

# Learning area overview

Prep–Year 10 Australian Curriculum

## Mathematics

Australian Curriculum Version 8

The Australian Curriculum defines a solid foundation in knowledge, understanding, skills and values for all Australian students. This overview summarises key elements of this learning area.

### Key ideas

#### Proficiency strands

The proficiency strands describe how content is explored or developed. They are integrated throughout the content descriptions and the achievement standards.

##### Understanding

Connecting, describing, representing, thinking.

##### Fluency

Calculating, finding solutions and recalling accurately and readily.

##### Problem-solving

Formulating, interpreting, investigating, modelling.

##### Reasoning

Analysing, evaluating, explaining, justifying, proving.

### Content descriptions

Content descriptions describe what is to be taught and what students are expected to learn. Content descriptions are organised through strands and sub-strands.

	Strands	Number and algebra	Measurement and geometry	Statistics and probability
Sub-strands		Number and place value (P–8)	Using units of measurement (P–10)	Chance (1–10)
		Fractions and decimals (1–6)	Shape (P–7)	Data representation and interpretation (P–10)
		Real numbers (7–10)	Geometric reasoning (3–10)	
		Money and financial mathematics (1–10)	Location and transformation (P–7)	
		Patterns and algebra (P–10)	Pythagoras and trigonometry (9–10)	
	Linear and non-linear relationships (7–10)			

### Achievement standards

Achievement standards for each learning area or subject describe the learning expected of students at each year level or band of years. In Mathematics, the first paragraph of the achievement standard relates to understanding and the second paragraph relates to skills. This learning area provides an achievement standard for each year P–10, excluding 10A.

Find out more on the QCAA Australian Curriculum web page at <https://www.qcaa.qld.edu.au/p-10/aciq>

#### Rationale summary

Mathematics develops the numeracy capabilities needed to make informed, efficient decisions in the real world, and to learn the fundamentals on which further mathematics is built.

#### Aims summary

Mathematics develops confident, creative users of mathematics by cultivating the ability to pose and solve problems, and to recognise the connections between different areas of mathematics.

### Year-by-year curriculum

#### Year description

Describes the connection between the content descriptions and the proficiency strands for each year.

##### Primary

P

1

2

3

4

5

6

##### Secondary

7

8

9

10

10A