

CLAREZA ACADEMY

Grade 1 Math

Free sample: Unit 1, Lessons 1 to 8

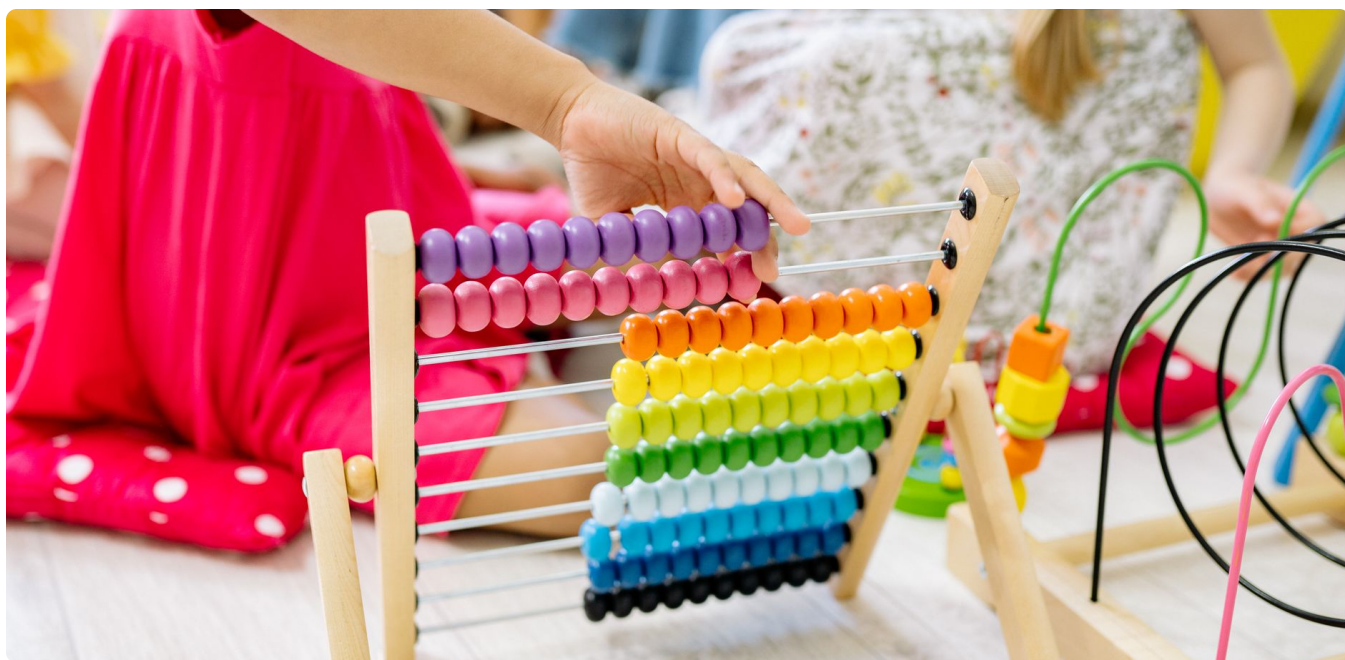
These are 8 lessons from *Clareza Grade 1: The Full Year: Math, Reading, Science and Social Studies*, a first grade year a parent runs at the kitchen table. Each lesson is a short script for you, a page to read together, and a practice sheet you may copy for your household. Answers are at the back.

Clareza Grade 1: The Full Year: Math, Reading, Science and Social Studies. Sample edition.

Copyright © 2026 Professor C's Academy LLC. All rights reserved.

Sharing. This sample may be shared freely and printed for use in your own home or co-op, as long as it is shared whole and unchanged. It may not be sold.

Clareza is a secular curriculum. Standards references: Common Core State Standards and the Next Generation Science Standards.



MATH · UNIT 1

Counting, Comparing, and the Number Line

This is the on-ramp for the whole year. Your child stretches counting from small sets up to 120, learns to count on from any number instead of always starting at 1, and meets the number line as a picture of counting they already know how to do. It also builds the words 'more, fewer, same' and the idea of a group of ten as a bundle, both come back constantly for the rest of the year.

In this unit

1. One-to-one correspondence in counting a set of objects up to 20
2. The count sequence to 120 applied to bundled sets of objects
3. Order-irrelevance and conservation of number when counting a fixed set
4. The counting-on strategy starting from a nonzero number
5. Comparison of two counted groups using more/fewer/same
6. The number line as a counting path with one-to-one hops mapped to numbers in order
7. Transfer of the counting-on-a-number-line strategy to an unfamiliar real-world counting context
8. The standard count sequence from 1 to 20

One-to-one correspondence in counting a set of objects up to 20

Goal: Child counts a set of up to 20 pictured objects by touching or circling each one exactly once and states the total.

