Statistics and Probability Year 2

Cross Curriculum Priorities
- Aboriginal and Torres Strait Islander cultures and histories
- Asia and Australia's engagement with Asia
- Sustainability

General Capabilities
- Literacy
- Numeracy
- ICT Competence
- Creative Thinking

Year 1

**CHANCE**
- Identify outcomes of familiar events involving chance and describe them using everyday language such as 'will happen', 'won't happen' or 'might happen' (ACMSP018)
- Understanding that some events are certain or impossible (ACMSP038)

**DATA REPRESENTATION & INTERPRETATION**
- Choose simple questions and gather responses (ACMSP046)
- Identify a question of interest based on one categorical variable. Gather data relevant to this question (ACMSP047)
- Collect, check and classify data (ACMSP048)
- Make displays of data using lists, tables and picture graphs and interpret from (ACMSP049)

**Year 1 Achievement Standard**

By the end of Year 1, students collect, check and classify data, and interpret them. They interpret and compare data displays, with and without the use of digital technologies.

**Problem Solving**

Students develop the ability to make choices, interpret, 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.

**Logical Thinking**

Students develop an increasingly sophisticated capacity for logical thought and actions, such as analysing, proving, 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 adopt the learner's role to the unknown, when they generalise and interpret visualising, when they verify that something is true or false and when they compare and contrast related ideas and explain their choices.

**Numeracy**

Students represent multiplication and division by grouping into sets. They divide familiar 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 interpret simple maps of familiar locations. They explain the effects of one-step transformations. Students make sense of collected information.

**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 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.

**Fluency**

Students develop skills in choosing appropriate procedures, carrying out procedures flexibly, accurately and efficiently, and using forward knowledge and concepts wisely. Students are fluent when they calculate answers efficiently, when they recognise visual ways of answering questions, when they choose appropriate methods and algorithms, when they recall definitions and notation and 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, 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 adopt the learner's role to the unknown, when they generalise and interpret visualising, when they verify that something is true or false and when they compare and contrast related ideas and explain their choices.