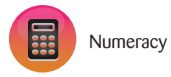


**Cross Curriculum Priorities**



**General Capabilities**



**First Steps Links**

**Understand Chance**

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

**Collect and Process Data**

**Part A**

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

**Collect and Process Data**

**Part B**

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

**Interpret Data**

- KU 1 Pg.
- KU 2 Pg.
- KU 3 Pg.

Year 4	Year 5	Year 6
<p><b>CHANCE</b></p> <p>Describe possible everyday events and order their chances of occurring [ACMSP092]</p> <p>Identify everyday events where one cannot happen if the other happens [ACMSP093]</p> <p>Identify events where the chance of one will not be affected by the occurrence of the other [ACMSP094]</p>	<p><b>CHANCE</b></p> <p>List outcomes of chance experiments involving equally likely outcomes and represent probabilities of those outcomes using fractions [ACMSP116]</p> <p>Recognise that probabilities range from 0 to 1 [ACMSP117]</p>	<p><b>CHANCE</b></p> <p>Describe probabilities using fractions, decimals and percentages [ACMSP144]</p> <p>Conduct chance experiments with both small and large numbers of trials using appropriate digital technologies [ACMSP145]</p> <p>Compare observed frequencies across experiments with expected frequencies [ACMSP145]</p>
<p><b>DATA REPRESENTATION &amp; INTERPRETATION</b></p> <p>Select and trial methods for data collection, including survey questions and recording sheets [ACMSP095]</p> <p>Construct suitable data displays, with and without the use of digital technologies, from given or collected data. Include tables, column graphs and picture graphs where one picture can represent many data values [ACMSP096]</p> <p>Evaluate the effectiveness of different displays in illustrating data features including variability [ACMSP097]</p>	<p><b>DATA REPRESENTATION &amp; INTERPRETATION</b></p> <p>Pose questions and collect categorical or numerical data by observation or survey [ACMSP118]</p> <p>Construct displays, including column graphs, dot plots and tables, appropriate for data type, with and without the use of digital technologies [ACMSP119]</p> <p>Describe and interpret different data sets in context [ACMSP120]</p>	<p><b>DATA REPRESENTATION &amp; INTERPRETATION</b></p> <p>Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables [ACMSP147]</p> <p>Interpret secondary data presented in digital media and elsewhere [ACMSP119]</p>

## Year 5 Achievement Target

By the end of Year 5, students solve simple problems involving the four operations using a range of strategies. They check the reasonableness of answers using estimation and **rounding**. Students identify and describe factors and multiples. They explain plans for simple budgets. Students connect three-dimensional objects with their two-dimensional representations. They describe transformations of two-dimensional shapes and identify line and rotational symmetry. Students compare and interpret different **data** sets.

Students order decimals and unit fractions and locate them on **number** lines. They add and subtract fractions with the same **denominator**. Students continue patterns by adding and subtracting fractions and decimals. They find unknown quantities in **number** sentences. They use appropriate units of measurement for length, area, **volume**, **capacity** and mass, and calculate **perimeter** and area of rectangles. They convert between 12 and 24 hour time. Students use a grid reference system to locate landmarks. They measure and construct different angles. Students list outcomes of chance experiments with **equally likely outcomes** and assign probabilities between 0 and 1. Students pose questions to gather **data**, and construct **data** displays appropriate for the **data**.

## ACTIVITIES

PROFICIENCY STRANDS	
<p><b>Understanding</b></p> <p>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.</p>	<p><b>Problem Solving</b></p> <p>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.</p>
<p><b>Fluency</b></p> <p>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.</p>	<p><b>Reasoning</b></p> <p>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.</p>