Master Comparing Number Representations to 20 B

Rationale

In this step, pupils build on their understanding of comparing numbers to 20 represented by concrete apparatus to compare numbers represented by numerals.

Pupils will continue to use the vocabulary 'greater than', 'less than', and 'equal to' in their comparisons, using a number line to support their reasoning.

Key Stem Sentences

- They each have ___ ten and ___ ones.
- ___ has ___ tens / ones. / ___ has no tens / ones.
- ___ has more / fewer tens / ones than ___
- ___ is greater than / less than / equal to ___

Key Vocabulary

- compare
- fewer
- more
- greater than / less than / equal to

Key Representations

Number cards with Dienes

15   12
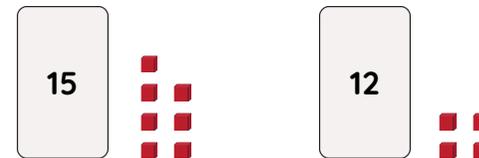
They each have 1 ten. 15 has 5 ones and 12 has 2 ones. 15 has more ones than 12. 15 is greater than 12

Number cards

14   20
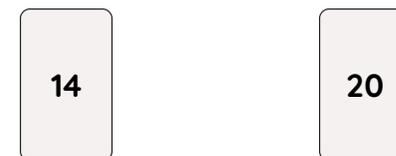
14 is less than 20

Number lines (to support reasoning)

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

13 is less than 19

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

17 is greater than 11

Common Errors or Misconceptions

- Pupils may not be secure in identifying numerals, for example identifying 9 as 6
- Pupils may not identify the number of tens first and assume that more ones means that the number is greater.
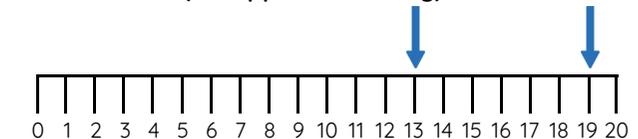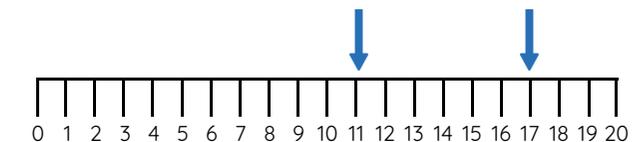
Pupils will FLOURISH if they can...

- identify whether a number to 20, represented by numerals, is greater than, less than or equal to another number.
- explain their understanding using verbal sentences and concrete apparatus.