About 13 minutes



Teach it FOR THE PARENT

1. **Say:** I have some buttons on the table! I want to know exactly how many there are. Can you help me count them the careful way?
Look for: Child is attending and ready to touch/count along.
2. **Say:** Here's the rule: touch one thing, say one number. Never touch the same thing twice. When you touch the last one, that number tells you how many there are in all!
Look for: Child repeats or nods to the rule: one touch, one number, last number is the total.
3. **Say:** Watch me count these 6 dots. Touch, '1'. Touch, '2'... I stop at '6'. So how many dots are there? Six! Not 'let me count again', six is the answer.
Look for: Child points at the last dot and says '6' as the total, without needing to recount.
4. **Say:** Your turn! Here are some ducks on the page. Touch each duck one time and count out loud. Then tell me, how many ducks in all?
Look for: Child touches each duck exactly once, says the count sequence aloud, and states the final number as the total.
5. **Say:** Nice counting! Now watch, I'm going to spread these same ducks far apart. Do you think the number changes, or stays the same?
Look for: Child predicts or discovers the total stays the same after rearranging the identical set.
6. **Say:** You're a careful counter now, one touch, one number, and the last number is the total! Let's practice counting some more pictures.
Look for: Child is ready to move into independent practice items.

If they get stuck

- *The last number I say is just the name of the last object, not the amount in the whole group.*
 After every count, ask 'so how many blocks?' and require a repeat of the last number without recounting; do this every single time, not just when it looks wrong.
- *If you count the same objects in a different order or arrangement, you get a different total.*
 Do the same 5 objects twice in front of the child: count left to right, then rearrange and count starting from a different object; point out out loud, 'still 5 - moving them did not change how many.'
- *A group that takes up more space on the table has more objects in it.*
 Require counting both groups aloud and pointing to each object before answering 'more/fewer/same'; do not let the child answer by looking alone.

Read together FOR THE STUDENT

Point to each thing one time. Say one number for each thing you touch. Do not skip any. Do not touch one thing twice. The last number you say is how many things are there in all!

Going further: Touch each object one time as you count it. One touch gets one number word, that's called one-to-one counting. Keep going until every object has been touched once. The last number word you say names the total amount, no matter how the objects are arranged.

Watch it work

Maya sees 5 apples in a row. She wants to know how many apples there are.

1. Maya touches the first apple and says '1'. She keeps touching one new apple for each number: '2, 3, 4, 5', one touch, one number, every time.
2. She stops when every apple has been touched exactly once. No apple got touched twice.
3. The last number she said was '5'. So there are 5 apples in all, that's the answer to 'how many?'

The idea: The last number word you say while touching each object once is the total count.

Sam counts 7 stars spread far apart. Then his friend bunches the same 7 stars close together. Sam counts again.

1. Sam touches each spread-out star once, counting '1, 2, 3, 4, 5, 6, 7'. Total: 7.
2. His friend pushes the stars close together. The stars did not change, only their spacing changed.
3. Sam touches each bunched-up star once and counts '1, 2, 3, 4, 5, 6, 7' again. Total: still 7.

The idea: Moving objects closer or farther apart does not change how many there are, the count stays the same.

Practice: One-to-one correspondence in counting a set of objects up to 20

1. Touch each cat one time. Count out loud. How many cats are there?



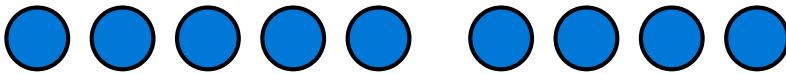
(A) 5 (B) 3 (C) 4

2. Touch each star one time. Count out loud. How many stars are there?



(A) 7 (B) 6

3. You touch each dot and count '1, 2, 3, 4, 5, 6, 7, 8, 9'. You touched the last dot. How many dots are there in all?



(A) I need to count again to find out (B) 9

4. There are 8 leaves bunched close together. A friend spreads them far apart. If you count the spread-out leaves, how many will there be?

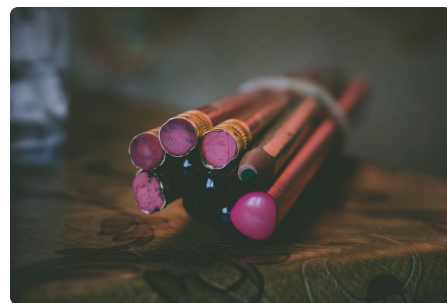


(A) 8, the same as before (B) More than 8, because they take up more space now

The count sequence to 120 applied to bundled sets of objects

Goal: Child extends one-to-one counting to sets of up to 120 objects arranged in bundled groups of ten plus extra ones.

About 14 minutes



Teach it FOR THE PARENT

- Say:** I have cubes tied into bundles of ten. Let's count a big pile fast!
Look for: Child looks at bundles with interest, ready to count.
- Say:** Each bundle is ten cubes. We count bundles first: ten, twenty, thirty. Then we count extra cubes on.
Look for: Child repeats or nods that bundles are counted by tens first.
- Say:** Watch me. I have 3 bundles and 2 extra cubes. Ten, twenty, thirty... thirty-one, thirty-two. How many total?
Look for: Child says thirty-two, the last number, as the total count.
- Say:** Now I spread these same cubes out wide. Did the total change? Let's check.
Look for: Child says no, the total stays thirty-two even though it looks different.
- Say:** Your turn. Here are 5 bundles and 4 extra cubes. Count them and tell me the total.
Look for: Child counts by tens to fifty, then on to fifty-four, and states fifty-four.
- Say:** Great counting! Now let's try some questions with bundles and extra cubes on the page.
Look for: Child is ready to move into independent practice items.

