

NUMBERS AND THE NUMBER SYSTEM

Pupils should be taught to:

Use the vocabulary of comparing and ordering numbers, and the symbols $>$, $<$, $=$; give a number lying between two given numbers and order a set of numbers

As outcomes, Year 4 pupils should, for example:

Use, read and write:

*how many, as many as, the same number as, equal to...
more than, fewer than, greater than, less than, smaller than,
larger than... most, least, smallest, largest...
order, first, last, before, after, next, between, half way between...
ordinal numbers: first, second, third, fourth... 1st, 2nd, 3rd, 4th...
and the $<$ and $>$ signs.*

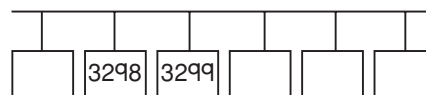
Respond to oral or written questions such as:

- Which is greater: 7216 or 7261?
Which is longer: 3157 m or 3517 m?
- Jo has walked 4356 metres.
Ny has walked 4365 metres.
Who has walked further? How many metres further?
- Indicate on a number line what number is half way between:
740 and 750 4000 and 4100 2350 and 2380

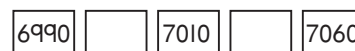


Now try without a number line.

- A melon weighs between 1090 grams and 1110 grams.
How heavy could it be?
- An oil tank holds between 5900 litres and 6100 litres of oil.
What could its capacity be?
- My car cost between £6950 and £7050.
Suggest what it cost.
- This is part of the number line.
Fill in the missing numbers.



- Here is a row of five cards. Two cards are blank.
Write a number on each blank card.
The five numbers must be in order.



- Put these numbers in order, largest/smallest first:
4521, 2451, 5124, 2154, 5214.
- If $3160 < \square < 3190$, what numbers could \square be?

See also the examples on ordering in:
negative numbers (page 14), fractions (page 22)
and decimals (page 28).

As outcomes, Year 5 pupils should, for example:

Use, read and write, spelling correctly, the vocabulary from the previous year, and extend to: *ascending/descending order...* and the \leq and \geq signs.

Respond to oral or written questions such as:

- Which is greater: 17 216 or 17 261?
Which is longer: 43 157 m or 43 517 m?
- Jo has cycled 14 356 metres.
Ny has cycled 15 365 metres.
Who has cycled further?
How many metres further?
- What number is half way between:
27 400 and 28 000... 45 670 and 45 680...?
- A journey takes about 2 hours, give or take 10 minutes. How long could the journey be?
- The distance to the crossroads is about 1 km, give or take 100 metres.
How far away could the crossroads be?
- Use knowledge of place value and number operations to place digits in the best position to make the largest/smallest sum, difference, product or quotient, using either a calculator or a computer program.
- Put these numbers in ascending/descending order: 14 521, 126 451, 25 124, 2154, 15 214.
- If $16\,240 \leq \square \leq 16\,320$, what numbers could \square be?

See also the examples on ordering in: negative numbers (page 15), fractions (page 23) and decimals (page 29).

As outcomes, Year 6 pupils should, for example: