

Cross Curriculum Priorities



Aboriginal and Torres Strait Islander histories and culture



Asia and Australia's engagement with Asia



Sustainability

General Capabilities



Literacy



Numeracy



ICT Competence



Critical and Creative Thinking



Intercultural Understanding



Personal and Social Competence



Ethical Behaviour

First Steps Links

Understand Chance

- KU 1 Pg.
- KU 2 Pg.
- KU 3 Pg.
- KU 4 Pg.
- KU 5 Pg.
- KU6 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 6	Year 7	Year 8
CHANCE	CHANCE	CHANCE
Describe probabilities using fractions, decimals and percentages [ACMSP144]	Construct sample spaces for single-step experiments with equally likely outcomes [ACMSP167]	Identify complementary events and use the sum of probabilities to solve problems [ACMSP204]
Conduct chance experiments with both small and large numbers of trials using appropriate digital technologies [ACMSP145]	Assign probabilities to the outcomes of events and determine probabilities for events [ACMSP168]	Describe events using language of 'at least', exclusive 'or' (A or B but not both), inclusive 'or' (A or B or both) and 'and'. [ACMSP205]
Compare observed frequencies across experiments with expected frequencies [ACMSP145]		Represent events in two-way tables and Venn diagrams and solve related problems [ACMSP292]
DATA REPRESENTATION & INTERPRETATION	DATA REPRESENTATION & INTERPRETATION	DATA REPRESENTATION & INTERPRETATION
Interpret and compare a range of data displays, including side-by-side column graphs for two categorical variables [ACMSP147]	Identify and investigate issues involving continuous or large count data collected from primary and secondary sources [ACMSP169]	Investigate techniques for collecting data, including census, sampling and observation [ACMSP284]
Interpret secondary data presented in digital media and elsewhere [ACMSP119]	Construct and compare a range of data displays including stem-and-leaf plots and dot plots [ACMSP170]	Explore the practicalities and implications of obtaining data through sampling using a variety of investigative processes [ACMSP206]
	Calculate mean, median, mode and range for sets of data. Interpret these statistics in the context of data [ACMSP171]	Explore the variation of means and proportions of random samples drawn from the same population [ACMSP293]
	Describe and interpret data displays and the relationship between the median and mean [ACMSP172]	Investigate the effect of individual data values, including outliers, on the mean and median [ACMSP207]

Year 7 Achievement Target

By the end of Year 7, students solve problems involving the comparison, addition and subtraction of integers. They make the connections between whole numbers and index notation and the relationship 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 for numbers to algebra. They interpret simple linear representations and model authentic information. 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 two 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 one quantity as a fraction or percentage of another. Students solve simple linear equations and evaluate algebraic expressions after numerical substitution. They assign ordered pairs to given 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 line. Students determine the sample space for simple experiments with equally likely outcomes and assign probabilities to those outcomes. They calculate mean, mode, median and range for data sets. They construct stem-and-leaf plots and dot-plots.

ACTIVITIES	

PROFICIENCY STRANDS	
Understanding	Problem Solving
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.	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.
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Fluency	Reasoning
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.	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.
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