

SUPPORTING RESEARCH

FOCUS_{on}

MATHEMATICS





A Research-Based Mathematics Strategy Series

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INTRODUCTION TO THE SERIES

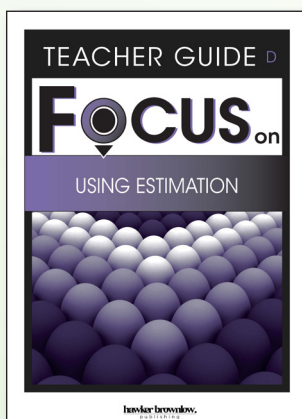
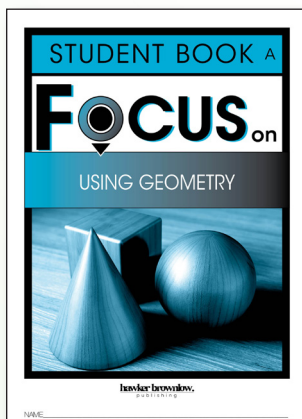
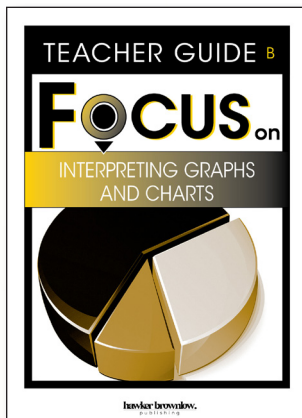
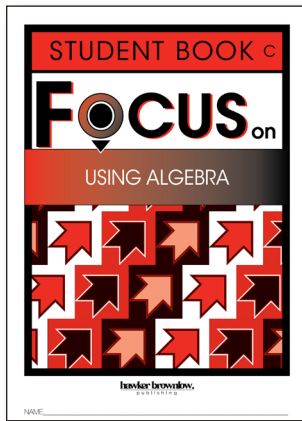
Mathematics has been deemed the gateway to success in both the classroom and the workplace. The further a student goes in mathematics, the greater chance he or she will have of earning a higher academic degree or earning more money once he/she has left the academic world.

Mastery of algebra has received the most concentrated focus as a signature of achievement. But before a student can master this higher level of mathematics, the student needs to master the foundations of mathematics, the stepping stones to higher-level mathematics. This is the intention of the **FOCUS on Mathematics** series.

The **FOCUS on Mathematics** series is a concentrated maths strategy practice program geared towards both on-level and off-level maths students. **FOCUS on Mathematics** is a series designed for on-level and struggling maths students needing repeated practice. **FOCUS on Mathematics** centres on brief instruction and concentrated targeted maths concepts and strategies in the context of word problems.

The **FOCUS on Mathematics** series covers:

- Building Number Sense
- Using Geometry
- Using Estimation
- Determining Probability and Averages
- Using Algebra
- Interpreting Graphs and Charts



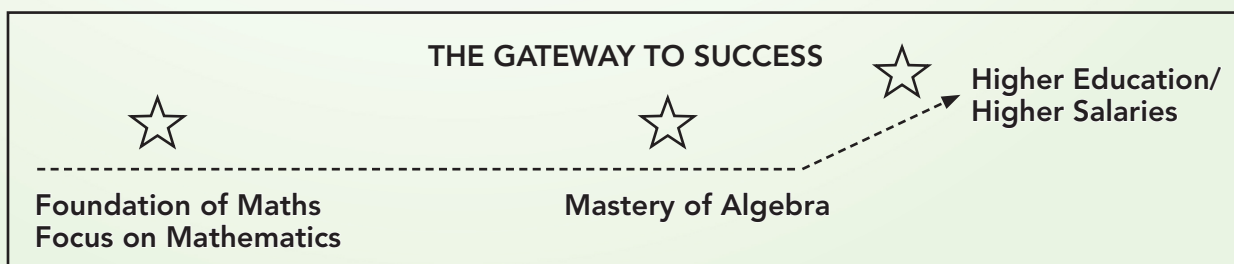
WHAT IS THE NEED FOR FOCUS ON MATHEMATICS?

