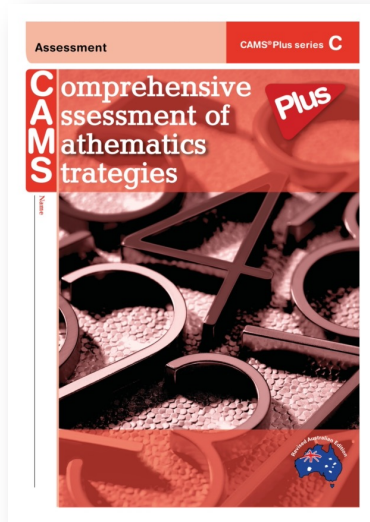
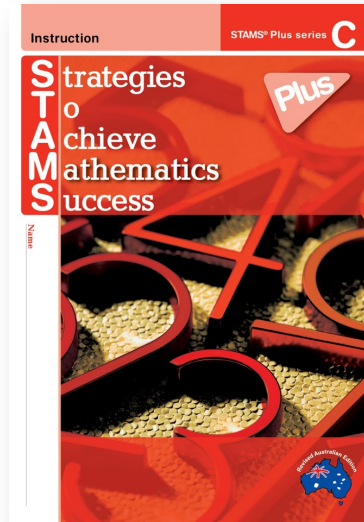


# How to use CAMS<sup>®</sup>Plus, STAMS<sup>®</sup>Plus and Solve<sup>®</sup>



Assessment



Instruction



Extra Practice

# About the Program

- An 8 level program (A-H) that allows you to identify and teach 16 fundamental mathematics concepts across each level
- Developed and used in schools across North America for over 10 years
- Correlated to Australian Curriculum content descriptions
- Includes rewritten maths problems to make them relevant to Australian teachers, classrooms and schools
- Each level includes a student book and teacher guide

# 16 fundamental skills and concepts: Levels A-H

## Level A (Years 1-2)

- Understand addition and Subtractions
- Fact families
- Make tens to add and subtract
- Solve word problems
- Add three numbers
- Count to 100
- Place value
- Compare Numbers
- Add and subtract ten
- Add 2-digit numbers
- Subtract ten
- Spaces
- Equal parts
- Length
- Time
- Data

## Level B (Years 2-3)

- Counting patterns
- Place value
- Compare numbers
- Mental maths
- Addition strategies
- Subtraction strategies
- Solve word problems
- Add and subtract to 1000
- Arrays
- Equal parts of shapes
- Length
- Add and subtract length
- Time
- Money
- Data and dot plots
- Graphs

## Level C (Years 3-4)

- Place value
- Add and subtract
- Multiplication concepts
- Fact strategies
- More fact strategies
- Division concepts
- Fact families
- Fraction concepts
- Model equivalent fractions
- Benchmark fractions
- Compare fractions
- Fractions greater than 1
- Plane figures
- Length
- Perimeter
- Picture graphs and column graphs

## Level D (Years 4-5)

- Multiplication properties
- Multiply mentally
- Multiply by 1-digit numbers
- Multiply by 2-digit numbers
- Relate division to multiplication
- Divide without regrouping
- Divide with regrouping
- Equivalent fractions
- Simplify fractions
- Decimal place value
- Compare and order decimals
- Relate decimals to fractions
- Angles
- Understand area
- Area of rectangles
- Dot plots

## Level E (Years 5-6)

- Multiply 3-digit numbers
- Divide mentally
- Estimate quotient
- 1-digit divisors
- Zeros in the quotient
- 2-digit divisors
- Understand mixed numbers
- Add and subtract like fractions
- Compare related and unlike fractions
- Add and subtract related fractions
- Add and subtract mixed numbers
- Add and subtract decimals
- Area
- Surface area
- Understand volume
- Line graphs

## Level F (Years 6-7)

- Multiply whole numbers by fractions
- Multiply fractions
- Divide whole numbers by fractions
- Divide fractions by fractions
- Multiply and divide by powers of ten
- Multiply decimals
- Divide decimals by whole numbers
- Divide by decimals
- Understand ratios
- Understand percentage
- Unit rates
- Ratios in tables of data
- Solve equations using number sense
- Solve equations using inverse operations
- Use formulas
- Volume

