# The NSW Education Standards Authority (NESA) syllabus - Mathematics 


#### Abstract

The NSW Education Standards Authority (NESA) has redeveloped the Mathematics syllabus. The new syllabus is to be taught in Years 3 to 10 from 2024. It seems like a big change, but your school's mathematics program likely won't need to change substantially to meet the new outcomes.


## Key changes to the syllabus:

- One working mathematically statement that outlines the proficiencies to be integrated across all stages and outcomes.
- A focus on making connections across concepts, which may include integration of learning across different strands, sub-strands or outcomes.
- The separation of fractions into two focus areas:
- Partitioned fractions (Stage 2)
- Representing quantity fractions (Stage 3).
- The separation of whole number into two focus areas:
- Representing numbers using place value (Stage 2)
- Representing numbers (Stage 3).
- The embedding of decimals and percentages in:
- Representing numbers using place value (Stage 2)
- Representing numbers (Stage 3).
- A greater emphasis on the structure of place value.
- Stronger connections between shape, transformations and areas.
- Consistent representations of mathematical models and structures across focus areas.
- The embedding of patterns and algebra in additive and multiplicative relations and in two-dimensional spatial structure.
- Sub-strand changes (see next page for comprehensive table)


## Mathletics NSW Scope and Sequence

In anticipation of the new NSW syllabus, Mathletics has been inventoried and aligned to the new syllabus.

We have created Scope and Sequence documents based on the NSW Department of Education's "Big Ideas to Start Strong". These documents include learning sequences that allow for the integration and connection of concepts. Each learning sequence is related back to the NSW outcomes as well as the big idea.
Teachers can use the Mathletics NSW Scope and Sequence as provided or they can use the outcome mapping pages to create their own learning sequences. The related content in Mathletics is shown alongside each learning sequence. The flexible nature of this approach allows teachers to choose the most relevant content for the needs of their students and to align with their school maths program.
We know a new syllabus can be daunting, but Mathletics is here to help the transition go as smoothly as possible. With Mathletics, you can maintain the high level of teaching and learning we know you want to provide for your students.

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## Sub-strand changes:

| NSW Mathematics K-10 Syllabus (2012) | NEW NSW Mathematics K-10 Syllabus |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Early Stage | Stage 1 | Stage 2 | Stage 3 |
| Number and Algebra | Number and Algebra | Number and Algebra | Number and Algebra | Number and Algebra |
| Whole numbers | Representing whole numbers | Representing whole numbers A \& B | Representing numbers using place value A \& B | Representing numbers |
| Addition and subtraction | Combining and separating quantities | Combining and separating quantities A \& B | Additive relations A \& B | Additive relations |
| Multiplication and division | Forming groups | Forming groups A \& B | Multiplicative relations A \& B | Multiplicative relations |
| Patterns and Algebra | Representing whole numbers | Forming groups, RWN A \& B | Multiplicative relations A \& B | Multiplicative relations |
| Fractions and Decimals | $n / a$ | Forming groups | Partitioned fractions RWNB A \& B (decimals) | Representing quantity fractions RWN A \& B (decimals \& \%) |
| Measurement and Geometry | Measurement and Space | Measurement and Space | Measurement and Space | Measurement and Space |
| Position | Geometric measure | Geometric measure: A \& B Position | Geometric measure A \& B: Position | Geometric measure A \& B: Position |
| Length | Geometric measure | Geometric measure: A \& B Length | Geometric measure $A \& B$ : Length | Geometric measure A \& B: Length |
| Angles | $\mathrm{n} / \mathrm{a}$ | $n / \mathrm{a}$ | Geometric measure A \& B: Angle | Geometric measure A \& B: Angle |
| Two-dimensional space | Two-dimensional spatial structure | Two-dimensional spatial structure A \& B: 2D Shapes | Two-dimensional spatial structure A \& B: 2D Shapes | Geometric measure A \& B: Angle |
| Area | Two-dimensional spatial structure | Two-dimensional spatial structure A \& B: Area | Two-dimensional spatial structure A \& B: Area | Two-dimensional spatial structure A \& B: Area |
| Three-dimensional space | Three-dimensional spatial structure | Three-dimensional spatial structure A \& B: 3D Objects | Three-dimensional spatial structure A \& B: 3D Objects | Three-dimensional spatial structure A \& B: 3D Objects |
| Volume and capacity | Three-dimensional spatial structure | Three-dimensional spatial structure A \& B: Volume | Three-dimensional spatial structure A \& B: Volume | Three-dimensional spatial structure A \& B: Volume |
| Mass | Non-spatial measure | Non-spatial measure A \& B: Mass | Non-spatial measure A \& B: Mass | Non-spatial measure A \& B: Mass |
| Time | Non-spatial measure | Non-spatial measure A\&B: Time | Non-spatial measure A \& B: Time | Non-spatial measure A \& B: Time |
| Statistics and Probability | Statistics and Probability | Statistics and Probability | Statistics and Probability | Statistics and Probability |
| Data | Data | Data | Data | Data |
| Chance | $n / a$ | Chance | Chance | Chance |

