

INSTRUCTIONAL GUIDANCE: MAGNITUDE COMPARISON

Teaching guidance and background

Page 1 of 2

What it looks like

Identifying which number is more or less

- ▶ “___ is more than ___.”
- ▶ “___ is less than ___.”

Comparing numbers using counting order

- ▶ “___ comes after ___, so ___ is more.”
- ▶ “___ comes before ___, so ___ is less.”

Explaining how we know

- ▶ “I know ___ is more because ___.”
- ▶ “I know ___ is less because ___.”

Beginning teen-number reasoning

- ▶ “___ is 10 and ___ more.”
- ▶ “___ has 1 ten and ___ ones.”
- ▶ “Both numbers have 1 ten, but ___ has more ones, so ___ is more.”

Year 1 extension: Comparing two-digit numbers using tens and ones

- This is an **extension**, not the starting point for Year 1 students.
- ▶ “___ has more tens than ___, so ___ is more.”
- ▶ “Both numbers have ___ tens, but ___ has more ones, so ___ is more.”

Why does it matter?

- Magnitude comparison helps students understand the relative size of numbers.
- For 6–8-year-old children, symbolic number comparison should be the strongest instructional focus.
- Foundation instruction should emphasise comparing numerals within 20 using counting order, number tracks/paths, and quantity representations.
- Year 1 instruction should extend comparison to numbers within 100 using teen-number understanding, tens and ones, hundreds charts, Base-10 materials, and place-value charts.

Goal of instruction

The goal of instruction is to move students from accurately comparing familiar small numbers towards comparing larger numbers within 20, including teen numbers.

For **Foundation**, the core focus should be:

1. comparing numerals and quantities to at least 20,
2. using counting order to explain which number is more or less,
3. using number tracks or number paths to prove comparisons,
4. comparing same, more, and less using clear stem sentences,
5. beginning to notice teen numbers as **10 and some more**, where appropriate.

For **Year 1**, the core focus should extend to:

1. extend comparison to numbers within 100 for this recommendation, while continuing to build broader curriculum expectations for larger number ranges.
2. revisiting teen numbers as **10 and some more** as a bridge into place-value work,
3. comparing two-digit numbers using tens and ones,
4. using number tracks, hundred charts, base-10 materials, and place-value charts to explain comparisons.

Place-value comparison of two-digit numbers, especially using tens and ones to compare numbers such as **54 and 38**, should be treated as a **Year 1 extension from Foundation work**, not as optional enrichment only. It is warranted when students are working with numbers to 100, while recognising that some Year 1 students will still need substantial work with teen numbers and decade structure first.

Teaching Guidance and Background

The phases below are cumulative. Foundation students may work mainly through Phases 1–3 within 20. Year 1 students should revisit those foundations briefly, then extend comparison to numbers within 100 using decade, tens-and-ones, and place-value reasoning.

Phase 1: Compare familiar small numbers

Use numbers within 10.

Examples:

- 4 and 6
- 8 and 5
- 10 and 10

Focus language:

- ▶ ___ is more than ___.
- ▶ ___ is less than ___.
- ▶ ___ and ___ are the same.

Phase 2: Compare teen numbers using counting order and number tracks

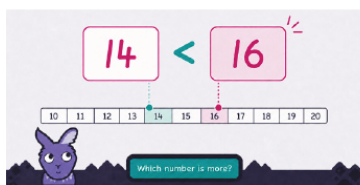
Use numbers within 20.

Examples:

- 12 and 15
- 14 and 16
- 18 and 15
- 19 and 17

Focus language:

- ▶ ___ comes after ___, so ___ is more.
- ▶ ___ comes before ___, so ___ is less.



INSTRUCTIONAL GUIDANCE: MAGNITUDE COMPARISON

Teaching guidance and background

Page 2 of 2

This is a **core Foundation routine** and an important review routine for Year 1 students who are not yet secure comparing numbers within 20.

Phase 3: Foundation emerging / Year 1 bridge — compare teen numbers using 10 and some more

Use base-10 blocks, ten-frames, bead strings, or grouped counters to show that teen numbers are made from **10 and some more**.

Examples:

- 14 is 10 and 4 more.
- 16 is 10 and 6 more.
- 18 is 10 and 8 more.

Focus language:

- ▶ ___ is 10 and ___ more.
- ▶ Both numbers have 10. ___ has more extra ones, so ___ is more.

This phase should support emerging teen-number understanding in Foundation and serve as a bridge into Year 1 place-value work. It should not be treated as a full place-value unit in Foundation.

Phase 4: Year 1 extension — compare two-digit numbers using tens and ones

Use this in Year 1 when students are comparing numbers beyond 20 and developing understanding that a two-digit number is made of tens and ones. Students who are not yet secure with teen numbers as 10 and some more may need additional work in Phase 3 before this phase.

Examples:

- 35 and 30
- 46 and 42
- 54 and 38

Focus language:

- ▶ First compare the tens.
- ▶ ___ has more tens than ___, so ___ is more.
- ▶ If the tens are the same, compare the ones.

This is an extension from Foundation comparison work. It is appropriate Year 1 content, but students may need a careful bridge through teen numbers, decade numbers, and base-10 representations before they can compare all two-digit numbers efficiently.