

Review & practice

Daily review and daily practice

Daily review should be brief: about 5–10 minutes. Use quantities, numerals and familiar representations that students have already been taught. These routines are most useful when students are mostly accurate but need more frequent practice to become quicker, more confident and more reliable. If many students are inaccurate or unsure, pause the routine and return to explicit modelling before continuing. Check the Counting, Quantifying and Numeral Recognition: Resources for a slide bank that can be used to support these review and practice routines.

Core routines

The routines in this section are designed for **brief, frequent whole-class practice** as part of everyday Foundation and Year 1 instruction. They help students strengthen the core skills of **counting accurately, recognising quantities, matching quantities to numerals, and explaining how they know "how many."**

These routines should be used once a skill or representation has been introduced, and then revisited regularly to build accuracy, efficiency, confidence, and retention. They are not intended to replace explicit teaching. If students are inaccurate or unsure, pause the routine and return to **Teacher Modelling / Guided Practice / Supported Independent Practice** before using the routine for quick daily review.

Across the routines, teachers should prompt students to use and explain different ways of quantifying:

- **Counting:** "I counted each object once."
- **Subitising:** "I knew it was ___ without counting."
- **Groupitising:** "I saw ___ and ___, so it makes ___."
- **Numeral-quantity matching:** "This quantity matches numeral ___."

The routines progress from highly structured representations, such as the **cardinality chart**, fingers, five-frames, ten-frames, dice, and domino patterns, towards less structured arrangements such as dot cards and collections of counters. Teachers should begin with smaller quantities and familiar arrangements, then gradually increase the number range, reduce visual supports, and introduce less structured arrangements as students become more accurate and efficient.

A consistent whole-class response routine is recommended:

Show the quantity or numeral → provide think time → signal for a response → have students say or show the quantity → ask "How do you know?" → confirm or correct → repeat with varied examples.

Use these routines flexibly for short daily review, warm-ups, transitions, or small-group reteaching. The goal is for students to become increasingly accurate, efficient, and flexible in determining "how many" across a range of materials and visual arrangements.

Counting and numeral recognition using a cardinality chart

Purpose

This routine helps children connect numerals to quantities and see the successor principle: each number is one more than the number before it and one less than the number after it. This routine can be used slowly during initial teaching, then revisited more briskly during review once students understand the chart and can match numerals to quantities accurately.

Use for

Whole-class instruction when introducing or reviewing numerals and quantities from 1 to 10.

Display options

Use either:

- **a document camera** with a printed cardinality chart and connecting cubes, or
- **a digital display**, such as an interactive whiteboard, with a cardinality chart and movable "cubes" or squares that can be dragged onto the chart.

Materials

- Large cardinality chart displayed for the class



INSTRUCTIONAL GUIDANCE: COUNTING, QUANTIFYING & NUMERAL RECOGNITION

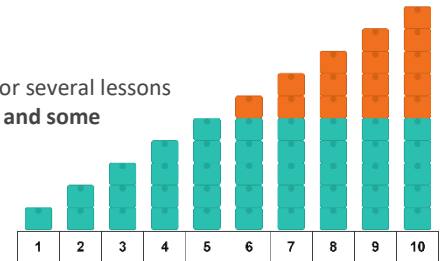
Review & practice

Page 2 of 6

- Connecting cubes or movable digital squares
- Optional: student mini cardinality charts and cubes for supported practice

Teacher note

Introduce one new number at a time. Continue the routine until the chart reaches 5, then pause for several lessons because 5 is an important benchmark number. When introducing 6 to 10, build each number as **5 and some more** using five cubes of one colour and the extra cubes in another colour.

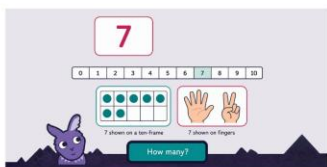


Numbers 6 to 10 are shown as 5 and some more.

Step	Teacher move	Student response
1. Introduce the chart	"Today we are using a cardinality chart. This chart helps us match numbers to quantities." Display the chart using a document camera or interactive whiteboard. If using real cubes, "I will place the cubes on the chart." If using the whiteboard, "I will drag the squares onto the chart like cubes."	
2. Read the number list	Teacher draws a finger across the number list at the bottom of the chart, or points across the number list on the digital display. "This is a number list. It shows the numbers 1 through 10 in order." "Let's read the number list together." Teacher points to each numeral from 1 to 10.	Students track the number list. "1, 2, 3, 4, 5, 6, 7, 8, 9, 10."
3. Match the numeral to the quantity	Point to the numeral being introduced. "What number is this?" Hold up stop hand, pause, then lower hand. Hold up or display that number of cubes. "How many cubes do I have? Count with me." "How many cubes do I have?" Hold up stop hand, pause, then lower hand.	Students say the number. Students count the cubes. Students say the total number of cubes.
4. Place the quantity on the chart	"I am going to put these ___ cubes above the number ___ on my chart." Place the cubes on the chart or drag the digital squares into position. "Say it with me: ___ cubes match the number ___."	"___ cubes match the number ___."
5. Connect to one more	Point to the new tower and the previous tower. "Look. It is like steps. This tower is one cube higher than the tower before it." "Say it with me: ___ is one more than ___."	"___ is one more than ___."
6. Check for understanding	Point to a completed tower. "What number does this tower match?" Hold up stop hand, pause, then lower hand. "How do you know?"	Students say the matching number. "I counted the cubes." / "It is one more than ___." / "It matches the number ___."
7. Continue the routine	Repeat the same steps for the next number being introduced. Add only one new number per lesson until children are secure to 5.	Students read the numeral, count the cubes, and say the matching sentence.

