

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 2	Year 3	Year 4
<p>NUMBER AND PLACE VALUE</p> <p>Investigate number sequences, initially those increasing and decreasing by 2's, 3's, 5's and 10 from any starting point, then moving to other sequences. [ACMNA026]</p> <p>Recognise, model, represent and order numbers to at least 1000 [ACMNA027]</p> <p>Group, partition and rearrange collections up to 1000 in hundreds, tens and ones to facilitate more efficient counting. [ACMNA028]</p> <p>Explore the connection between addition and subtraction. [ACMNA029]</p> <p>Solve simple addition and subtraction problems using a range of efficient mental and written strategies. [ACMNA030]</p> <p>Recognise and represent multiplication as repeated addition, groups and arrays [ACMNA031]</p> <p>Recognise and represent division as grouping into equal sets and solve simple problems using these representations [ACMNA032]</p>	<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>FRACTIONS AND DECIMALS</p> <p>Recognise and interpret common uses of halves, quarters and eighths of shapes and collections. [ACMNA033]</p>	<p>FRACTIONS AND DECIMALS</p> <p>Model and represent unit fractions including 1/2, 1/4, 1/3, 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>MONEY AND FINANCIAL MATHEMATICS</p> <p>Count and order small collections of Australian coins and notes according to their value. [ACMNA034]</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>PATTERNS AND ALGEBRA</p> <p>Describe patterns with numbers and identify missing elements. [ACMNA035]</p> <p>Solve problems using number sentences for addition and subtraction. [ACMNA036]</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>

Year 3 Achievement Standard

By the end of Year 3, students recognise the connection between addition and subtraction and solve problems using efficient strategies for multiplication. They model and represent unit fractions. They represent money values in various ways. Students identify symmetry in the environment. They match positions on maps with given information. Students recognise angles in real situations. They interpret and compare data displays. Students count to and from 10 000. They classify numbers as either odd or even. They recall addition and multiplication facts for single digit numbers. Students correctly count out change from financial transactions. They continue number patterns involving addition and subtraction. Students use metric units for length, mass and capacity. They tell time to the nearest minute. Students make models of three-dimensional objects. Students conduct chance experiments and list possible outcomes. They carry out simple data investigations for categorical variables.

ACTIVITIES

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