

Linking **NUMERO**[®] to the NSW Syllabus

NUMERO[®]

plays an important role in developing numeracy, mathematics and proficiency skills, relating to the NSW Syllabus and the Australian Curriculum. The table below provides links to the curriculum.

NUMERO[®]

particularly supports the Proficiency strands of the Australian Curriculum requiring students to use each of Understanding, Fluency, Problem Solving and Reasoning.

The proficiencies describe the actions in which students can engage when learning and using the content of mathematics.

Understanding refers to how students build a knowledge of adaptable and transferable mathematical concepts and structures, through making connections between related concepts and then applying to develop new ideas. It is the linking of the how and why of mathematics. It is shown when students can describe their mathematical thinking and when they can interpret mathematical information.

Fluency refers to how students develop skills in choosing appropriate procedures; carrying out procedures flexibly, accurately, efficiently and appropriately; and recalling factual knowledge and concepts readily. It is shown when students can choose appropriate methods and calculate answers.

Problem solving refers to how students develop the ability to make choices, interpret, formulate, model and investigate problem situations, and communicate solutions effectively in familiar and unfamiliar situations. It is shown when students can use mathematics, plan investigations and verify answers.

Reasoning refers to how students develop capacity for logical thought and actions, such as analysing, proving, evaluating, explaining, inferring, justifying and generalising. It is shown when students can explain their thinking, justify the use of strategies and responses, and then adapt knowledge to unknown situations.

The table below provides links to the curriculum.



links to the NSW Syllabus and the Australian Curriculum

Year Level	Content	Code	Description	Related Australian Curriculum
Early stage 1	Whole Numbers	Mae-4NA	counts to 30, and orders, reads and represents numbers in the range 0 to 20	ACMNA001, ACMNA002, ACMNA289
Stage 1	Whole Numbers 1 Whole Numbers 2	MA1-4NA	applies place value, informally, to count, order, read and represent two- and three-digit numbers	ACMNA012
Stage 1	Whole Numbers 2	MA1-4NA	applies place value, informally, to count, order, read and represent two- and three-digit numbers	ACMNA02
Stage 1	Addition and Subtraction 1	MA1-5NA	uses a range of strategies and informal recording methods for addition and subtraction involving one- and two-digit numbers	ACMNA015
Stage 1	Addition and Subtraction 2	MA1-5NA	uses a range of strategies and informal recording methods for addition and subtraction involving one- and two-digit numbers	ACMNA029, ACMNA030
Stage 1	Multiplication and Division 2	MA1-6NA	uses a range of mental strategies and concrete materials for multiplication and division	ACMNA031
Stage 2	Addition and Subtraction 1	MA2-5NA	uses mental and written strategies for addition and subtraction involving two-, three-, four- and five-digit numbers	ACMNA054, ACMNA055
Stage 2	Multiplication and Division 1	MA2-6NA	uses mental and informal written strategies for multiplication and division	ACMNA056
Stage 2	Multiplication and Division 2	MA2-6NA	uses mental and informal written strategies for multiplication and division	ACMNA075, ACMNA076
Stage 3	Whole Numbers 1	MA3-4NA	orders, reads and represents integers of any size and describes properties of whole numbers	ACMNA098
Stage 3	Whole Numbers 2	MA3-4NA	orders, reads and represents integers of any size and describes properties of whole numbers	ACMNA122

Stage 3	Multiplication and Division 1	MA3-6NA	selects and applies appropriate strategies for multiplication and division, and applies the order of operations to calculations involving more than one operation	ACMNA100
Stage 3	Multiplication and Division 2	MA3-6NA	selects and applies appropriate strategies for multiplication and division, and applies the order of operations to calculations involving more than one operation	ACMNA123
Stage 3	Fractions and Decimals 2	MA3-7NA	compares, orders and calculates with fractions, decimals and percentages	ACMNA127, ACMNA131
Stage 4	Indices	MA4-9NA	Operates with positive-integer and zero indices of numerical bases	ACMNA150
Stage 4	Fractions, Decimals and Percentages	MA4-5NA	operates with fractions, decimals and percentages	ACMNA158

References:

Australian Curriculum Assessment and Reporting Authority (2018). Mathematics proficiencies.
 Accessed from <https://www.australiancurriculum.edu.au/resources/mathematics-proficiencies/>

NSW Education Standards Authority (NESA) (2019). Mathematics K – 12 syllabi.
 Accessed from <https://educationstandards.nsw.edu.au/wps/portal/nesa/k-10/learning-areas/mathematics/mathematics-k-10>

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