Addition – Year 2

Selected National Curriculum Programme of Study Statements Pupils should be taught to:

• recall and use addition and subtraction facts to 20 fluently and derive and use related facts up to 100.

• add and subtract numbers using concrete objects, pictorial representations, and mentally, including:

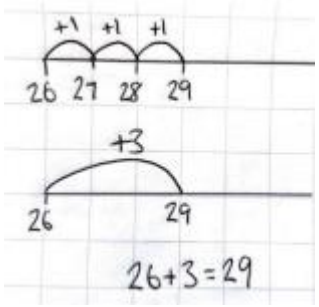
- a 2-digit number and ones
- a 2-digit number and tens
- two 2-digit numbers
- adding three 1-digit numbers

The Big Ideas (NCETM)

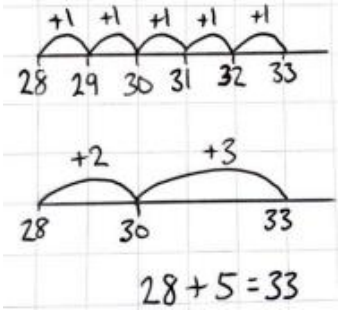
Understanding that addition of two or more numbers can be done in any order is important to support children's fluency. When adding two numbers it can be more efficient to put the larger number first. For example, given 3 + 8 it is easier to calculate 8 + 3. When adding three or more numbers it is helpful to look for pairs of numbers that are easy to add. For example, given 5 + 8 + 2 it is easier to add 8 + 2 first than to begin with 5 + 8. Understanding the importance of the equals sign meaning 'equivalent to' (i.e. that 6 + 4 = 10, 10 = 6 + 4 and 5 + 5 = 6 + 4 are all valid uses of the equals sign) is crucial for later work in algebra. Empty box problems can support the development of this key idea. Correct use of the equals sign should be reinforced at all times. Altering where the equals sign is placed develops fluency and flexibility.

Stage 1

Add 2-digit numbers and ones to 50 without bridging.

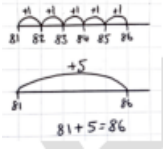


Add 2-digit numbers and ones to 50 with bridging



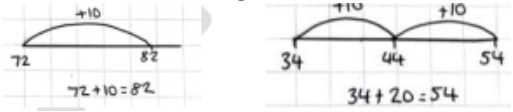
Stage 2

Add 2-digit numbers and ones to 100 without bridging

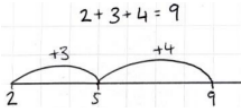


Add 2-digit numbers and ones to 100 with bridging.

Add 2-digit and tens.

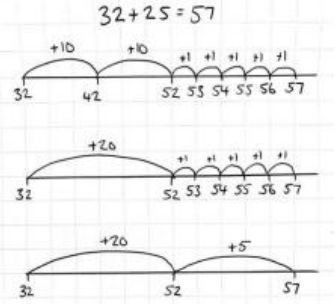


Adding three 1-digit numbers.

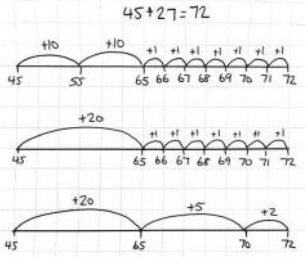


End of year expectation

Adding two 2-digit numbers without bridging



Adding two 2-digit numbers with bridging.



Subtraction – Year 2

Selected National Curriculum Programme of Study Statements Pupils should be taught to:

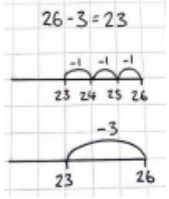
• Pupils should be taught to: • recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • add and subtract numbers using concrete objects, pictorial representations, and mentally, including: o a 2-digit number and ones o a 2-digit number and tens o two 2-digit numbers o adding three 1-digit numbers • show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot

The Big Ideas (NCTEM)

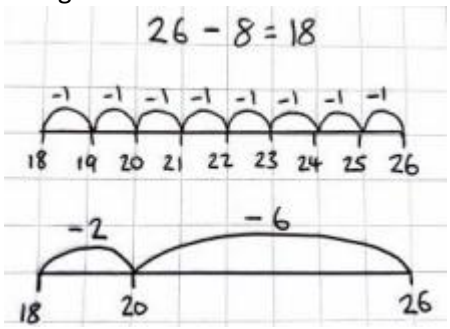
Understanding that addition of two or more numbers can be done in any order is important to support children's fluency. When adding two numbers it can be more efficient to put the larger number first. For example, given 3 + 8 it is easier to calculate 8 + 3. When adding three or more numbers it is helpful to look for pairs of numbers that are easy to add. For example, given 5 + 8 + 2 it is easier to add 8 + 2 first than to begin with 5 + 8. Understanding the importance of the equals sign meaning 'equivalent to' (i.e. that 6 + 4 = 10, 10 = 6 + 4 and 5 + 5 = 6 + 4 are all valid uses of the equals sign) is crucial for later work in algebra. Empty box problems can support the development of this key idea. Correct use of the equals sign should be reinforced at all times. Altering where the equals sign is placed develops fluency and flexibility.

Stage 1

Subtract 2-digit numbers and ones with numbers to 50 without bridging.

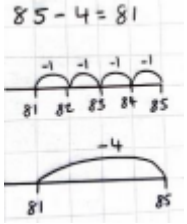


Subtract 2-digit numbers and ones to 50 with bridging

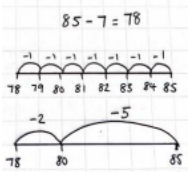


Stage 2

Subtract 2-digit numbers and ones to 100 without bridging.

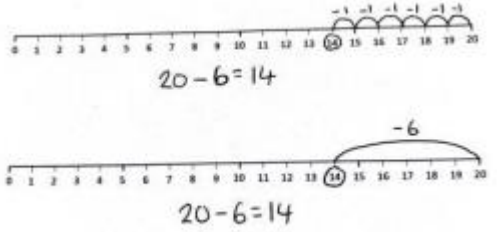


Subtract 2-digit numbers and ones to 100 with bridging

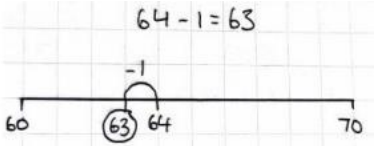
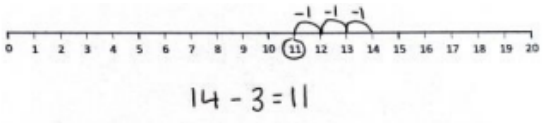


End of year expectation

Represent and use number bonds within 20.



Find 1 less from any given number within 100



Subtract 1-digit and 2-digit numbers within 20