There is a current drive in mathematics education to meet 21st-century skills so that today's students will be competitive in tomorrow's workforce. Australian state and territory education ministers continue to make improve numeracy standards a national priority. The National Goals for Schooling in the Twenty-first Century (the Adelaide Declaration), agreed to by all education ministers in April 1999, included the following goal: "Students should have attained the skills of numeracy... such that, every student should be numerate ...at an appropriate level."

The Statements of Learning for Mathematics, developed by the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) and Curriculum Corporation, in collaboration with Australian educational authorities, emphasise the significance of effective mathematics learning in schools:

- **"Mathematics is an integral part of a general education.** Mathematics is part of our cultural heritage. All students have a right to learn mathematics and the language of mathematics, to make sense of mathematics, to be confident in their use of mathematics and to see how it can help them make sense of their world and the worlds of others. High expectations for achievement, conceptual understanding and the opportunity to learn reasonable and challenging mathematics are fundamental to equity and social justice."
- **"Mathematics contributes to individual and collective development.** Mathematics and the capacity to be numerate, that is, the ability to effectively apply mathematics in everyday, recreational, work and civic life, is vital to the quality of participation in society."
- **"Mathematics connects with other curriculum areas.** Mathematics is a domain that supports learning and application in other curriculum areas and also draws on them for learning contexts."

(Statements of Learning for Mathematics,
Curriculum Corporation, 2006)



The release of several major reports has named algebra as a “gateway to higher mathematics”, which then leads to greater successes in both the academic and working lives of students (National Mathematics Advisory Panel (NMAP), 2008; National Council of Teachers of Mathematics (NCTM), 2006). An NMAP survey of maths teachers in the US reported that student performance in algebra is negatively affected by students’ lack of knowledge and understanding of these topics: rational numbers, word problems and study habits.

In response to concerns about students’ lacklustre mathematical performance, maths experts and researchers have joined forces to combat the slowing of mathematics progress. These experts have also laid a pathway for students to follow to develop the mathematical skills and knowledge to master algebra.

The **FOCUS on Mathematics** series provides students with explicit instruction in key mathematical concepts and strategies combined with targeted practice in the context of word problems. The **FOCUS on Mathematics** series may be an effective tool to help students along this pathway to proficiency in algebra.

Rational Numbers	Using Algebra, Building Number Sense and Using Estimation
Word Problems	A total of 800 word problems are provided in this series.
Study Habits	Student Self-Assessments in each Student Book promote self-monitoring and goal-setting.


HOW IS NEED FOR FOCUS ON MATHEMATICS SUPPORTED BY RESEARCH?

The **FOCUS on Mathematics** series is supported by research from mathematical researchers and organisations, including the National Mathematics Advisory Panel (NMAP) and the National Council of Teachers of Mathematics (NCTM). Much of the research on effective instruction for mathematics students parallels the recommendations of the NMAP (2008). Many of these recommendations are integrated into the **FOCUS on Mathematics** series, including: word problem focus, explicit instruction with modelling and focused practice.

Lesson 2 Read the passage. Then do Questions 1–5.

Dinosaur Data

Andrew went to the local natural history museum to find information about dinosaurs for his science project. He decided to build a paper model dinosaur. For his project presentation, he would make a dinosaur standing on a display board. Andrew had six weeks to complete the project. He started by making notes on facts he read about dinosaurs. Andrew focused his research on the Tyrannosaurus or T. rex. It was a large meat eater and is Andrew's favorite type of dinosaur.




