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## Using the CAMS® Plus and STAMS® Plus program

Each *CAMS® Plus* student book includes a pretest, a post test, four benchmark tests and three self-assessment forms. The pretest and post test, which both include five items for each of the 16 *STAMS® Plus* lessons, are designed to assess mastery.

The benchmarks are designed to be given at regular intervals during *STAMS® Plus* instruction. With one item for each lesson, they provide an ongoing measure of overall progress for individual students and the class as a whole.

The chart below describes common scenarios for when to administer the pretest and how to use the results.

Use	Purpose of pretest	Timing for pretest	Using pretest results
<b>During the school year for on-level children</b>	To determine which year-level topics children have mastered and which topics need remediation.	Give the pretest about 3 months into the school year.	Use the results to create an instructional plan for the class or small groups based on areas in which children showed weaknesses. (See <i>STAMS® Plus</i> teacher guide.)
	To assess children's mastery of a topic you have taught with your core program.	Following instruction on a specific topic with your core program, give the page or pages from the pretest that address that topic. (See page 9.)	Immediately begin <i>STAMS® Plus</i> instruction in that topic for those children who need it.
<b>During the school year for below-level children</b>	To identify gaps in each child's understanding of below-year-level topics.	Administer the appropriate level of the <i>CAMS® Plus</i> pretest as early in the school year as possible. Use standardised test scores to identify the year level at which the child should be tested.	Immediately begin remediation with the corresponding <i>STAMS® Plus</i> lessons at that level.

## Implementing CAMS® Plus assessments and STAMS® Plus lessons

### Option 1: Data-driven instruction

#### 1 Diagnose with CAMS® Plus pretest

- Use the *CAMS® Plus* pretest to place children in the *STAMS® Plus* series. Pretest questions correspond to each of the 16 topics in the *STAMS® Plus* lessons, so results clearly identify exactly which topics your children need to study. (See details on pages 9–10.)

#### 2 Instruct with STAMS® Plus lessons

- Use the results of the *CAMS® Plus* pretest to assign specific lessons in the *STAMS® Plus Series* to remediate areas that need improvement. (See the *STAMS® Plus* teacher guide for more details about instruction.)

#### 3 Monitor progress with CAMS® Plus benchmarks

- Use the four *CAMS® Plus* benchmarks, each with one question per topic, to monitor children's progress at four points during the year. (See details on pages 11–12.)

#### 4 Assess mastery with CAMS® Plus post test

- Use the *CAMS® Plus* post test to assess mastery of each of the 16 fundamental topics following instruction with *STAMS® Plus*. (See details on pages 13 and 14.)

### Option 2: Comprehensive instruction

#### Suggested pacing chart for Book G

Day(s)	Lesson	Assessment and Instruction	Minutes
1–5		<i>CAMS® Plus</i> pretest	30–45/day
6–10	1	Understand integers	30–45/day
11–15	2	Add and subtract integers	30–45/day
16–20	3	Multiply and divide integers	30–45/day
21–25	4	Evaluate expressions	30–45/day
26		<i>CAMS® Plus</i> benchmark 1	30–45
27–31	5	Solve linear equations	30–45/day
32–36	6	Equations with rational numbers	30–45/day
37–41	7	Proportional relationships	30–45/day
42–46	8	Solve proportions	30–45/day
47		<i>CAMS® Plus</i> benchmark 2	30–45
48–52	9	Rate problems	30–45/day
53–57	10	Percentage as a ratio	30–45/day
58–62	11	Percentage problems	30–45/day
63–67	12	Similarity	30–45/day
68		<i>CAMS® Plus</i> benchmark 3	30–45
69–73	13	Circles	30–45/day
74–78	14	Cylinders	30–45/day
79–83	15	Pie charts	30–45/day
84–88	16	Theoretical probability	30–45/day
89		<i>CAMS® Plus</i> benchmark 4	30–45
90–94		<i>CAMS® Plus</i> post test	30–45/day

**Note:** Allocate 19 weeks for full implementation of the *CAMS® Plus* and *STAMS® Plus* program, with each lesson spanning 5 school days.

# The Australian Curriculum

Each book in the *CAMS® Plus*, *STAMS® Plus* and *Solve® Series* covers a range of Australian Curriculum content descriptions spread across two year levels. This allows teachers to select lessons for remediation or extension based on each student's needs. The content descriptions addressed by the lessons in Book G are listed here. Please note that not all the content descriptions for years 7 and 8 are addressed by the 16 standard lessons and 1 additional lesson (presented in bold), as the focus of the *CAMS® Plus*, *STAMS® Plus* and *Solve® Series* is on fundamental maths skills and concepts. For more information on the Australian Curriculum go to: [www.australiancurriculum.edu.au/](http://www.australiancurriculum.edu.au/)

Australian Curriculum Content Descriptions			Relevant Lesson(s)
YEAR 7	ACMNA151	Apply the associative, commutative and distributive laws to aid mental and written computation	4 5
	ACMNA157	Connect fractions, decimals and percentages and carry out simple conversions	11 15
	ACMNA158	Find percentages of quantities and express one quantity as a percentage of another, with and without digital technologies	10 11
	ACMNA173	Recognise and solve problems involving simple ratios	7 8 12 15
	ACMNA174	Investigate and calculate 'best buys', with and without digital technologies	9
	ACMNA175	Introduce the concept of variables as a way of representing numbers using letters	5 6
	ACMNA176	Create algebraic expressions and evaluate them by substituting a given value for each variable	5 6
	ACMNA177	Extend and apply the laws and properties of arithmetic to algebraic terms and expressions	4 6
	ACMNA179	Solve simple linear equations	5 6 7
	ACMNA280	Compare, order, add and subtract integers	1 2
	ACMMG159	Establish the formulas for areas of rectangles, triangles and parallelograms and use these in problem solving	13 14
	ACMMG160	Calculate volumes of rectangular prisms	14
	ACMMG166	Demonstrate that the angle sum of a triangle is $180^\circ$ and use this to find the angle sum of a quadrilateral	<b>17</b>
	ACMSP167	Construct sample spaces for single-step experiments with equally likely outcomes	16
	ACMSP168	Assign probabilities to the outcomes of events and determine probabilities for events	16
ACMSP170	Construct and compare a range of data displays including stem-and-leaf plots and dot plots	15	
YEAR 8	ACMNA183	Carry out the four operations with rational numbers and integers, using efficient mental and written strategies and appropriate digital technologies	1 2 3 6
	ACMNA187	Solve problems involving the use of percentages, including percentage increases and decreases, with and without digital technologies	10 11
	ACMNA188	Solve a range of problems involving rates and ratios, with and without digital technologies	7 8 9 12 15
	ACMNA189	Solve problems involving profit and loss, with and without digital technologies	11
	ACMNA192	Simplify algebraic expressions involving the four operations	4 5
	ACMNA193	Plot linear relationships on the Cartesian plane with and without the use of digital technologies	7
	ACMNA194	Solve linear equations using algebraic and graphical techniques. Verify solutions by substitution	6 7 8
	ACMMG197	Investigate the relationship between features of circles such as circumference, area, radius and diameter. Use formulas to solve problems involving circumference and area	13 14
	ACMMG202	Establish properties of quadrilaterals using congruent triangles and angle properties, and solve related numerical problems using reasoning	<b>17</b>