Year 4 Mathematics

Achievement Standard

By the end of Year 4, students use their understanding of place value to represent tenths and hundredths in decimal form and to multiply natural numbers by multiples of 10. They use mathematical modelling to solve financial and other practical problems, formulating the problem using number sentences, solving the problem choosing efficient strategies and interpreting results in terms of the situation. Students use their proficiency with addition and multiplication facts to add and subtract, multiply and divide numbers efficiently. They choose rounding and estimation strategies to determine whether results of calculations are reasonable. Students use the properties of odd and even numbers. They recognise equivalent fractions and make connections between fraction and decimal notations. Students count and represent fractions on a number line. They find unknown values in numerical equations involving addition and subtraction. Students follow and create algorithms that generate sets of numbers and identify emerging patterns.

They use scaled instruments and appropriate units to measure length, mass, capacity and temperature. Students measure and approximate perimeters and areas. They convert between units of time when solving problems involving duration. Students compare angles relative to a right-angle using angle names. They represent and approximate shapes and objects in the environment. Students create and interpret grid references. They identify line and rotational symmetry in plane shapes and create symmetrical patterns.

Students create many-to-one data displays, assess the suitability of displays for representing data and discuss the shape of distributions and variation in data. They use surveys and digital tools to generate categorical or discrete numerical data in statistical investigations and communicate their findings in context. Students order events or the outcomes of chance experiments in terms of likelihood and identify whether events are independent or dependent. They conduct repeated chance experiments and describe the variation in results.

Assessable Elements

An overall level of achievement in this subject is determined by the teacher's on-balance judgment of the evidence presented in students' summative assessment across the following strands:

- Fluency
- Problem Solving
- Reasoning
- Understanding

Delivery (mode, time requirements, lessons)

Students have access to scheduled lessons each week. Lessons are delivered via our Learning Management System. Students are also expected to undertake independent study to complete tasks and assessment in accordance with the Work Rate Calendar.

Student Requirements

Computer, internet access, email, printer, scanner, headset with microphone, stationery, resource list and SRS list.

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Units, Learning Experiences and Summative Assessment		
Semester 1	Term 1	Unit 1 Students will engage with a variety of mathematical topics, focusing on operations, place value, multiplication, data collection, and time-related problems. The term introduces both fundamental concepts and practical problem-solving skills.
		 Summative Assessment: Students will demonstrate their knowledge and understanding through a combination of hands-on investigations and tests throughout the term.
	Term 2	Unit 2 Students will delve deeper into measurement, number operations, and understanding geometric concepts. The term focuses on practical applications of mathematics, including real-life investigations and problem- solving strategies.
		 Summative Assessment: Students will demonstrate their knowledge and understanding through a combination of hands- on investigations and tests throughout the term.
Semester 2	Term 3	Unit 3 Students will focus on graphing, estimation strategies, and the foundations of fractions, along with practical applications like mapping, directions, and algorithms. The term emphasizes problem-solving and mathematical reasoning through a range of strategies and investigations.
		 Summative Assessment: Students will demonstrate their knowledge and understanding through a combination of hands- on investigations and tests throughout the term.
	Term 4	Unit 4 Students will focus on reinforcing key mathematical operations, place value, measurement, and geometry. The term will also feature some engaging investigations and opportunities for students to explore math in real-world scenarios. Here's an outline of what they'll cover:
		 Summative Assessment: Students will demonstrate their knowledge and understanding through a combination of hands- on investigations and tests throughout the term.

Disclaimer All of the above information is accurate at the time of development.