Measurement & Geometry Year 2

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Teacher: Date:

A Local Public School

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

SPACE

Represent Location

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

Represent Shape

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

Represent Transformation

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

Reason Geometrically

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

SPACE

Understand Units

- ☐ 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.

Direct Measure

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

Indirect Measure

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

Estimate

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

Year 1	Year 2	Year 3
USING UNITS OF MEASUREMENT	**USING UNITS OF MEASUREMENT**	**USING UNITS OF MEASUREMENT**
Measure and compare the lengths and capacities of pairs of objects using uniform informal units *[ACMMG019]* - understanding that in order to compare objects, the unit of measurement must be the same size Tell time to the half-hour *[ACMMG020]* - reading time on analogue and digital clocks and observing the characteristics of half-hour times Describe duration using months, weeks, days and hours *[ACMMG021]*	Compare and order several shapes and objects based on length, area, volume and capacity using appropriate uniform informal units *[ACMMG037]* - comparing lengths using finger length, hand span or a piece of string Compare masses of objects using balance scales *[ACMMG038]* - using balance scales to determine whether the mass of different objects is more, less or about the same. Tell time to the quarter-hour, using the language of 'past' and 'to' *[ACMMG039]* Name and order months and seasons *[ACMMG040]* Use a calendar to identify the date and determine the number of days in each month *[ACMMG041]*	Measure, order and compare objects using familiar metric units of length, mass and capacity *[ACMMG061]* - recognising and using centimetres and metres, grams and kilograms, and millilitres and litres Tell time to the minute and investigate the relationship between units of time *[ACMMG062]* - recognising there are 60 minutes in an hour and 60 seconds in a minute
SHAPE	**SHAPE**	**SHAPE**
Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features *[ACMMG022]* - focusing on geometric features and describing shapes and objects using everyday words such as 'corners', 'edges' and 'faces'	Describe and draw two-dimensional shapes, with and without digital technologies *[ACMMG042]* - identifying key features of squares, rectangles, triangles, kites, rhombuses and circles, such as straight lines or curved lines, and counting the edges and corners Describe the features of three-dimensional objects *[ACMMG043]* - identifying geometric features such as the number of faces, corners or edges	Make models of three-dimensional objects and describe key features *[ACMMG063]* - exploring the creation of three-dimensional objects using origami, including prisms and pyramids
LOCATION AND TRANSFORMATION	**LOCATION AND TRANSFORMATION**	**LOCATION AND TRANSFORMATION**
Give and follow directions to familiar locations *[ACMMG023]*	Interpret simple maps of familiar locations and identify the relative positions of key features *[ACMMG044]* Investigate the effect of one-step slides and flips with and without digital technologies *[ACMMG045]* Identify and describe half and quarter turns *[ACMMG045]*	Create and interpret simple grid maps to show position and pathways *[ACMMG065]* Identify symmetry in the environment *[ACMMG066]*
GEOMETRIC REASONING	**GEOMETRIC REASONING**	**GEOMETRIC REASONING**
		Identify angles as measures of turn and compare angle sizes in everyday situations *[ACMMG064]*

Year 2 Achievement Target

By the end of Year 2, students recognise increasing and decreasing number sequences involving 2s, 3s and 5s. They represent multiplication and division by grouping into sets. They associate collections of Australian coins with their value. Students identify the missing element in a number sequence. Students recognise the features of three-dimensional objects. They interpret simple maps of familiar locations. They explain the effects of one-step transformations. Students make sense of collected information. Students count to and from 1000. They perform simple addition and subtraction calculations using a range of strategies. They divide collections and shapes into halves, quarters and eighths. Students order shapes and objects using informal units. They tell time to the quarter hour and use a calendar to identify the date and the months included in seasons. They draw two- dimensional shapes. They describe outcomes for everyday events. Students collect data from relevant questions to create lists, tables and picture graphs.

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.

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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.

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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.

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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.

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