By the end of year 7...

MATHEMATICS

- ☐ Investigate index notation & represent whole numbers as products of powers of prime numbers
- ☐ Investigate & use square roots of perfect square numbers
- ☐ Apply the associative, commutative & distributive laws to aid mental & written computation
- ☐ Compare, order, add & subtract integers
- ☐ Compare fractions using equivalence. Locate & represent positive & negative fractions & mixed numbers on a number line
- ☐ Solve problems involving addition & subtraction of fractions, including those with unrelated denominators
- ☐ Multiply & divide fractions & decimals using efficient written strategies & digital technologies
- ☐ Express one quantity as a fraction of another, with & without the use of digital technologies
- ☐ Round decimals to a specified number of decimal places
- ☐ Connect fractions, decimals & percentages & carry out simple conversions
- ☐ Find percentages of quantities & express one quantity as a percentage of another, with & without digital technologies.
- ☐ Recognise & solve problems involving simple ratios
- ☐ Investigate & calculate 'best buys', with & without digital technologies
- ☐ Introduce the concept of variables as a way of representing numbers using letters
- ☐ Create algebraic expressions & evaluate them by substituting a given value for each variable
- ☐ Extend & apply the laws & properties of arithmetic to algebraic terms & expressions
- ☐ Given coordinates, plot points on the Cartesian plane, & find coordinates for a given point
- ☐ Solve simple linear equations
- ☐ Investigate, interpret & analyse graphs from authentic data
- ☐ Establish the formulas for areas of rectangles, triangles & parallelograms & use these in problem solving
- ☐ Calculate volumes of rectangular prisms
- ☐ Draw different views of prisms & solids formed from combinations of prisms
- ☐ Describe translations, reflections in an axis, & rotations of multiples of 90° on the Cartesian plane using coordinates.
- ☐ Identify line & rotational symmetries
- ☐ Identify corresponding, alternate & co-interior angles when two straight lines are crossed by a transversal
- ☐ Investigate conditions for two lines to be parallel & solve simple numerical problems using reasoning
- ☐ Demonstrate that the angle sum of a triangle is 180° & use this to find the angle sum of a quadrilateral
- ☐ Classify triangles according to their side & angle properties & describe quadrilaterals
- ☐ Construct sample spaces for single-step experiments with equally likely outcomes
- ☐ Assign probabilities to the outcomes of events & determine probabilities for events
- ☐ Identify & investigate issues involving numerical data collected from primary & secondary sources
- ☐ Construct & compare a range of data displays including stem-&-leaf plots & dot plots
- ☐ Calculate mean, median, mode & range for sets of data. Interpret these statistics in the context of data
- ☐ Describe & interpret data displays using median, mean & range

ENGLISH

- ☐ Understand the way language evolves to reflect a changing world, particularly in response to the use of new technology for presenting texts & communicating
- ☐ Understand how accents, styles of speech & idioms express & create personal & social identities
- ☐ Understand & explain how the text structures & language features of texts become more complex in informative & persuasive texts & identify underlying structures such as taxonomies, cause & effect, & extended metaphors
- ☐ Understand that the coherence of more complex texts relies on devices that signal text structure & guide readers, for example overviews, initial & concluding paragraphs & topic sentences, indexes or site maps or breadcrumb trails for online texts
- ☐ Understand the use of punctuation to support meaning in complex sentences with prepositional phrases & embedded clauses
- ☐ Recognise & understand that subordinate clauses embedded within noun groups/phrases are a common feature of written sentence structures & increase the density of information
- ☐ Understand how modality is achieved through discriminating choices in modal verbs, adverbs, adjectives & nouns
- ☐ Analyse how point of view is generated in visual texts by means of choices, for example gaze, angle & social distance
- ☐ Investigate vocabulary typical of extended & more academic texts & the role of abstract nouns, classification, description & generalisation in building specialised knowledge through language
- ☐ Understand how to use spelling rules & word origins, for example Greek & Latin roots, base words, suffixes, prefixes, spelling patterns & generalisations to learn new words & how to spell them

This is to be used as a guide only.
All children learn at a different pace & in different ways.
Summarised from: https://www.australiancurriculum.edu.au/