## Level G (Years 7-8)

- Understand integers
- Add and subtract integers
- Multiply and divide integers
- Evaluate expressions
- Solve linear equations
- Equations with rational numbers
- Proportional relationships
- Solve proportions
- Rate problems
- Percentage as a ratio
- Percentage problems
- Similarity Circles
- Cylinders Pie charts
- Theoretical probability

## Level H (Years 8-9)

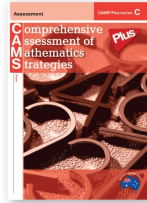
- Exponents Square roots
- Solve two-step equations
- Two-step equations with rational numbers
- Linear and nonlinear equations
- Gradient
- Graph linear equations
- Solve sets of simultaneous of equations graphically
- Solve sets of simultaneous of equations algebraically
- Special pairs of angles
- Angle sums
- Triangle similarity
- Pythagorean theorem
- Distance formula
- Mean, median, range
- Scatter plots

# What does it look like?

## The CAMS® Plus, STAMS® Plus and Solve® Series

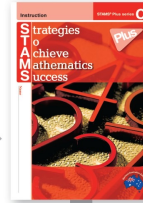
A unique blend of assessment and instruction, this powerful program teaches the fundamental maths skills students need to move on to the next year level and to become independent problem solvers.

### 1 Assessment - CAMS® Plus



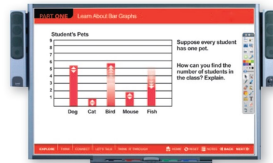
Use the pretest, post test and benchmark tests to pinpoint student needs, monitor progress and assess mastery.

### 2 Instruction - STAMS® Plus



Use the results of the pretest to provide targeted instruction on essential maths skills with these highly scaffolded lessons.

### 3 Modelled Instruction (IWB)



Engage students and drive home understanding with interactive lessons to model instruction and bring every topic to life.

### 4 Additional Practice - Solve® (Levels C-H)



Reinforce conceptual understanding with additional practice to promote higher order thinking.

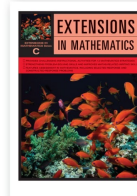
## CAMS and STAMS Online



**CAMS & STAMS Online: Assessment and Reports** is an online portal that allows you to produce detailed reports of how your students and class progress using the CAMS & STAMS program. Visit [www.hawkerbrownlow.com](http://www.hawkerbrownlow.com) for more information.

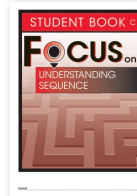
## Additional Resources

### 1 Extensions in Maths



Assist comprehension with step-by-step instruction and thorough practice to develop confident thinkers.

### 2 Focus on Maths



Provide concentrated practice with targeted strategies to reinforce understanding of newly introduced concepts.

# What is it?

- **CAMS<sup>®</sup> Plus** (Comprehensive Assessment of Mathematics Strategies) -  
*Assessment:* Diagnose student difficulties in fundamental maths skills necessary for success in mathematics. Includes pretest, benchmarks and post test
- **STAMS<sup>®</sup> Plus** (Strategies To Achieve Mathematics Success) -  
*Instruction:* Target individualised instruction on essential maths skills based on the assessment results in CAMS<sup>®</sup>
- **Solve<sup>®</sup>** - Practice: Supplement instruction and reinforce maths skills with scaffolded and sequenced practice, based on the lessons introduced in STAMS<sup>®</sup>

Each level in the **CAMS<sup>®</sup>**, **STAMS<sup>®</sup>** and **Solve<sup>®</sup>** Series spans two year levels, helping to provide differentiation, explicit teaching and student data

# What are the benefits?

## Comprehensive program that allow you to:

- Diagnose (**CAMS<sup>®</sup> Plus**) student mastery
- Instruct (**STAMS<sup>®</sup> Plus**) to the level of their ability
- Benchmark their progress (**CAMS<sup>®</sup> Plus**)
- Assess their achievement (**CAMS<sup>®</sup> Plus**)
- Provide differentiated instruction (**STAMS<sup>®</sup> Plus** and **Solve**)
- Create structure and continuity
- Facilitate instructional planning
- Make recordkeeping easier with online scoring management system

# Student Books

- **CAMS® Plus** student book contains

- Student pacing chart
- 16 pretests, 4 benchmarking tests and 16 post tests (30-45 minute lessons)
- Additional lesson pretest and post test
- Self-assessment and performance graph

- **STAMS® Plus** student book contains:

- 16 standard lessons: Each lesson is broken into 5 parts, modelled instruction, modelled practice, guided instruction, guided practice and independent practice
- Each part takes one class to teach, so a single lesson takes five days.
- Additional lessons: Levels A-G each contain a selection of additional lessons taken from the next level in the series, helping transition students into new concepts.

