

Master Comparing Number Representations to 20 A

Rationale

In this practical step, pupils build on their understanding of numbers to 20. They will draw on their understanding of comparing numbers to 10 to compare numbers to 20, represented by concrete apparatus. Pupils will continue to use the vocabulary 'greater than', 'less than', and 'equal to' in their comparisons. They will also understand that 2-digit numbers are always greater than 1-digit numbers.

Pupils will need access to concrete apparatus, such as Dienes, to complete this practical step.



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



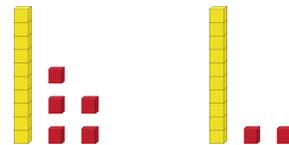
Common Errors or Misconceptions

- Pupils may assume that more ones means that the number is greater.
- Pupils may assume that the numbers must be represented in the same pattern or orientation to be equal.



Key Representations

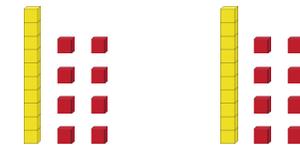
Dienes



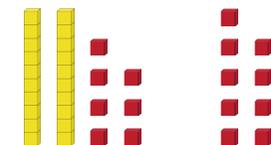
They each have 1 ten. 15 has 5 ones. 12 has 2 ones.
15 is greater than 12



14 has 1 ten. 20 has 2 tens. 14 has fewer tens than 20
14 is less than 20



They each have 1 ten and 8 ones.
18 is equal to 18



17 has 1 ten. 9 has no tens.
17 is greater than 9



Pupils will FLOURISH if they can...

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

