Year 7 Achievement Target

By the end of Year 7, students solve problems involving the comparison, addition and subtraction of fractions. They make the connections between whole numbers and index notation and the relationships between perfect squares and square roots. They solve problems involving percentages and all four operations with fractions and decimals. They compare the cost of items to make financial decisions. Students represent numbers using variables. They connect the laws and properties of numbers to algebra. They interpret simple linear relationships and model real-world situations. Students describe different views of three-dimensional objects. They represent transformations in the Cartesian plane. They solve simple numerical problems involving angles formed by a transversal crossing parallel lines. Students identify issues involving the collection of continuous data. They describe the relationship between the median and mean in data displays.

Students use fractions, decimals and percentages, and their equivalences. They express quantity as a fraction or percentage of another. Students solve simple linear equations and evaluate algebraic expressions. They use numerical patterns to give points on the Cartesian plane. Students use formulas for the area and perimeter of rectangles and calculate volumes of rectangular prisms. Students classify triangles and quadrilaterals. They name the types of angles formed by a transversal crossing parallel lines. Students determine the sample space for simple experiments with equally likely outcomes and use simple probability to assign probabilities to those outcomes. They calculate mean, mode, median and range for data sets. They construct stem and leaf plots and dot-plots.

**FRACTIONS AND DECIMALS**

- **Calculation and Operations**
  - Compare and order common fractions and decimals and locate them on a number line.
  - Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator.
  - Recognise that the number system can be extended beyond hundredths.
  - Compare, order and represent decimals.

- **Understanding**
  - Investigate equivalent fractions, decimals and percentages and carry out simple conversions.

**MONEY AND FINANCIAL MATHEMATICS**

- **Money and Financial Planning**
  - Investigate and calculate `best buys`, with and without digital technologies.
  - Investigate and calculate percentage discounts of `best buys`, with and without digital technologies.

**PATTERNS AND ALGEBRA**

- **Shape and Space**
  - Describe, continue and create patterns with fractions, decimals and simple number sequences from linear, number and spatial patterns.

- **Numerical Reasoning**
  - Use equivalent number sentences involving multiplication and division to find unknown quantities.

**INTERCURRICULAR PRIORITIES**

- **Cross Curriculum Priorities**
  - **First Steps Links**
    - Numeracy
    - Understand the use of variables to represent numbers, and represent numbers in a variety of ways, including using algebraic notation and representations, where they make connections between and among objects, events and situations.
  - **FRACTIONS AND DECIMALS**
    - Investigate equivalent fractions, decimals and percentages and carry out simple conversions.
  - **MONEY AND FINANCIAL MATHEMATICS**
    - Investigate and calculate `best buys`, with and without digital technologies.
  - **PATTERNS AND ALGEBRA**
    - Describe, continue and create patterns with fractions, decimals and simple number sequences from linear, number and spatial patterns.

**ACTIVITIES**

- **Calculate**
  - Compare and order common fractions and decimals and locate them on a number line.
  - Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator.
  - Recognise that the number system can be extended beyond hundredths.
  - Compare, order and represent decimals.
- **Understand**
  - Investigate equivalent fractions, decimals and percentages and carry out simple conversions.
- **Money and Financial Planning**
  - Investigate and calculate `best buys`, with and without digital technologies.
  - Investigate and calculate percentage discounts of `best buys`, with and without digital technologies.
- **Shape and Space**
  - Describe, continue and create patterns with fractions, decimals and simple number sequences from linear, number and spatial patterns.

**INTERCURRICULAR PRIORITIES**

- **Cross Curriculum Priorities**
  - **First Steps Links**
    - Numeracy
    - Understand the use of variables to represent numbers, and represent numbers in a variety of ways, including using algebraic notation and representations, where they make connections between and among objects, events and situations.
  - **FRACTIONS AND DECIMALS**
    - Investigate equivalent fractions, decimals and percentages and carry out simple conversions.
  - **MONEY AND FINANCIAL MATHEMATICS**
    - Investigate and calculate `best buys`, with and without digital technologies.
  - **PATTERNS AND ALGEBRA**
    - Describe, continue and create patterns with fractions, decimals and simple number sequences from linear, number and spatial patterns.