Mathematics Curriculum Overview - Stage 3

The new syllabus structure illustrates the important role Working Mathematically plays across all areas of mathematics and reflects the strengthened connections between concepts. Working mathematically has been embedded in the outcomes, content and examples of the syllabus. The focus areas build on the foundational skills developed in K–2 and 3-4 deepening and enriching learning.

Mathematics K–10 outcomes and their related content are organised in:

- Number and algebra
- Measurement and space
- Statistics and probability

NUMBER & ALGEBRA

Represents Numbers

Focuses On: applying an understanding of place value and the role of zero to represent the properties of numbers

and comparing and ordering decimals up to 3 decimal places

and determining percentages of quantities, and finding equivalent fractions and decimals for benchmark percentage values

Additive Relations

Focuses On: selecting and applying appropriate strategies to solve addition and subtraction problems

Multiplicative Relations

Focuses On: selecting and applying appropriate strategies to solve multiplication and division problems

and constructing and completing number sentences involving multiplicative relations, applying the order of operations to calculations

Representing Quantity Fractions

Focuses On: comparing and ordering fractions with denominators of 2, 3, 4, 5, 6, 8 and 10

and determining 1/2, 1/4, 1/5 and 1/10 of measures and quantities

MEASUREMENT & SPACE

Geometric Measure

Focuses On: locating and describing points on a coordinate plane

and selecting and using the appropriate unit and device to measure lengths and distances including perimeters

and measuring and constructing angles, and identifying the relationships between angles on a straight line and angles at a point

2D Spatial Structure

Focuses On: investigating and classifying two-dimensional shapes, including triangles and quadrilaterals based on their properties

and selecting and using the appropriate unit to calculate areas, including areas of rectangles

and combining, splitting and rearranging shapes to determine the area of parallelograms and triangles

3D Spatial Structure

Focuses On: visualising, sketching and constructing three-dimensional objects, including prisms and pyramids, making connections to two-dimensional representations

and selecting and using the appropriate unit to estimate, measure and calculate volumes and capacities

Non-spatial Measure

Focuses On: selecting and using the appropriate unit and device to measure the masses of objects

and measuring and comparing duration, using 12- and 24-hour time and am and pm notation

STATISTICS & PROBABILITY

Data

Focuses On: constructing graphs using many-to-one scales

and interpreting data displays, including timelines and line graphs

Chance

Focuses On: conducting chance experiments and quantifies the probability

All information from NSW Education Standards Authority: https://curriculum.nsw.edu.au/learning-areas/mathematics/mathematics-k-10-2022/overview