Adapted from "Counting and numeral recognition activity 1": Jordan, N. C., & Dyson, N. (2025).

Early numbers, big ideas: Fostering number sense in young children. Centre for Independent Studies.



Review & practice

Finger Automaticity: Show the number

Purpose

This routine helps children quickly represent numbers on their fingers. It strengthens numeral recognition, quantity representation, and the structure of **5 and some more** for numbers 6–10.

Use for

Brief whole-class practice after students have been taught how to make the target numbers on their fingers. Use only numbers that have already been introduced. Begin with smaller numbers, then gradually include numbers to 10.

Display options

Use either:

- number recognition cards held up by the teacher, or
- a digital display with numerals shown one at a time.

Materials

- Number recognition cards, or numerals displayed digitally
- No student materials required

Teacher note

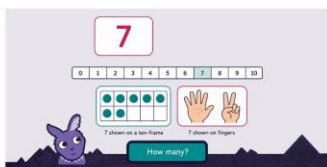
Use two versions of this routine. In the **supported version**, students look at their own fingers, make the number, and check before showing. In the **bunny ears version**, students show the number with hands held beside the head so the teacher can quickly scan responses. Choose a consistent way for the class to show each number. For numbers 6–10, emphasise **one full hand of 5 and some more** on the other hand.



Step	Teacher move	Student response
1. Introduce the task	"Today we are practising showing numbers quickly on our fingers." "When I show a number, say the number. Then make that number on your fingers."	
2. Show a known numeral	Hold up or display the 4 card. "What number?" Hold up stop hand, pause, then lower hand.	"4."
3a. Supported version: look and check	"Make 4 on your fingers. Look at your fingers and check." "Show me."	Students make 4 and check their own fingers. Students hold up 4 fingers for the teacher to scan. "4 fingers show the number 4."
3b. Bunny ears version: show quickly	"Show 4 as bunny ears." "Hold still while I check. Hands down."	Students hold 4 fingers beside their head. Students hold still, then lower hands.
4. Practise 5 and some more	Hold up or display the 7 card. "What number?" Hold up stop hand, pause, then lower hand. "Make 7 on your fingers. Look and check: one full hand is 5, and 2 more makes 7." "Show 7 as bunny ears."	"7." Students make 5 and 2 more. Students hold 5 fingers on one hand and 2 more on the other hand beside their head. "7 is 5 and 2 more."
5. Quick mixed review	Flash known numerals in mixed order. Use a brisk rhythm: "Read it. Make it. Bunny ears. Hands down."	Students say the numeral, make the finger quantity, show it, and lower hands.
6. Ask how they know	For selected examples, ask: "How do you know you are showing ___?"	"I counted my fingers." / "I know one hand is 5." / "I showed 5 and ___ more."
7. Confirm or correct	If students show the wrong number, say: "Check your fingers. Let's count them together." For numbers over 5, say: "Start with one full hand of 5. Now add ___ more." "Say it with me: ___ is 5 and ___ more."	Students count fingers with the teacher. Students adjust their fingers. "___ is 5 and ___ more."
8. Repeat with pace	Continue with known numerals. Once students are accurate, shorten the prompt to: "Read it. Bunny ears. Hands down."	Students respond quickly and accurately.

Adapted from "Finger counting activity 2: Finger automaticity": Jordan, N. C., & Dyson, N. (2025).

Early numbers, big ideas: Fostering number sense in young children. Centre for Independent Studies.



Review & practice

Subitising: Recognising sets

Purpose

This routine helps children recognise small quantities quickly without counting. It supports subitising, quantity recognition, and explaining how they know "how many."

Use for

Brief whole-class practice with quantities that have already been introduced. Begin with 0–2, then gradually include quantities to 5. Use varied dot arrangements.

Display options

Use either:

- dot cards flashed by the teacher, or
- a digital display showing one dot arrangement at a time.

Materials

- Subitising dot cards for known quantities, beginning with 0, 1 and 2
- Optional: digital dot cards

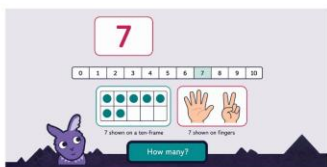
Teacher note

Flash each card briefly so students do not have enough time to count every dot. The goal is quick recognition. Keep the routine brisk. Ask "How did you know?" on selected examples only. Occasionally use a quick turn-and-talk before selecting 1–2 students to share, but do not pause after every card. If students are inaccurate, increase viewing time, use smaller quantities, or return to more structured arrangements.

