

Cross Curriculum Priorities



General Capabilities



First Steps Links

Understand Whole and Decimal Numbers

- KU 1 Pg.
- KU 2 Pg.
- KU 3 Pg.
- KU 4 Pg.
- KU 5 Pg.
- KU 6 Pg.
- KU 7 Pg.
- KU 8 Pg.

Understand Fractional Numbers

- KU 1 Pg.
- KU 2 Pg.
- KU 3 Pg.
- KU 4 Pg.
- KU 5 Pg.
- KU 6 Pg.
- KU 7 Pg.

Understand Operations

- KU 1 Pg.
- KU 2 Pg.
- KU 3 Pg.
- KU 4 Pg.
- KU 5 Pg.
- KU 6 Pg.
- KU 7 Pg.
- KU 8 Pg.
- KU 9 Pg.

Calculate

- KU 1 Pg.
- KU 2 Pg.
- KU 3 Pg.
- KU 4 Pg.
- KU 5 Pg.
- KU 6 Pg.
- KU 7 Pg.
- KU 8 Pg.
- KU 9 Pg.
- KU 10 Pg.

Reason About Number Patterns

- KU 1 Pg.
- KU 2 Pg.
- KU 3 Pg.
- KU 4 Pg.
- KU 5 Pg.
- KU 6 Pg.

Year 3	Year 4	Year 5
<p>NUMBER AND PLACE VALUE</p> <p>Investigate the conditions required for a number to be odd or even and identify odd and even numbers. [ACMNA051]</p> <p>Recognise, model, represent and order numbers to at least 10 000 to assist calculations and solve problems. [ACMNA052]</p> <p>Apply place value to partition, rearrange and regroup numbers to at least 10 000 to assist calculations and solve problems. [ACMNA053]</p> <p>Recognise and explain the connection between addition and subtraction. [ACMNA054]</p> <p>Recall addition facts for single digit numbers and related subtraction facts to develop increasingly efficient mental strategies for computation. [ACMNA055]</p> <p>Recall multiplication facts of two, three, five and ten and related division facts. [ACMNA056]</p> <p>Represent and solve problems involving multiplication using efficient mental and written strategies and appropriate digital technologies. [ACMNA056]</p>	<p>NUMBER AND PLACE VALUE</p> <p>Investigate and use the properties of odd and even numbers [ACMNA071]</p> <p>Recognise, represent and order numbers to at least tens of thousands [ACMNA072]</p> <p>Apply place value to partition, rearrange and regroup numbers to at least tens of thousands to assist calculations and solve problems [ACMNA073]</p> <p>Investigate number sequences involving multiples of 3, 4, 6, 7, 8, and 9 [ACMNA074]</p> <p>Recall multiplication facts up to 10×10 and related division facts [ACMNA075]</p> <p>Develop efficient mental and written strategies and use appropriate digital technologies for multiplication and for division where there is no remainder [ACMNA076]</p>	<p>NUMBER AND PLACE VALUE</p> <p>Identify and describe factors and multiples of whole numbers and use them to solve problems [ACMNA098]</p> <p>Use estimation and rounding to check the reasonableness of answers to calculations [ACMNA099]</p> <p>Solve problems involving multiplication of large numbers by one- or two-digit numbers using efficient mental, written strategies and appropriate digital technologies [ACMNA100]</p> <p>Solve problems involving division by a one digit number, including those that result in a remainder [ACMNA101]</p> <p>Use efficient mental and written strategies and apply appropriate digital technologies to solve problems [ACMNA291]</p>
<p>FRACTIONS AND DECIMALS</p> <p>Model and represent unit fractions including $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{5}$ and their multiples to a complete whole [ACMNA058]</p>	<p>FRACTIONS AND DECIMALS</p> <p>Investigate equivalent fractions used in contexts [ACMNA077]</p> <p>Count by quarters halves and thirds, including with mixed numerals. Locate and represent these fractions on a number line [ACMNA078]</p> <p>Recognise that the place value system can be extended to tenths and hundredths. Make connections between fractions and decimal notation [ACMNA079]</p>	<p>FRACTIONS AND DECIMALS</p> <p>Compare and order common unit fractions and locate and represent them on a number line Investigate strategies to solve problems involving addition and subtraction of fractions with the same denominator [ACMNA103]</p> <p>Recognise that the number system can be extended beyond hundredths [ACMNA104]</p> <p>Compare, order and represent decimals [ACMNA105]</p>
<p>MONEY AND FINANCIAL MATHEMATICS</p> <p>Represent money values in multiple ways and count the change required for simple transactions to the nearest five cents. [ACMNA059]</p>	<p>MONEY AND FINANCIAL MATHEMATICS</p> <p>Solve problems involving purchases and the calculation of change to the nearest five cents with and without digital technologies [ACMNA080]</p>	<p>MONEY AND FINANCIAL MATHEMATICS</p> <p>Create simple financial plans [ACMNA106]</p>
<p>PATTERNS AND ALGEBRA</p> <p>Describe, continue and create number patterns resulting from performing addition and subtraction [ACMNA060]</p>	<p>PATTERNS AND ALGEBRA</p> <p>Explore and describe number patterns resulting from performing multiplication [ACMNA081]</p> <p>Solve word problems by using number sentences involving multiplication or division where there is no remainder [ACMNA082]</p> <p>Use equivalent number sentences involving addition and subtraction to find unknown quantities [ACMNA083]</p>	<p>PATTERNS AND ALGEBRA</p> <p>Describe, continue and create patterns with fractions, decimals and whole numbers resulting from addition and subtraction [ACMNA107]</p> <p>Use equivalent number sentences involving multiplication and division to find unknown quantities [ACMNA121]</p>

