

Summary of changes to the Western Australian Curriculum: Mathematics Years 7 to 10

Overall

The Western Australian Curriculum: Mathematics was originally adopted from the Australian Curriculum version 8.1 (2018).

The Mathematics curriculum has been adapted from the current Western Australian Curriculum, the New South Wales Curriculum and Australian Curriculum version 9, and has been contextualised for the *Western Australian Curriculum and Assessment Outline*. The content has been clarified and exemplified to support teachers in planning for teaching, learning and assessment.

General

- Content has been reorganised to show a developmental progression between the year levels, and between primary and secondary Mathematics.
- Examples have been added to clarify content descriptions, support teacher understanding and provide contexts for teaching. These are not mandated.
- Optional content is included in Year 9 and Year 10 to build and extend students year level knowledge according to areas of interest, understanding of content and preparation for subsequent study.

Sub-strands – renamed and reorganised

Number and algebra

Existing content renamed and reorganised into sub-strands to provide a developmental sequence across Pre-primary to Year 10 (P–10).

- **Number and place value** and **Real numbers** renamed **Understanding number** and **Calculating with number**
- **Money and financial mathematics** renamed **Financial mathematics**
- **Patterns and algebra** and **Linear and non-linear relationships** renamed **Algebraic techniques, Linear and non-linear equations and inequalities** and **Linear and non-linear patterns and relationships**
- **Modelling with number and algebra** is a new sub-strand

Measurement and geometry

Existing content renamed and reorganised into sub-strands to facilitate connections between measurement and geometry and to provide a developmental sequence across P–10.

- **Using units of measurement, Shape, Location and transformation, Geometric reasoning** and **Pythagoras and trigonometry** renamed **Two-dimensional space and structures, Three-dimensional space and structures** and **Non-spatial measurement (time)**
- **Modelling with measurement and geometry** is a new sub-strand

Probability and statistics

Existing content renamed and reorganised into sub-strands to facilitate connections between probability and statistics and to provide a developmental sequence across P–10.

- **Chance** and **Data representation and interpretation** renamed **Probability and statistics**
- **Modelling with probability and statistics** is a new sub-strand

Content changes

Key content changes have been identified below. Teachers **must** consult the curriculum for a comprehensive understanding of changes.

- Content descriptions rewritten to include the proficiencies of understanding, reasoning, fluency and problem-solving
- A consistent modelling process has been included across all content strands and across all years
- Financial mathematics rewritten to include a financial literacy component across all years
- Complexity of linear, quadratic and exponential equations clarified at each year level
- Year 9 optional and Year 10 optional content established and based on current Year 9, current Year 10 and 10A content
- Simplifying algebraic fractions, solving equations involving algebraic fractions, solving linear simultaneous equations algebraically, solving problems involving parallel and perpendicular lines, algebraic and graphical representations of circles and geometric proof, moved from Year 10 to optional content
- Laws of logarithms, factor and remainder theorem, and sketching polynomials are not included in optional content
- Comparing the result of using approximate or exact real numbers and the impact of measurement errors on accuracy included in Years 9 and 10
- Introduction of Pythagoras' theorem moved from Year 9 to Year 8
- Solving simple quadratic equations included in Year 8 to support using Pythagoras' theorem
- Geometric language, notation and conventions included in Year 7
- Capacity units, conversions and calculations developed across Years 8–10
- Angle sum of a quadrilateral moved from Year 7 to Year 8, conditions for congruent triangles moved from Year 8 to Year 9 and conditions for similar triangles moved from Year 9 to Year 10
- 12- and 24-hour time systems across multiple time zones developed across Years 7 and 8
- Association between two categorical variables included in Year 10
- Statistical literacy, chance experiments and simulations included from Year 7 to Year 10

Year level descriptions

- Inclusion of phases of schooling information to provide teachers with guidance about the sorts of curriculum experiences likely to support students at each phase
- Updated to align with the revised content descriptions

Achievement standards

- Revised to align with content descriptions
- Reference to students demonstrating the behaviours of the proficiencies in conjunction with year level content in routine situations included
- Reference to selecting and using year level content along with the modelling process to solve straightforward real-world problems included
- Language change from 'At standard' to 'By the end of the year'