- Andrew learned that the Triassic period was when dinosaurs first appeared on Earth. The period lasted 252,000,000 years ago. Which of the following shows this number rounded to the nearest ten million?
 - Ⓐ 200,000,000
 - Ⓑ 200,000,000
 - Ⓒ 250,000,000
 - Ⓓ 250,000,000
- Andrew read that T. rex lived during the Cretaceous period, which lasted until 65.5 million years ago. Which of the following shows this number rounded to the nearest million?
 - Ⓐ 65,000,000
 - Ⓑ 65,000,000
 - Ⓒ 65,000,000
 - Ⓓ 70,000,000

Word Problem Practice:
Concentrated and repeated word problem practice

Learn About

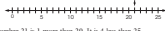
Using Estimation: Closest Number

Estimation can be used to find the closest number to another number. To find the number that is closest, count up or count back. See if the number is closer to 5, 10, 15, 20 or 25. Look at the number line, and then read the reasons why each number is the closest.



- The number 4 is closer to 5 because 4 is 1 less than 5 but 6 less than 10.
- The number 8 is closer to 10 because 8 is 2 less than 10 but 3 more than 5.
- The number 11 is closer to 10 because 11 is 1 more than 10 but 4 less than 15.

Kyle is having a birthday party. He counted 21 dinner plates. Is 21 closer to 20 or 25?



The number 21 is 1 more than 20. It is 4 less than 25.
The number 21 is closer to 20 than to 25.

Estimation can be used to find the closest number to another number. To find the number that is closest, count up or count back. See if the number is closer to 5, 10, 15, 20 or 25.

Explicit Instruction
Learn About Section

Lesson Preview

Read the sample problem.

Using Estimation

Joe likes playing with cars. His favorite is a sports car. Joe has 27 sports cars and 4 trucks.

- What is the nearest ten to 27?
 - Ⓐ 10
 - Ⓑ 20
 - Ⓒ 30
 - Ⓓ 40
- Which number is closest to 4?
 - Ⓐ 20
 - Ⓑ 15
 - Ⓒ 10
 - Ⓓ 5

Explicit Instruction:
Learn Preview

Word Problem Focus

Research Says:

Word problems are the proving ground for students to demonstrate their mastery of mathematical fluency and conceptual understanding. Having the ability to transfer what they have learned to new problem-solving situations is one of the major end goals for mathematical education (NMAP, 2008; NCTM, 2006). "The issue of transfer, that is, the ability to use skills learned to solve one class of problems, such as similar triangles, to solve another class of problems, such as linear algebra, is a vital part of mathematics learning" (NMAP, 2008, p. 30). And yet, students, on average, have the most difficulty solving word problems.

From Research to Application:

The **FOCUS on Mathematics** series provides repeated and focused practice of key maths strategies in the context of word problems. With more than 800 word problems in the series, students gain multiple opportunities to practise core maths concepts and strategies.

Explicit Instruction with Modelling

Research Says:

Explicit instruction is a hallmark of effective instruction for struggling and on-level students. The NMAP recommends explicit instruction as one of the instructional methods that research has proved to be effective.

"By the term explicit instruction, the Panel means that teachers provide clear models for solving a problem type using an array of examples, that students receive extensive practice in use of newly learned strategies and skills, that students are provided with opportunities to think aloud (i.e., talk through the decisions they make and the steps they take), and that students are provided with extensive feedback" (p. 23).

Each of these features, as defined by the NMAP, can be found in the FOCUS on Mathematics series. With explicit instruction and teacher modelling, skill efficiency is nearly guaranteed for students (Hiebert & Grouws, 2008).

From Research to Application:

The **FOCUS on Mathematics** series uses explicit instruction in the teaching of the mathematical strategies. The explicit instruction occurs in the Learn About section and in the Lesson Preview section.

Through the Learn About section, students receive explicit instruction consisting of a definition, semi-concrete and visual representations of the maths concepts, and a usage rule for the maths strategy. Additionally, the FOCUS on Mathematics series is a perfect vehicle for struggling students because it does not overwhelm students with the presentation of information. In the Learn About lesson, students initially experience the maths concepts in short presentations, usually three to seven sentences long.

A Remember box text feature is a point of reference for students to use while attending to lessons. The Remember box is consistently placed in each book of the series. Struggling or novice maths students usually skip or gloss over text features, which are valuable tools. With repeated exposure and external prompting by the teacher, students learn to pay attention to the text feature.