If they get stuck

- The last number I say is just the name of the last object, not the amount in the whole group.* After every count, ask 'so how many blocks?' and require a repeat of the last number without recounting; do this every single time, not just when it looks wrong.
- If you count the same objects in a different order or arrangement, you get a different total.* Do the same 5 objects twice in front of the child: count left to right, then rearrange and count starting from a different object; point out out loud, 'still 5 - moving them did not change how many.'
- A group that takes up more space on the table has more objects in it.* Require counting both groups aloud and pointing to each object before answering 'more/fewer/same'; do not let the child answer by looking alone.

Read together FOR THE STUDENT

Ten cubes make one bundle. A bundle is a group of ten tied together. To count bundles, count tens first: ten, twenty, thirty. Then count the extra ones after: thirty-one, thirty-two. It's just like counting fingers, but each bundle is worth ten fingers, not one!

Going further: When objects are bundled in tens, count the bundles first by tens: ten, twenty, thirty. Then count on by ones for the extras. Six bundles and 4 ones is sixty, then sixty-one, sixty-two, sixty-three, sixty-four. The last number said names the whole group's total, not just the last object touched.

Watch it work

Maya has 4 bundles of ten cubes and 3 extra cubes.

1. Count the bundles by tens: ten, twenty, thirty, forty.
2. Count the extra cubes on: forty-one, forty-two, forty-three.
3. The whole group has forty-three cubes.

The idea: Count bundles by tens first, then count on by ones.

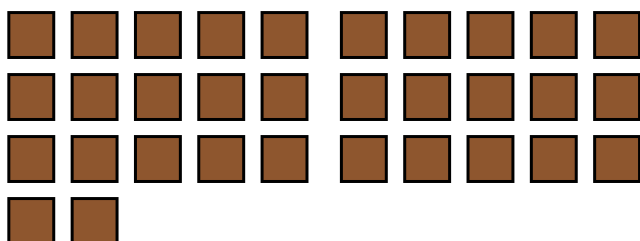
Sam has 9 bundles of ten and 7 extra cubes.

1. Count the bundles: ten, twenty, thirty, forty, fifty, sixty, seventy, eighty, ninety.
2. Count the extras on: ninety-one, ninety-two... ninety-seven.
3. The whole group has ninety-seven cubes.

The idea: Nine bundles means nine counting words by tens before the ones start.

Practice: The count sequence to 120 applied to bundled sets of objects

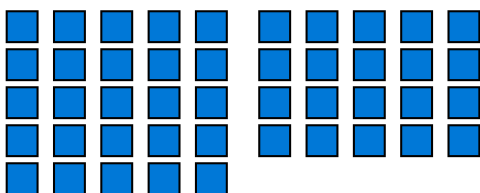
1. Count the bundles and extra cubes. How many cubes in all?



3 bundles of ten and 2 extra cubes

- (A) 32 (B) 3

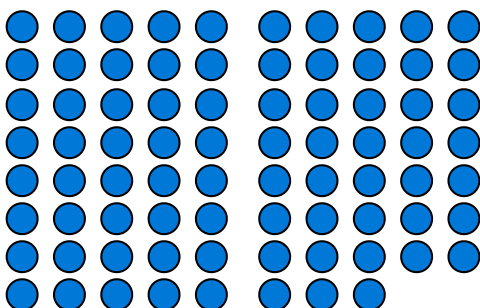
2. How many cubes are in this bundled group?



4 bundles of ten and 5 extra cubes

- (A) 54 (B) 9 (C) 45

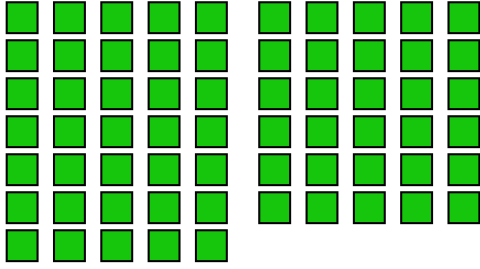
3. Ana counts 7 bundles and 8 extra beads. What is the total?



7 bundles of ten and 8 extra beads

- (A) 87 (B) 78 (C) 15

4. These 6 bundles and 5 extras got spread out wide. How many cubes now?



6 bundles of ten and 5 extra cubes, spread apart

- ☐ A 65 ☐ B It changed, so we must recount differently

Order-irrelevance and conservation of number when counting a fixed set

Goal: Child explains that counting the same set in a different order or arrangement gives the same total.

About 14 minutes



Teach it FOR THE PARENT

- Say:** Look at these 5 stars. Watch me move them into a circle. Did we add any stars?
Look for: Child says no stars were added or removed.
- Say:** Moving objects does not change the total. Only adding or taking away changes it. Let's count these stars two ways.
Look for: Child listens and watches the counting demo.
- Say:** Count the stars in a line: 1,2,3,4,5. Now count them in a circle. circle the total both times.
Look for: Child circles 5 after each count.
- Say:** Here are 7 blocks bunched up. Count them. Now I spread them out. Count again. Same or different?
Look for: Child counts 7 both times and says 'same'.
- Say:** A row of 6 dots is spread out long. A pile of 8 dots is bunched close. Which has more?
Look for: Child counts both instead of judging by length, and picks 8.
- Say:** Great counting! Now you'll try some on your own. Remember: moving things never changes how many.
Look for: Child is ready to move to independent practice items.

