbers to 10 in order from least to greatest, using the counting order and the number path to check.

I can put numbers to 10 in order.

About 35 minutes

★ Taught in Kindergarten in some states

THE LESSON

- 1 Warm up** (5 min) Count from 0 to 10 and back. Children crouch low at 0, grow a little with each number, and stretch tall at 10.
- 2 Teach** (10 min) Give three children the cards 6, 2 and 9 and line them up out of order. Which is least? It goes first. Check on the floor path: 2 comes before 6, and 9 comes last. Then try 4, 8 and 1.
Say: "I find the least number first. Then the next one we count to. The greatest goes last."
- 3 Try it together** (5 min) Pairs draw three cards, put them in order from least to greatest and read them aloud. They check by standing each card on its spot on the floor path.
- 4 Practice** (10 min) Children draw three cards at a time, put them in order and write them on paper. Then they write the number between on sheet 1 of Between Numbers to 10.
- 5 Exit ticket** (5 min) Read **Exit Ticket 4.7** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. The boxes are marked least and greatest: watch for the greatest written first.

Need help? Order cards 1 to 5 by laying each one on its spot on the floor number path.

Ready for more? Order four or five cards, or order them from greatest to least.

GET READY

- Number cards 0 to 10 for each pair
- The floor number path 0 to 10
- A string and clothespins for a class number line

WORDS TO USE

order: the way the numbers come when we count

least: the smallest number; it goes first

greatest: the biggest number; it goes last

ASK

- Which number is least? How do you know?
- Which comes next when we count?
- Where would 5 go?

WATCH FOR

Writes the numbers in the order they were shown. Lay the cards on the number path first, then copy them in that order.

Puts the greatest first. Point to the word least: the least goes first, like the start of the path.

Thinks two numbers far apart go together. Walk the path from 0 and stop at each card as you reach it.

ON ANIMAL MATH

PRINTABLE

Between Numbers to 10: sheets 1-2: the number between two numbers

MAKER

Number Line: Mode Missing Number, Number Range 1-10, Start With Zero

MAKER

Graph Paper: Paper Type Number Lines, Number Lines 0 to 10: mark the three numbers, then write them in order

TOOL

Number Line: Start 0, End 10

EXIT TICKET

Kindergarten Compare to 10 Exit Tickets: Exit Ticket 4.7

Compare to 10

Lesson 4.8: First to tenth

GOAL Children use first, second, third and on to tenth to name the places in a line, counting from the front.

I can find first to tenth in a line.

About 35 minutes

★ Taught in Kindergarten in some states

THE LESSON

- 1 Warm up** (5 min) Line up 5 children at the door. Tap each head as the class says the place: first, second, third, fourth, fifth. Mix the line up and try again.
- 2 Teach** (10 min) Line up 10 toy animals behind a flag. Point to the front: first. Tap each animal and say its place up to tenth, setting the place cards under them. Then turn the line around: the front changes, so first changes too.
Say: "We start at the front: first, second, third, fourth, fifth, and on to tenth."
- 3 Try it together** (5 min) Call a place, such as "the fourth animal." A child counts from the front and taps it. Then call "Put the bear in the seventh place."
- 4 Practice** (10 min) Children circle, color or put an X on the animal in each place on sheets 1 and 5 of Animal Race (first to fifth), then color the place in each row on sheet 1 of Ordinal Numbers, Color to 10th.
- 5 Exit ticket** (5 min) Read **Exit Ticket 4.8** aloud, one question at a time. Children answer, then circle a face as you read the "I can" line. Only 1st is printed under the line: watch who counts from the flag, touching each animal, and who starts at the wrong end.

Ready for more? Cut the animals out and glue them in line on sheet 4 of Animal Race, or color places to tenth on a maker sheet.

GET READY

- Ten toy animals and a flag or line of tape for the front
- Place cards 1st to 10th

WORDS TO USE

first: the one at the front

second, third: the next places, in order

tenth: the place of the tenth one in line

ASK

- Which one is first? How do you know?
- Who is right after the third?
- If the line turns around, who is first now?

WATCH FOR

Counts from the wrong end. Find the front first: a finger on the flag, then count.

Colors five things for "fifth". Fifth is one place: count to it and color only that one.

Mixes up the words after third. Say the places with the numbers: four, fourth; five, fifth.

Need help? Work with first to fifth only, with the place cards under the line.

ON ANIMAL MATH

PRINTABLE **Animal Race: Ordinal Numbers First to Fifth:** sheets 1 and 5, then sheet 4 (cut and glue)

PRINTABLE **Ordinal Numbers - Color to 10th:** sheets 1-2

PRINTABLE **Ordinal Numbers - Color to 5th:** for first to fifth

MAKER **Ordinal Numbers:** Mode Color the Position, Range 1st - 5th, then 1st - 10th

EXIT TICKET **Kindergarten Compare to 10 Exit Tickets:** Exit Ticket 4.8