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Focused Practice Research Says:

One of the major callings from the U.S. National Mathematics Advisory Panel is for deeper learning and practice of mathematical skills and strategies. In fact, the panel states "Few curricula ... provide sufficient practice to ensure fast and efficient solving of basic fact combinations and execution of the standard algorithms" (p. 26). This calling is also echoed in NCTM's Focal Points. These two organisations are calling for maths instruction that goes beyond being "a mile wide and an inch deep" learning experience for students. Focusing on specific key mathematical topics allows "teachers to commit more time each year to topics receiving special emphasis. At the same time, students would have opportunities to explore these topics in depth, in the context of related content and connected applications, thus developing more robust mathematical understandings" (NCTM, 2006, p. 4).

*Focused Practice:
Re-teach through
20 lessons*

FOCUS STRATEGIES

Building Number Sense

Using Estimation

Using Algebra

Using Geometry

Determining Probability and Averages

Interpreting Graphs and Charts

*Repeated Practice:
Reinforce Key Maths
Strategies*

From Research to Application:

FOCUS on Mathematics is part of a focused curriculum series that allows for deep instruction and practice of specific maths concepts. The diagnosis of students' mastery of maths skills and strategies begins with the Comprehensive Assessment of Maths Strategies Series (CAMS® Series). Explicit instruction of specific maths strategies occurs with the Strategies to Achieve Mathematics Success Series (STAMS® Series). Finally, the **FOCUS on Mathematics** series provides repeated practice of maths strategies that are directly taught in the STAMS® Series.

Progress Monitoring through Formative Assessments

Research Says:

The NMAP recommends that formative assessment, “the ongoing monitoring of student learning to inform instruction” (p. 46), is an effective instructional tool for educators. Formative assessments provide frequent and precise reporting of students’ progress in a subject area. With this information, teachers may adjust or realign their instruction to more precisely fit students’ needs. The **FOCUS on Mathematics** series is a flexible instructional classroom tool to use because of the formative assessments teachers use in the series: student self-assessment and teacher assessment through conferencing, as well as selected and constructed assessments. Research (National Center on Student Progress Monitoring; NMAP, 2008; William, 2008) supports the use of these types of assessments because they are significant in increasing instructional effectiveness, students’ self-efficacy, motivation and engagement in learning activities. According to Bandura (1986), self-efficacy is “people’s judgement of their abilities to organize and execute courses of action required to attain designated types of performance” (p. 391)

When a student’s self-efficacy is raised, so is his or her willingness to engage in that activity. Both struggling and on-level readers benefit from increased self-efficacy.

From Research to Application:

Students progress through the brief instruction in the Learn About and Lesson Preview sections and then complete the appropriate number of lessons to show progress in the maths skill. These brief practice lessons are designed on-level so that students may show progress at their instructional level. With a tighter alignment to instruction and deeper student engagement, the **FOCUS on Mathematics** series is a strong mathematical instrument in the quest for conceptual understanding and maths fluency.

Through **FOCUS on Mathematics**, students engage in several types of assessments. Along with teacher interaction and guidance, these assessments foster positive results for students in terms of personal fulfilment and academic success.

Self-Assessment
Lessons 1 - 5

Answer these questions after you completed Lessons 1-5.

FOCUS on Using Estimation, Book A

Name _____ Date _____

- How well did you do in Lessons 1-5? Circle your answer.
great good could have done better
- Did you have any trouble with the questions? If so, what kind of trouble did you have?

- Complete this sentence: *I could have done even better in Lessons 1-5 if...*

- What do you want to do differently in Lessons 6-10?

Student Self-Assessment: Motivate and Focus Students

Tracking Chart

For each lesson, write the date you completed it. Write how many questions you answered correctly. Do the Self-Assessment after each group of five lessons.

Name _____

Lesson	Date Completed	Questions Correct	Lesson	Date Completed	Questions Correct
1		/5	11		/5
2		/5	12		/5
3		/5	13		/5
4		/5	14		/5
5		/5	15		/5

Now complete Self-Assessment 1 on page 45. Now complete Self-Assessment 3 on page 55.