If they get stuck

- The last number I say is just the name of the last object, not the amount in the whole group.* After every count, ask 'so how many blocks?' and require a repeat of the last number without recounting; do this every single time, not just when it looks wrong.
- If you count the same objects in a different order or arrangement, you get a different total.* Do the same 5 objects twice in front of the child: count left to right, then rearrange and count starting from a different object; point out out loud, 'still 5 - moving them did not change how many.'
- A group that takes up more space on the table has more objects in it.* Require counting both groups aloud and pointing to each object before answering 'more/fewer/same'; do not let the child answer by looking alone.

Read together FOR THE STUDENT

Count 5 bears in a line. Now bunch them up. Count again. Still 5! Moving things around does not change how many there are. Only adding or taking away changes the total.

The objects are the same. So the count stays the same.

Going further: When you count a set, the total does not change if you move the objects. It does not change if you count in a new order. This is called order-irrelevance. The amount only changes if objects are added or removed. Spreading things out just changes how they look, not how many there are.

Watch it work

Maya lines up 6 buttons and counts them: 1,2,3,4,5,6. Then she pushes them into a small pile.

1. Count the line: 1,2,3,4,5,6. The total is 6.
2. Push buttons into a pile. No buttons added. No buttons removed.
3. Count the pile: 1,2,3,4,5,6. The total is still 6.

The idea: Moving objects does not change how many there are.

Sam has 4 blocks in a row. He counts left to right, then right to left.

1. Count left to right: 1,2,3,4. Total is 4.
2. Count right to left: 1,2,3,4. Same blocks, new order.
3. Both counts give 4. The order you count in does not change the total.

The idea: Counting in a different order gives the same total.

Practice: Order-irrelevance and conservation of number when counting a fixed set

1. Count the 5 apples in a line. Now they are in a pile. How many apples now?



5 apples, now piled up

- (A) 6 (B) 5 (C) 4

2. You count 6 blocks left to right. Now count them right to left. What is the total?



6 blocks in a row

- (A) 6 (B) 5

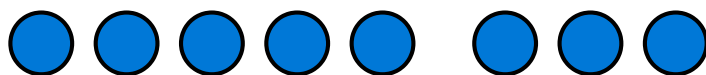
3. You touch 4 toys, saying '1,2,3,4.' Someone asks: how many toys in all?



4 toys

- (A) Only the last toy (B) 4

4. A row of 6 dots is spread out long. A pile of 8 dots is bunched close. Which has more dots?



8 bunched dots vs 6 spread dots

- (A) The bunched pile of 8 (B) The spread-out row of 6

The counting-on strategy starting from a nonzero number

Goal: Child counts on from a stated number between 1 and 20 to find a total, without restarting the count at 1.

About 12 minutes



Teach it FOR THE PARENT

- Say:** I already counted 6 stars. Watch me get more without starting over. Ready?
Look for: Child watches and does not object to skipping the recount.
- Say:** When I know a group has 6, I just say '6' and keep going: 7, 8. I never go back to 1.
Look for: Child can repeat that you start at the known number, not at 1.
- Say:** Here are 8 counted dots. 2 more dots show up. Say '8' with me. Now count on: 9... 10.
Look for: Child says '8' first, then '9, 10' without recounting the original 8.
- Say:** Now you try. 10 fish are counted. 3 more fish swim in. Start at 10. Count on. How many fish now?
Look for: Child starts at 10 and says 11, 12, 13, landing on 13 as the total.
- Say:** You just counted on like a pro! Let's practice this a few more times.
Look for: Child is ready to move into independent practice items.

If they get stuck

- The last number I say is just the name of the last object, not the amount in the whole group.*
After every count, ask 'so how many blocks?' and require a repeat of the last number without recounting; do this every single time, not just when it looks wrong.
- If you count the same objects in a different order or arrangement, you get a different total.*
Do the same 5 objects twice in front of the child: count left to right, then rearrange and count starting from a different object; point out out loud, 'still 5 - moving them did not change how many.'
- A group that takes up more space on the table has more objects in it.*
Require counting both groups aloud and pointing to each object before answering 'more/fewer/same'; do not let the child answer by looking alone.

Read together FOR THE STUDENT

You have 5 blocks already counted. Do not start over at 1. Say '5' and keep going: 6, 7, 8. Counting on saves time. It is like starting a race from the 5-yard line instead of the start line.

Going further: Counting on means starting your count at the number you already know, not at 1. If you have 5 counted, say '5', then add on: '6, 7, 8.' The last number said is the total.

Watch it work

Maya has 7 apples in a basket. Her dad gives her 2 more apples. How many apples now?

1. Start at 7, the number already counted. Say '7' out loud, do not recount the basket.
2. Count on for each new apple: '8' (first new apple), '9' (second new apple).
3. The last number said, 9, is the total. Maya has 9 apples.

The idea: Start the count at the known number, then keep going for the new objects.

There are 12 ducks on the pond. 3 more ducks land. How many ducks now?

1. Start at 12, since that is already counted. Say '12'.
2. Count on: '13' (first new duck), '14' (second), '15' (third).
3. 15 is the total number of ducks now.

The idea: Counting on works the same way even when the starting number is bigger.

