Progression in number facts

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<tr><th colspan="2">Reception</th></tr>
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- Counting forwards and backwards in 1s to 20

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- Partitioning 2, 3, 4, 5, 6 and 10
- Say one more and one less than a number to 20
- Double numbers from 1 to 5

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- Begin counting forwards and backwards in multiples of 2 and 10

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<tr><th colspan="2">Year 1</th></tr>
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- Counting to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number
- Counting forwards and backwards in even and odd numbers (to 20)

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Addition and subtraction (Within 10)

1. Adding 1 (e.g. 7 + 1 *and* 1 + 7)
2. Doubles of numbers to 5 (e.g. 4 + 4)
3. Adding 2 (e.g. 4 + 2 *and* 2 + 4)
4. Number bonds to 10 (e.g. 8 + 2 *and* 2 + 8)
5. Adding 10 to a number (e.g. 5 + 10 *and* 10 + 5)
6. Adding 0 to a number (e.g. 3 + 0 *and* 0 + 3)
7. Near doubles (e.g. 3 + 4 *and* 4 + 3)
8. The ones without a family! 5 + 3, 3 + 5, 6 + 3, 3 + 6

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Alongside

Partitioning 2, 3, 4, 5, 6 and 10

Partitioning 7, 8 and 9

Linking addition facts to corresponding subtraction facts

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- Counting in multiples of 2 (to 20)
- Counting in multiples of 5 (to 50)
- Counting in multiples of 10 (to 100)

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<tr><th colspan="2">Year 2</th></tr>
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- Counting in multiples of 2, 5 and 3
- Counting on in 10s from any number, forwards and backwards
- Counting forwards and backwards in odd and even numbers (to 100)

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Addition and subtraction (Bridging 10)

1. Doubles of numbers to 10 (e.g. 7 + 7)
2. Near doubles (e.g. 5 + 6 *and* 6 +5)
3. Bridging (e.g. 8 + 4 *and* 4 + 8)
4. Compensating

- Recall and use addition and subtraction facts to 20 fluently
- Derive and use related facts up to 100

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Alongside

Partitioning 11 to 20 into single digit addends (e.g. 9 +2=11)

Linking addition facts to corresponding subtraction facts

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Multiplication facts

1. Recall 10 times table facts
2. Recall 5 times table facts
3. Recall 2 times table facts

Making connections with other tables facts (e.g. 10x 5x)

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Alongside

Linking multiplication facts to corresponding division facts

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<tr><th colspan="2">Year 3</th></tr>
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- Count in multiples of 4, 8, 50 and 100
- Count up and down in tenths

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Multiplication facts

1. Recall 4 times table facts
2. Recall 8 times table facts
3. Recall 3 times table facts

Making connections with other tables facts (e.g. 2x 4x 8x)

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Alongside

Linking multiplication facts to corresponding division facts

Using commutativity and associativity to derive related facts (e.g. 30 × 2 = 60, 60 ÷ 3 = 20 and 20 = 60 ÷ 3)

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Year 4

- Count in multiples of 6, 7, 9, 25 and 1,000
- Count backwards through zero to include negative numbers
- Count up and down in tenths and hundredths

Multiplication facts (up to 12 x 12)	**Alongside**
1. Recall 6 times table facts 2. Recall 9 times table facts 3. Recall 7 times table facts 4. Recall 11 times table facts 5. Recall 12 times table facts Making connections with other tables facts (e.g. 3x 6x 9x)	Linking multiplication facts to corresponding division facts Using commutativity and associativity to derive related facts (e.g. 30 × 2 = 60, 60 ÷ 3 = 20 and 20 = 60 ÷ 3)

Use place value, known and derived facts to multiply and divide mentally, including:

- multiplying by 0 and 1
- dividing by 1
- multiplying together three numbers
- recognising and using factor pairs and commutativity in mental calculations

Year 5

- Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- Count forwards and backwards with positive and negative whole numbers, including through zero
- Pupils continue to practise counting forwards and backwards in simple fractions

- Pupils continue to use all the multiplication tables to calculate mathematical statements in order to maintain their fluency.
- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- Recall prime numbers up to 19
- Multiply and divide numbers mentally drawing upon known facts
- Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000
- Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})

Year 6
• Count forwards and backwards in multiples with positive and negative values, including through zero • Counting in time/g/p/m/cm etc. (bridging to cm)
• Pupils continue to use all the multiplication tables to calculate mathematical statements in order to maintain their fluency • Perform mental calculations, including with mixed operations and large numbers • Identify common factors, common multiples and prime numbers • Use their knowledge of the order of operations to carry out calculations involving the four operations • Multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places

*For a number fact to be recalled fluently it should be recalled in less than 3 seconds, without reliance on counting strategies.