# Teacher Guides

## **CAMS® Plus teacher guide includes:**

- CAMS® and STAMS® pacing chart
- Using the Pretest, Using the Benchmark, Using the Post test sections
- Individual student record sheet and performance graph
- Class record sheet and performance graph
- Pretest, benchmark and post test answer keys



# Teacher Guides

## STAMS® Plus teacher guide includes:

- Suggested pacing chart
- Step-by-step instructions on how to guide students through lessons including:

- *Lesson objectives*
- *Prerequisites*
- *Vocabulary*
- *Maths background*
- *Interactive whiteboard*
- *Tips*
- *EAL/D support*
- *Error alert*
- *Answer analysis*
- *Assessment and remediation*

- Correct and example answers to student book
- School-Home Connections
- Fun and simple activity worksheets designed to encourage parents to assist in their child's mathematics education
- Additional lessons

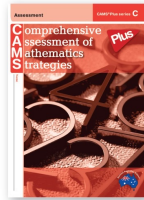
# How does it work?

1. Download the **placement booklet** to assess which mathematics concepts your students either excel or struggle with
2. Next, order the **CAMS® & STAMS® Plus** books for your desired level. Note: each level has a **student book** and **teacher guide**
3. Take the 16 pretests from the **CAMS® Plus** book to assess the level of mastery your students have in terms of the 16 lessons
4. Work through the **STAMS® Plus** books throughout the year. Supplement lessons with interactive whiteboard lessons and Solve.
5. Administer the 4 benchmark tests while teaching **STAMS® Plus** to monitor progress
6. If students are struggling with a maths concept or skill, have them work on the Related **STAMS® Lesson** presented in the teacher guide to foster understanding. If they are excelling, have them begin additional practice of the lesson in **Solve®**
7. At the end of the year, administer the 16 post tests in the **CAMS® Plus** book to gauge how much the students have progressed

# The CAMS® Plus, STAMS® Plus and Solve® Series

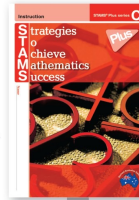
A unique blend of assessment and instruction, this powerful program teaches the fundamental maths skills students need to move on to the next year level and to become independent problem solvers.

## 1 Assessment - CAMS® Plus



Use the pretest, post test and benchmark tests to pinpoint student needs, monitor progress and assess mastery.

## 2 Instruction - STAMS® Plus



Use the results of the pretest to provide targeted instruction on essential maths skills with these highly scaffolded lessons.

## 3 Modelled Instruction (IWB)



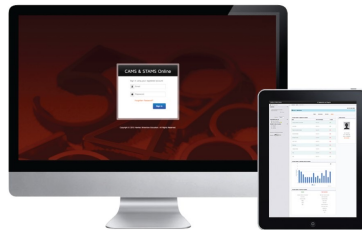
Engage students and drive home understanding with interactive lessons to model instruction and bring every topic to life.

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Reinforce conceptual understanding with additional practice to promote higher order thinking.

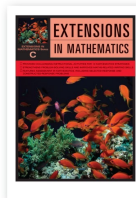
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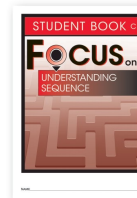
## Additional Resources

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### 2 Focus on Maths



Provide concentrated practice with targeted strategies to reinforce understanding of newly introduced concepts.

# CAMS<sup>®</sup> Plus - Assessment

## The CAMS<sup>®</sup> Plus book contains the following assessments:

- **16 pretests**

- 16 tests to be taken as soon as possible to fit in with class schedule
- Use this data when teaching STAMS<sup>®</sup> Plus strategies

- **4 benchmark tests**

- To be completed one-by-one, after a block of 4 STAMS<sup>®</sup> Plus lessons have been taught

- **16 post tests**

- Assesses the results of the students
- Great for parent-teacher interviews and to show student progress

# STAMS® Plus Lesson Format

**Each of the 16 standard lessons is broken into 5 parts:**



- Modelled instruction: "Learn about the strategy"
- Guided instruction: "Learn more about the strategy"
- Modelled practice: "Choose the right answer"
- Guided practice: "Write the best answer"
- Independent practice: "Prepare for a test"