Practice: The counting-on strategy starting from a nonzero number

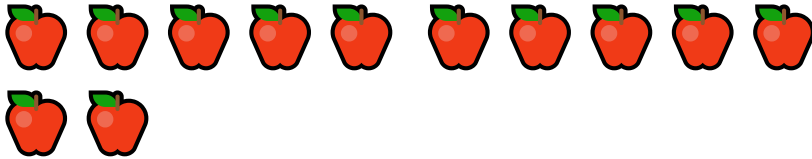
1. 6 ducks are already counted. 2 more ducks swim up. Count on from 6. How many ducks now?



6 counted, then 2 more join

- ☐ A 8 ☐ B 2 ☐ C 7

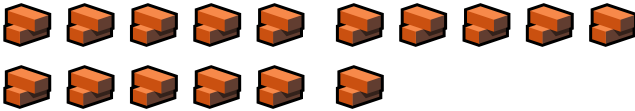
2. 9 apples are already counted. 3 more apples get added. Count on from 9. How many apples now?



9 counted, then 3 more join

- ☐ A 3 ☐ B 12

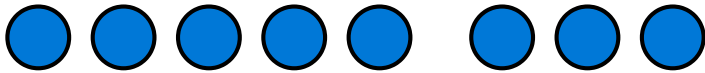
3. 14 blocks are already counted. 2 more blocks are added. Count on from 14. How many blocks now?



14 counted, then 2 more join

- ☐ A 15 ☐ B 16 ☐ C 14

4. These same 8 dots got spread out on the table. Do you need to start counting at 1 again to find the total?



8 dots, spread out

- ☐ A No, the total is still 8 ☐ B Yes, spreading them out changes the total

5. 17 stars are already counted. 3 more stars are added. Count on from 17. How many stars now?



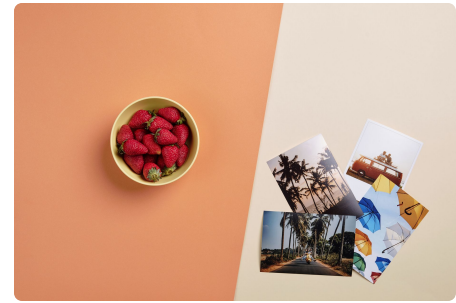
17 counted, then 3 more join

- ☐ A 3 ☐ B 20 ☐ C 18

Comparison of two counted groups using more/fewer/same

Goal: Child compares two pictured groups of objects and circles which has more, fewer, or the same amount, after counting both.

About 13 minutes



Teach it FOR THE PARENT

- Say:** I have two plates of cookies. One plate looks HUGE and spread out. One plate is small and bunched up. Which plate has more cookies? Let's find out for real!
Look for: Child engages and guesses, possibly based on how spread out a plate looks.
- Say:** Here's the secret: we never guess by how big a group LOOKS. We count each group all the way to the end. Then we compare the two numbers we get.
Look for: Child repeats or nods that counting comes before comparing.
- Say:** Look at these 5 apples and these 3 apples. Count the apples with me: 1, 2, 3, 4, 5. Now count the other side: 1, 2, 3. Which number is bigger, 5 or 3?
Look for: Child counts both groups aloud and correctly names 5 as bigger.
- Say:** Now try these 4 bunched stars and 4 spread-out stars. Count both. Do the counts match? If they match, it's the same amount, even if one looks bigger!
Look for: Child counts both groups and says the totals are equal, resisting the spread-out illusion.
- Say:** Your turn! Here are two new groups. Count each one out loud. Then circle more, fewer, or the same.
Look for: Child counts both groups fully before circling an answer, rather than guessing from looks.
- Say:** You're a counting detective now! Always count both groups first, then pick more, fewer, or same. Let's practice!
Look for: Child is ready to apply count-then-compare to new practice items.

If they get stuck

- The last number I say is just the name of the last object, not the amount in the whole group.*
After every count, ask 'so how many blocks?' and require a repeat of the last number without recounting; do this every single time, not just when it looks wrong.
- If you count the same objects in a different order or arrangement, you get a different total.*
Do the same 5 objects twice in front of the child: count left to right, then rearrange and count starting from a different object; point out out loud, 'still 5 - moving them did not change how many.'
- A group that takes up more space on the table has more objects in it.*
Require counting both groups aloud and pointing to each object before answering 'more/fewer/same'; do not let the child answer by looking alone.

Read together FOR THE STUDENT

Count both groups first. Say the last number loud, that's how many. Then compare the two numbers. The bigger number has more. The smaller number has fewer. Same number means they match! Watch out: a spread-out group can look big but still have fewer things.

Going further: To compare two groups, count each group fully and find its total. Compare the two totals, not how the objects look on the page. More means a bigger total. Fewer means a smaller total. Same means the totals match exactly, even if the groups look different in size or spacing.

Watch it work

5 apples on the left. 3 apples on the right. Which side has more?

1. Count the left apples: 1, 2, 3, 4, 5. The left group is 5.
2. Count the right apples: 1, 2, 3. The right group is 3.
3. Compare 5 and 3. 5 is bigger, so the left side has more.

The idea: Count both groups all the way, then compare the two totals.

4 stars bunched close together. 4 stars spread far apart. Which side has more?

1. Count the bunched stars: 1, 2, 3, 4. That group is 4.
2. Count the spread-out stars: 1, 2, 3, 4. That group is also 4.
3. Compare 4 and 4. They match, so it is the same amount, even though one looks bigger.

The idea: Spread-out objects can look like more, but only the count tells the truth.

