

Year 6 Block A Mathematics Overview

2023-24

Number: Place Value (within 10,000,000)	Number: Four Operations	Number: Fractions	Geometry: Position & Direction
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Number: Place Value

- Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit.
- Round any whole number to a required degree of accuracy.
- Use negative numbers in context, and calculate intervals across zero.
- Solve number and practical problems that involve all of the above.

Number: Four Operations

- Solve addition and subtraction multi step problems in contexts, deciding which operations and methods to use and why.
- Multiply multi-digit number up to 4 digits by a 2-digit number using the formal written method of long multiplication.
- Divide numbers up to 4 digits by a 2-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding as appropriate for the context.
- Divide numbers up to 4 digits by a 2-digit number using the formal written method of short division, interpreting remainders according to the context.
- 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.
- Solve problems involving addition, subtraction, multiplication and division.
- Use estimation to check answers to calculations and determine in the context of a problem, an appropriate degree of accuracy.

Number: Fractions

- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.
- Compare and order fractions, including fractions > 1 .
- Generate and describe linear number sequences (with fractions).

- Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions.
- Multiply simple pairs of proper fractions, writing the answer in its simplest form (for example $1/4 \times 1/2 = 1/8$).
- Divide proper fractions by whole numbers (for example $1/3 \div 2 = 1/6$).
- Associate a fraction with division and calculate decimal fraction equivalents (for example, 0.375) for a simple fraction (for example $3/8$).
- Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

Geometry: Position & Direction

- Describe positions on the full coordinate grid (all four quadrants).
- Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.