Lesson	Date Completed	Questions Correct	Lesson	Date Completed	Questions Correct
6		/5	16		/5
7		/5	17		/5
8		/5	18		/5
9		/5	19		/5
10		/5	20		/5

Now complete Self-Assessment 2 on page 45. Now complete Self-Assessment 4 on page 55.

Tracking Chart: Showcase Student Progress

ANSWER KEY (continued)

Lesson 6 (page 45)
1. B 2. D 3. C 4. B
5. Solution: The number ten is the number 21 in 20. The number five before represents the number 21.
Sample Explanation: I drew a number line to show the position of the number 21 between 20 and 22.

Lesson 7 (page 55)
1. B 2. B 3. A 4. C
5. Solution: The number 4 is closer to 3 than 10. The number five before represents the number 4.
Sample Explanation: I drew a number line from 0 to 10 to show that 4 is closer to 3 than 10. I marked 4 and 5 and saw that the number four is the closer number.

Lesson 8 (page 20)
1. B 2. A 3. A 4. C
5. Solution: The number ten is 10. The number ten is 11 is 10. About 20 people play Sample Explanation: First, I found the number ten in #1. Then, I found that the number ten is 11 is 10. Finally, I added the number ten.

Lesson 9 (page 28)
1. C 2. B 3. A 4. D
5. Solution: The number ten is 10. The number ten is 40 is 40. Every five there are 20 numbers in all on the number line. Sample Explanation: First, I found the number ten in the number and number 10 and 20. The 10 I counted to find that the number ten is 10 in 10. Next, I counted to find that the number ten is 40 in 40. Finally, I added the number ten.

Teacher Assessment: Monitor students' progress quickly and accurately.

Student Self-Assessment Research Says:

Student self-assessment is not only a motivational tool, but also one that encourages students to take on more responsibility for their learning. Giving students more control over their learning is an empowering instructional tool. Once students are actively engaged in their learning, their self-efficacy is boosted.

Additionally, students with learning disabilities, such as attention deficit issues, benefit from attending to their own progress.

A major obstacle for special-needs students is not being able to focus on the important ideas or concepts in a maths problem.

One way to help students focus on what ideas should be learned is through self-monitoring tools, such as the Student Self-Assessments.

“These students benefit from a structured, consistent environment in which clear expectations are communicated for learning and doing mathematics. Communicating clear expectations ... means the teacher should give students a way to understand what is expected and a way to monitor their progress through a particular task ... This approach helps students attend to important ideas and promotes independent self-monitoring” (Lovin, Kyger, & Allsopp, 2004, p. 161).

From Research to Application:

The Student Self-Assessments and Tracking Chart are designed to give students immediate feedback on their performance. The Tracking Chart is a visual tool students can use to discuss their progress with the teacher. The Student Self-Assessments bring in self-regulation and monitoring. The Student Self-Assessment questions make students' thoughts explicit to themselves so that they may make conscious decisions about their learning progress.

Teacher Assessments through Teacher Conferencing

Teachers are encouraged to meet with students and discuss their progress as they proceed through a **FOCUS on Mathematics** book. This action parallels a recommendation from the NMAP in terms of effective use of formative assessments. Teacher conferencing occurs when the teacher meets with students individually to discuss progress towards self-set learning goals, including specific examples of observable increases in maths skills and strategies. This conference allows teachers and students to realign assignments and goals for maximum learning. These discussions also make students more aware of individual progress towards their maths goals and support a growing belief that with effort they can improve.