Practice: Comparison of two counted groups using more/fewer/same

1. Count the bears on each side. Which side has more?



Left: 6 bears. Right: 3 bears (shown separately)

- ☐ A Right side (3 bears) ☐ B Left side (6 bears)

2. Count the apples on each side. Which side has fewer?



Left: 2 apples. Right: 7 apples (shown separately)

- ☐ A Right side (7 apples) ☐ B Left side (2 apples)

3. Count the stars on both sides. Do they have the same amount, or does one have more?



Left: 5 stars close together. Right: 5 stars spread far apart

- ☐ A The spread-out side has more ☐ B They are the same amount

4. Count the blocks on each side. Which side has more?



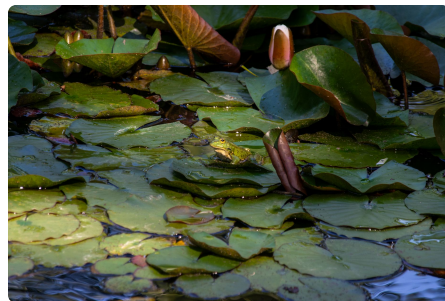
Left: 8 blocks bunched up. Right: 6 blocks spread out wide

- ☐ A Left side (8 blocks) ☐ B Right side (6 blocks)

The number line as a counting path with one-to-one hops mapped to numbers in order

Goal: Child locates a stated number on a number line by hopping forward one mark at a time from zero or another known point.

About 13 minutes



Teach it FOR THE PARENT

1. **Say:** A frog wants to hop to the number 6. Let's help her hop, one mark at a time!
Look for: Child is watching and ready to count hops with Clara.
2. **Say:** A number line is a path with numbers in order. We start at 0. We hop forward one mark at a time. Each hop, we say the next number.
Look for: Child repeats or nods that hops go one at a time, in order.
3. **Say:** Watch the frog. She starts at 0. Hop! She says 1. Hop! She says 2. Let's count together to 6.
Look for: Child counts along, 1 to 6, one number per hop.
4. **Say:** Where did the frog stop? Point to the number.
Look for: Child points to 6, not to 0 or a random mark.
5. **Say:** Now you try. The frog starts at 3. Help her hop to 7. Count each hop out loud.
Look for: Child hops one mark at a time from 3, saying 4, 5, 6, 7, stopping on 7.
6. **Say:** Did the frog land on the right number? How do you know?
Look for: Child confirms landing spot matches the target number said last.
7. **Say:** You found numbers by hopping one mark at a time. Now you'll try more hops on your own!
Look for: Child is ready to try practice items independently.

If they get stuck

- *The last number I say is just the name of the last object, not the amount in the whole group.* After every count, ask 'so how many blocks?' and require a repeat of the last number without recounting; do this every single time, not just when it looks wrong.
- *If you count the same objects in a different order or arrangement, you get a different total.* Do the same 5 objects twice in front of the child: count left to right, then rearrange and count starting from a different object; point out out loud, 'still 5 - moving them did not change how many.'
- *A group that takes up more space on the table has more objects in it.* Require counting both groups aloud and pointing to each object before answering 'more/fewer/same'; do not let the child answer by looking alone.

Read together FOR THE STUDENT

A number line is a path with numbers in order. To find a number, start at 0. Hop forward one mark at a time. Say each number as you land. Stop when you say the number you want. It is just like hopping on stepping stones to reach a friend.

Going further: A number line shows numbers in order, evenly spaced. Start at 0, or at another point you know. Hop forward one mark at a time. Each hop lands on the next number in the counting order. Say the number at each landing spot. You can also start at a number you already know, like 4, and hop from there.

Watch it work**Find 5 on the number line. Start at 0.**

1. Put your finger on 0.
2. Hop one mark. Say 1. Hop again. Say 2.
3. Keep hopping. Say 3, 4, 5.
4. Your finger stops on 5. That is the answer.

The idea: Each hop is one count. The last number said names the spot.

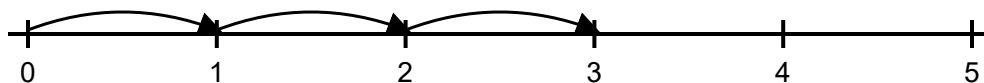
Find 8 on the number line. Start at 5, a point you already know.

1. Put your finger on 5.
2. Hop one mark. Say 6. Hop again. Say 7.
3. Hop one more time. Say 8.
4. Your finger stops on 8. That is the answer.

The idea: You do not need to start at 0. Start at any known point and hop on.

Practice: The number line as a counting path with one-to-one hops mapped to numbers in order

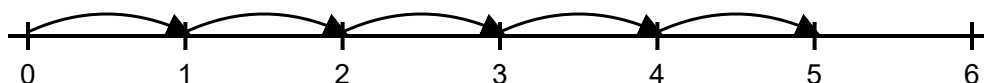
1. Start at 0. Hop one mark at a time. Where do you stop after 3 hops?



Hop from 0 to 3

- ☒ A 1 ☐ B 5 ☐ C 3

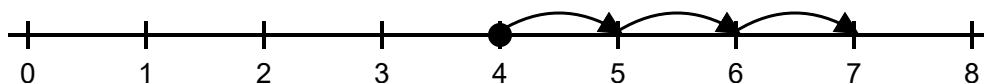
2. Start at 0. Hop to find the number 5. Which mark do you land on?