Year 4 Achievement Standard

By the end of Year 4, students choose appropriate strategies for calculations involving multiplication and division. They recognise common equivalent fractions in familiar contexts and make connections between fraction and decimal notations up to two decimal places. Students solve simple purchasing problems. They identify unknown quantities in number sentences. They describe number patterns resulting from multiplication. Students compare areas of regular and irregular shapes using informal units. They solve problems involving time duration. They interpret information contained in maps. Students identify dependent and independent events. They describe different methods for data collection and representation, and evaluate their effectiveness. Students use the properties of odd and even numbers. They recall multiplication facts to 10×10 and related division facts. Students locate familiar fractions on a number line. They continue number sequences involving multiples of single digit numbers. Students use scaled instruments to measure temperatures, lengths, shapes and objects. They convert between units of time. Students create symmetrical shapes and patterns. They classify angles in relation to a right angle. Students list the probabilities of everyday events. They construct data displays from given or collected data.

PROFICIENCY STRANDS

Understanding

Students build a robust knowledge of adaptable and transferable mathematical concepts. They make connections between related concepts and progressively apply the familiar to develop new ideas. They develop an understanding of the relationship between the 'why' and the 'how' of mathematics. Students build understanding when they connect related ideas, when they represent concepts in different ways, when they identify commonalities and differences between aspects of content, when they describe their thinking mathematically and when they interpret mathematical information.



Problem Solving

Students develop the ability to make choices, interpret, formulate, model and investigate problem situations, and communicate solutions effectively. Students formulate and solve problems when they use mathematics to represent unfamiliar or meaningful situations, when they design investigations and plan their approaches, when they apply their existing strategies to seek solutions, and when they verify that their answers are reasonable.



Fluency

Students develop skills in choosing appropriate procedures, carrying out procedures flexibly, accurately, efficiently and appropriately, and recalling factual knowledge and concepts readily. Students are fluent when they calculate answers efficiently, when they recognise robust ways of answering questions, when they choose appropriate methods and approximations, when they recall definitions and regularly use facts, and when they can manipulate expressions and equations to find solutions.



Reasoning

Students develop an increasingly sophisticated capacity for logical thought and actions, such as analysing, proving, evaluating, explaining, inferring, justifying and generalising. Students are reasoning mathematically when they explain their thinking, when they deduce and justify strategies used and conclusions reached, when they adapt the known to the unknown, when they transfer learning from one context to another, when they prove that something is true or false and when they compare and contrast related ideas and explain their choices.



Resources Being Used