# STAMS<sup>®</sup> Plus Lesson Format

## Week at a Glance

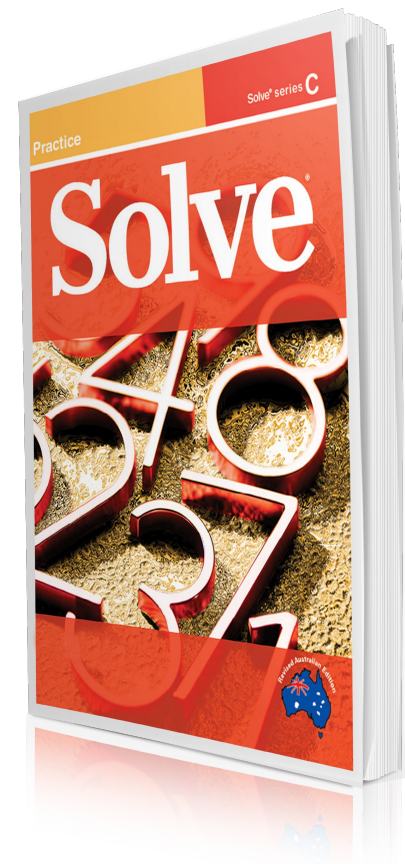
Suggested lesson pacing

	Monday	Tuesday	Wednesday	Thursday	Friday
	Modelled and Guided Instruction <b>Part one</b>	Modelled and Guided Instruction <b>Part two</b>	Modelled and Guided Practice <b>Part three</b>	Modelled and Guided Practice <b>Part four</b>	Independent Practice <b>Part five</b>
<b>Direct instruction</b>	Introduce new skill with student book pages  <b>20 minutes</b>	Introduce new skill with student book pages.  <b>20 minutes</b>	Model multiple-choice problem; analyse answers.  <b>10 minutes</b>	Model extended response problem.  <b>10 minutes</b>	
<b>Interactive Whiteboard (IWB) (optional)</b>	Use IWB lesson in place of part one in student book.	Use IWB lesson in place of part two in student book.	Review parts one and two as necessary.	Review parts one and two as necessary.	
<b>Independent work</b> 	Practise new skill.  <b>10 minutes</b>	Practise new skill.  <b>10 minutes</b>	Practise solving multiple-choice problems.  <b>20 minutes</b>	Practise solving extended-response problems.  <b>20 minutes</b>	Solve problems in test-prep format.  <b>20 minutes</b>
<b>Assessment</b> 	Check <i>Your Turn</i> answer.	Check <i>Your Turn</i> answer.	Check <i>Your Turn</i> answer.	Check <i>Your Turn</i> answer.	Check <i>Your Turn</i> answer. <i>Use Assessment and Remediation.</i> <b>15 minutes</b>
<b>Additional Activity (optional)</b>	<i>Hands-on Activity</i>  <b>15 minutes</b>	<i>Reteaching Activity</i>  <b>15 minutes</b>	<i>Vocabulary Activity</i>  <b>15 minutes</b>	<i>Real-World Connection plus School-Home Connection</i>  <b>15 minutes</b>	<i>Challenge Activity</i>  <b>15 minutes</b>

**Solve<sup>®</sup> provides students with additional practice of the strategies that were introduced in the STAMS<sup>®</sup> Plus instruction.**

## **Each level includes:**

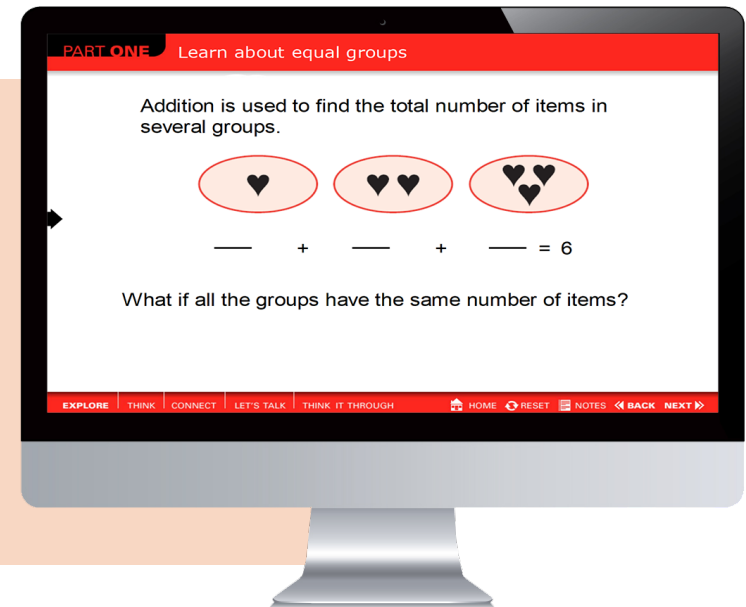
- A student book and teacher guide (levels C-H)
- A lesson corresponding to each lesson in STAMS<sup>®</sup> Plus
- Access to interactive whiteboard lessons
- A suggested pacing chart to include Solve<sup>®</sup> in your CAMS<sup>®</sup> Plus and STAMS<sup>®</sup> Plus instruction
- Reviews after every 4 Solve<sup>®</sup> lessons help to ensure that the student has complete mastery of the mathematical concept
- Great for additional practice for specific strategies!