Hop from 0 to 5

- ☒ A 4 ☐ B 5

3. Start at 4, a point you already know. Hop to find 7. Where do you stop?



Hop from 4 to 7

- ☒ A 3 ☐ B 7

4. A frog hops from 0 and lands on 6. Which set shows the same number of hops as objects?



Six hops, six frogs

- ☒ A 6 hops match 5 frogs ☐ B 6 hops match 6 frogs

Transfer of the counting-on-a-number-line strategy to an unfamiliar real-world counting context

Goal: Child uses a number line to count on from a two-digit starting number in a context never used during instruction, such as counting on from a page number or a scoreboard number.

About 15 minutes



Teach it FOR THE PARENT

- Say:** Quick check: start at 18 on your number line. Hop forward 2. Where do you land?
Look for: Child says or points to 20, using hops from 18, not recounting from 1.
- Say:** A number line is just a path of numbers in order. Any number can be your start, even one from a book or a game. You hop forward from there.
Look for: Child nods or repeats that the start number can come from anywhere.
- Say:** Maria is on page 24. She reads 3 more pages. Watch: find 24, hop, hop, hop. 25, 26, 27. She ends on page 27.
Look for: Child points to 24, then to each landing number, ending on 27.
- Say:** Why did we start at 24 and not at 1?
Look for: Child says 24 is where Maria already was, so that is the start.
- Say:** Now you try. A scoreboard shows 32 points. The team scores 4 more. Start at 32 and hop 4 times. What is the new score?
Look for: Child starts at 32, hops 33-34-35-36, answers 36 without recounting from 1.
- Say:** You just used the number line for a page number and a scoreboard. Now try it with a few more surprise numbers.
Look for: Child is ready to attempt practice items with new, unpracticed contexts.

If they get stuck

- The last number I say is just the name of the last object, not the amount in the whole group.*
After every count, ask 'so how many blocks?' and require a repeat of the last number without recounting; do this every single time, not just when it looks wrong.
- If you count the same objects in a different order or arrangement, you get a different total.*
Do the same 5 objects twice in front of the child: count left to right, then rearrange and count starting from a different object; point out out loud, 'still 5 - moving them did not change how many.'
- A group that takes up more space on the table has more objects in it.*
Require counting both groups aloud and pointing to each object before answering 'more/fewer/same'; do not let the child answer by looking alone.

Read together FOR THE STUDENT

A number line is a path of numbers in order. To count on, find your start number. Then hop forward one number at a time. Say each new number as you hop. This works for any numbers you see, like a page number in a book or a score in a game.

Going further: Counting on means starting at a given number and moving forward on the number line, one hop per number, without starting over at 1. The start number can come from anywhere: a block count, a page number, a scoreboard. You find the start, then hop the number of times you need, saying each number as you land.

Watch it work

Maria is on page 24 of her book. She reads 3 more pages. What page does she end on?

1. Find 24 on the number line. That is her start.
2. Hop forward 3 times: 25, 26, 27.
3. She lands on 27. 27 is the same as 24 plus 3 more.

The idea: The start number can come from a page, not just a pile of blocks, you still hop forward the same way.

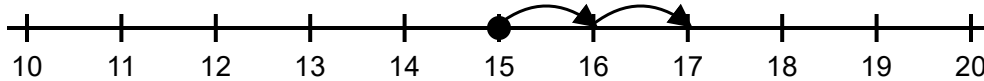
A scoreboard shows Team Red has 32 points. Team Red scores 4 more points. What is Team Red's new score?

1. Find 32 on the number line. That is the start.
2. Hop forward 4 times: 33, 34, 35, 36.
3. The new score is 36. 36 is the same as 32 plus 4 more.

The idea: A scoreboard number is just a starting point, hop forward the same way you always do.

Practice: Transfer of the counting-on-a-number-line strategy to an unfamiliar real-world counting context

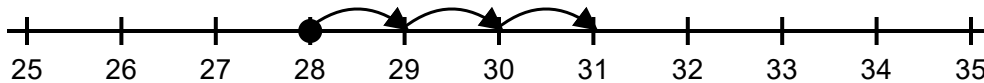
1. Start at 15 on the number line. Hop forward 2. Where do you land?



Start at 15, hop 2 times

- (A) 2 (B) 17

2. Start at 28 on the number line. Hop forward 3. Where do you land?



Start at 28, hop 3 times

- (A) 30 (B) 3 (C) 31

3. Two rows of blocks each have the same 8 blocks. One row is spread out, one row is bunched up. Which row has more blocks?



Same 8 blocks, arranged two different ways

- (A) Both rows have the same amount (B) The spread-out row has more

4. You count 6 stars going left to right and get 6. If you count the same 6 stars going right to left, what will you get?



6 stars in a row

- (A) A different number (B) Still 6

The standard count sequence from 1 to 20

Goal: Child recalls the count sequence in order from 1 to 20 without skipping or repeating a number.