Step	Teacher move	Student response
1. Introduce the task	"Today we are practising seeing how many dots without counting every dot." "I will show the dots quickly. Think about how many you see. When my hand goes down, say the number."	Students look at the teacher or display. Students prepare to respond.
2. Flash a known quantity	Show a card with 2 dots for about one second. Hold up stop hand, pause, then lower hand. "How many dots?"	"2."
3. Confirm and link to numeral	Show/reveal the numeral alongside the dot picture. "Yes, there are 2 dots."	
4. Ask how they know*	For some examples, ask: "How did you know it was ____? Turn and tell your partner how you knew." Then select 1–2 students to share.	Students briefly explain to a partner, then selected students respond, e.g. "I just saw it." / "I recognised the pattern." / "I saw ____ and ____."
5. Repeat with varied arrangements	Flash another known quantity, such as 1, 0, or 2 in a different arrangement. "How many dots?"	Students say the quantity.
6. Confirm or correct	If students give the wrong quantity, show the card again for longer. "Let's check. Count with me." Touch each dot once. "There are 2 dots. How many dots?"	"1, 2." "2"
7. Repeat with pace	Continue with known quantities in mixed order. Use a brisk rhythm: "Look. Think. Say it."	Students respond quickly and accurately.

Adapted from "Subitising activity 1 – Recognising sets": Jordan, N. C., & Dyson, N. (2025).

Early numbers, big ideas: Fostering number sense in young children. Centre for Independent Studies.



Review & practice

Subitising Activity: Five/Ten Frames

Purpose

This routine helps children quickly recognise quantities on five-frames and ten-frames. It supports subitising, groupitising, numeral–quantity matching, and understanding numbers as **5 and some more**.

Use for

Brief whole-class practice with quantities that have already been introduced. Use five-frames for 0–5, then ten-frames for 6–10.

Display options

Use either:

- five-frame or ten-frame cards flashed by the teacher, or
- a digital display showing one five-frame or ten-frame at a time (e.g. pre-prepared slides or an app such as <https://apps.mathlearningcenter.org/number-frames/>)

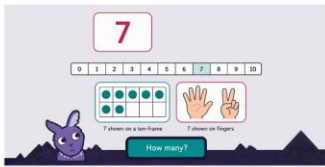
Materials

- Five-frame cards for 0–5
- Ten-frame cards for 0–10
- Optional: digital five-/ten-frame images

Teacher note

Use a consistent response format to keep the routine smooth. In this version, students respond chorally after think time. Occasionally, ask students to show the number on their fingers to reinforce the connection between the ten-frame structure and fingers, especially **5 and some more**. Keep explanations brief and selective so the routine maintains pace.

Step	Teacher move	Student response
1. Introduce the task	"Today we are practising seeing how many dots are on a five-frame or ten-frame." "I will show the frame quickly. Think about how many dots you see. When my hand goes down, say the number."	
2. Flash a five-frame	Show a five-frame with 4 dots for about one second. Hold up stop hand, pause, then lower hand. "How many?"	"4."
3. Confirm and link to numeral	Show/reveal the numeral alongside the dot picture. "Yes, 4"	
4. Ask how they know*	Occasionally say: "Turn and tell your partner how you knew." Then select 1–2 students to share.	Students briefly explain to a partner; selected students respond, e.g. "I saw 4." / "I saw 5 with 1 missing." / "I recognised the frame."
5. Flash a ten-frame	Show a ten-frame with 7 dots: top row full and 2 dots on the bottom row. Hold up stop hand, pause, then lower hand. "How many dots?"	"7."
6. Name the structure	Show the frame again. "The top row is full. That is 5. There are 2 more. Say it with me: 7 is 5 and 2 more."	"7 is 5 and 2 more."
7. Link to fingers	"Show 7 on your fingers." "Check your fingers. One full hand is 5, and 2 more makes 7. The ten-frame shows 5 and 2 more. Your fingers show 5 and 2 more."	Students show 5 fingers on one hand and 2 more on the other hand. Students check their fingers.
8. Link to numeral	Show or write the numeral. "This quantity matches numeral 7."	"7 dots match numeral 7."



INSTRUCTIONAL GUIDANCE: COUNTING, QUANTIFYING & NUMERAL RECOGNITION

Review & practice

Page 6 of 6

9. Confirm or correct	If students give the wrong quantity, show the frame again for longer. "Let's check. Is the top row full?" "How many in the full row?" "How many more?" "So 5 and 2 more is 7."	"Yes." / "No." "5." "2." "5 and 2 more is 7."
10. Repeat with pace	Continue with known quantities in mixed order. Use a consistent rhythm: "Look. Think. Say it." Occasionally add: "Show it on your fingers."	Students respond chorally; occasionally show the number on fingers to connect the frame to 5 and some more.

Adapted from "Subitising activity 2 – Five/ten frames": Jordan, N. C., & Dyson, N. (2025).

Early numbers, big ideas: Fostering number sense in young children. Centre for Independent Studies.