# Interactive Whiteboard Lessons

- Address one lesson from each of the **STAMS® Series**, and offer students opportunities to question and explore mathematical concepts in greater detail.
- Can be used to supplement instruction in part one (modelled instruction) and part two (guided instruction) of each lesson

- Interactive Whiteboard lessons can also recap and review previous lessons from any level before beginning instruction
- Features, such as cloning and dragging objects, and whiteboard tools, such as highlighters, keep students actively engaged in learning
- Teacher notes lead you through the modelled and guided instruction to maximise each lesson's instructional impact



- Interactive Whiteboard lessons are included in STAMS® Plus and Solve® Plus purchases. Enter code in book at: <https://iwb.camsandstams.com.au/>



# Differentiation

**STAMS lessons support several approaches to differentiated instruction. Work with small groups or individuals as needed by taking advantage of these lesson features.**

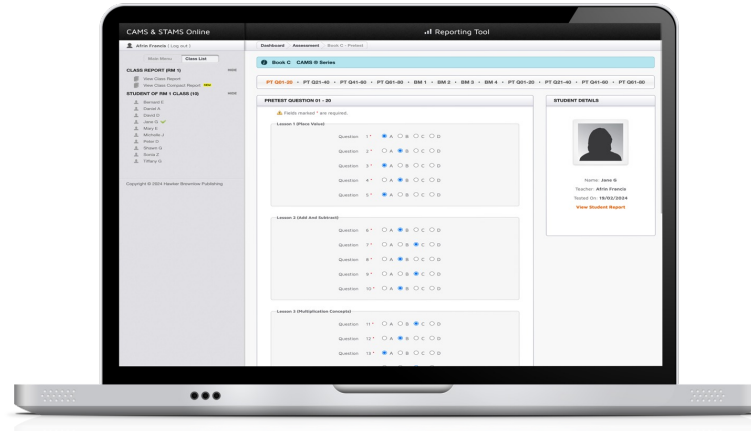
**1. For ESL / English as an Additional Language or Dialect (EAL/D) students:**

For any students who struggle with the language of maths, preview maths vocabulary. Throughout the instruction, refer to EAL/D Support tips that alert you to potential language obstacles. Use the Vocabulary Activity to help students tie new maths terms to words they already understand.

**2. For struggling students:** Use the Hands-on Activity, Reteaching Activity and Real-World Connection to give students other ways to access the skill. Review concepts visually with IWB lessons.

**3. For confident students:** Provide students an opportunity to extend their understanding of the concepts in the lesson with the Challenge Activity.

# CAMS® & STAMS®: Online Reporting and Assessment



- Teachers enter student results
- Automatically analyse student performance for each lesson
- View detailed reports by individual or class
- Print paper-based reports
- Great for parent-teacher interviews or for passing on to the student's next teacher

# Associated Products

CARS & STARS is a similar program (with the same structure) as CAMS Plus & STAMS Plus but designed for reading comprehension.

## The CARS & STARS Family of Products:

1. CARS (Comprehensive Assessment of Reading Strategies) Plus
2. STARS (Strategies To Achieve Reading Success) Plus
3. FOCUS on Reading
4. Extensions in Reading

Visit

<https://hawkerbrownlow.com/collections/cars-stars-collection>  
to learn more!



# Next Steps

**Download the Free Level Placement Guide from the website to get started!**

## **Hawker Brownlow Publishing**

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