About 12 minutes



Teach it FOR THE PARENT

1. **Say:** Let's be a rocket ship! To blast off, we count up together: 1, 2, 3... all the way to 20. Ready?
Look for: Child joins in counting aloud, even just a few numbers.
2. **Say:** The counting words always go in the very same order. 1 is always first. After 6 comes 7, never before, never twice. We never skip a number and we never say one two times.
Look for: Child listens and can repeat 'we don't skip, we don't repeat' in their own words or a nod.
3. **Say:** Watch me count from 1 to 10 on my fingers, one number per finger: 1... 2... 3... all the way to 10. Did I skip any? Did I say one twice?
Look for: Child agrees no numbers were skipped or repeated.
4. **Say:** Now I'll count on purpose with a mistake: 1, 2, 3, 5. What did I skip?
Look for: Child names 4 as the missing number.
5. **Say:** Your turn! Count out loud from 1 all the way to 20. Go slow so I can hear every number.
Look for: Child says all numbers 1-20 in order with no skip and no repeat.
6. **Say:** You just said the whole counting train in order! Now let's circle the right answer for some counting questions.
Look for: Child is ready to move to independent circling practice.

If they get stuck

- *The last number I say is just the name of the last object, not the amount in the whole group.*
After every count, ask 'so how many blocks?' and require a repeat of the last number without recounting; do this every single time, not just when it looks wrong.
- *If you count the same objects in a different order or arrangement, you get a different total.*
Do the same 5 objects twice in front of the child: count left to right, then rearrange and count starting from a different object; point out out loud, 'still 5 - moving them did not change how many.'
- *A group that takes up more space on the table has more objects in it.*
Require counting both groups aloud and pointing to each object before answering 'more/fewer/same'; do not let the child answer by looking alone.

Read together FOR THE STUDENT

Counting words go in one order every time: 1, 2, 3, all the way to 20. You do not skip any and you do not say one twice. It is like a train track, each number is a car, and the

cars line up the same way every time. If you say '1, 2, 4' you skipped the '3' car! Let's say the whole track together, in order.

Going further: The count sequence is the fixed order of number names from 1 to 20. Each number has one exact place in that order, 7 always comes right after 6, never before it and never twice in a row. Skipping a number or repeating one breaks the sequence. Practicing it in order, out loud, is how you get it locked into memory.

Watch it work

Say the count sequence starting at 1 and stopping at 10.

1. Start at 1, the very first number.
2. Say each number in order, one after another: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.
3. Stop right at 10, do not skip any number and do not say one twice.

The idea: The count sequence always goes in the same fixed order, one number at a time.

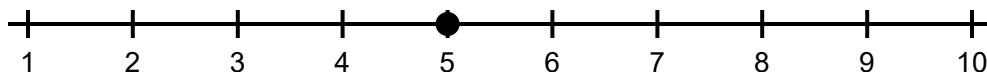
Here is a mixed-up list someone said: 11, 12, 14, 15. What number is missing?

1. Say the sequence slowly: 11, 12, 13, 14, 15.
2. Compare it to the mixed-up list: 11, 12, 14, 15.
3. Notice 13 was skipped, 13 belongs right between 12 and 14.

The idea: Every number in the sequence has one exact spot; skipping one leaves a gap you can find.

Practice: The standard count sequence from 1 to 20

1. What number comes right after 5 when we count?



- (A) 4 (B) 6 (C) 7

2. Which list of numbers is in the correct counting order?



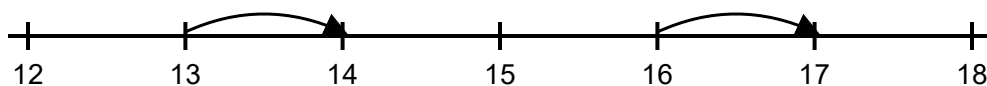
- (A) 1, 3, 4, 5 (B) 1, 2, 3, 4, 5

3. A friend counted: 8, 9, 9, 10. What did they do wrong?



- (A) They skipped a number (B) They said 9 two times

4. Which number is missing from this count: 13, 14, 16, 17?



- (A) 18 (B) 15 (C) 12

Answer key

Math

Lesson 1	1. C 2. A 3. B 4. A
Lesson 2	1. A 2. C 3. B 4. A
Lesson 3	1. B 2. A 3. B 4. A
Lesson 4	1. A 2. B 3. B 4. A 5. B
Lesson 5	1. B 2. B 3. B 4. A
Lesson 6	1. C 2. B 3. B 4. B
Lesson 7	1. B 2. C 3. A 4. B
Lesson 8	1. B 2. B 3. B 4. B
Unit 1 check-up	1. B 2. A 3. B 4. A 5. B 6. A 7. B 8. A 9. B 10. A 11. A 12. A 13. C 14. C 15. A

Photo credits

Photographs from Pexels, used under the Pexels licence. With thanks to: Boris Pavlikovsky, Engin Akyurt, Jill Burrow, Mehmet Kaya, Vinay Reddy Sama, Vural Yavas, Yan Krukau, <https://kaboompics.com/>, wal_172619.

Want Unit 2? It is free too.

Leave your email at **clarezaacademy.com/g1-math** and we will send the next unit, the same shape as this one: a script for you, a page to read together, a practice sheet and the answers.

On the same page you can watch a lesson taught by Clara, the teacher built into the online course, who explains a wrong answer instead of marking it. No account needed.

And if you want the whole year, every lesson in every subject is online for one family price. The first 30 days are free, nothing is charged before day 30, and you can cancel the same minute you start and still keep all 30 days.

clarezaacademy.com/g1-math