<p>3. Tracie has 3 books in her desk. What number below is closest to 3?</p> <p><input type="radio"/> 20</p> <p><input type="radio"/> 12</p> <p><input type="radio"/> 10</p> <p><input type="radio"/> 5</p>	<p>4. Tracie has about 9 pencils in her desk. What number below is closest to 9?</p> <p><input type="radio"/> 20</p> <p><input type="radio"/> 15</p> <p><input type="radio"/> 10</p> <p><input type="radio"/> 5</p>
<p>5. Tracie has about 14 marbles in her desk. Is 10 or 15 closer to the number 14? Draw a number line. Show your work in the space below. Remember to check your solution.</p> <p>Write your solution.</p> <p>Explain how you found your solution.</p>	

*Word Problem Practice:
Selected-response and
Constructed-response
question formats.*

Selected-Response and Constructed-Response Questioning Research Says:

By providing practice with test-question formats, the **FOCUS on Mathematics** series may reduce test anxiety in students. "Students of all levels of academic achievement and intellectual abilities can be affected by test anxiety" (Supon, 2004, p. 292). Supon and other researchers suggest that one method of alleviating test anxiety is to provide practice with test-question formats. With practice, students become comfortable with the question formats that relate to high-stakes testing. This is significant because "cognitive test anxiety exerts a significant stable and negative impact on academic performance measures."

From Research to Application:

FOCUS on Mathematics is a maths practice series that incorporates question formats that reflect those found on standardised tests. The practice of answering questions in a testing format bridges a testing gap students may have. The selected-response and constructed-response questioning found in each lesson is also a major element of formative assessments. The frequent use of these lessons as assessments enables teachers and students to experience a coherent maths curriculum.

QUICK-REFERENCE CHART: FROM RESEARCH TO APPLICATION: RESEARCH-BASED STRATEGIES AND FEATURES IN FOCUS ON MATHEMATICS

This Series Uses...	Example	Research Says...
<p>Annotated Answer Explanations for Students As part of guided instruction, students receive immediate feedback on their answer choices and read the reasoning behind correct and incorrect answers.</p>	<p>Student Book: Lesson Preview</p>	<p>Research (Pashler et al, 2007) has shown that when students receive direct instruction about the reasons why an answer is correct or incorrect, they demonstrate long-term retention and understanding of new learned content.</p>
<p>Balanced Instructional Approach A balanced instructional approach is one that uses both teacher-directed instruction and student-centred instruction.</p>	<p>Student Book: Learn About and Lesson Preview allow for a teacher-directed approach and/or for student-centred learning.</p>	<p>The National Mathematics Advisory Panel (2008) does not support a singular instructional approach for mathematics. An instructional program should neither be solely teacher-directed nor solely student-centred (p. 45).</p>
<p>Differentiated Instruction This is an instructional approach that allows students of varying abilities to learn the same content.</p>	<p>Teacher Guide: Teachers are directed to use individual, paired or small-group instruction depending on students' abilities.</p>	<p>'Multiple paths' does not mean that students are given free rein; it means that teachers must find that sweet spot between structure and choice that makes student learning possible . . . By allowing options that accommodate different thinking patterns, teachers help all students not only achieve planned learning goals but also own these goals in a way that's all theirs" (Carolan & Guinn, 2007, p. 45).</p>
<p>Explicit Instruction Explicit instruction involves, according to the NMAP,</p> <ul style="list-style-type: none"> • clear models for solving a problem type using several examples • extensive practice in use of newly learned strategies and skills • opportunities to think aloud • extensive feedback 	<p>Student Book:</p> <ul style="list-style-type: none"> • Learn About section • Lesson Preview offers think-aloud opportunities and the annotated answer explanations provide immediate feedback to students' answer choices • Student Self-Assessments <p>Teacher Guide:</p> <ul style="list-style-type: none"> • Teacher Assessments • "How Should I Use the <i>FOCUS on Mathematics</i> Series in the Classroom?" discussion feature 	<p>"Explicit instruction with students who have mathematical difficulties has shown consistently positive effects on performance with word problems and computation" (NMAP, 2008, xxiii).</p>
<p>Focused Practice Struggling and on-level students benefit from intensive practice of specific maths strategies</p>	<p>Series:</p> <ul style="list-style-type: none"> • Twenty practice lessons per book with both selected-response and constructed-response question formats 	<p>"For all content areas, practice allows students to achieve automaticity of basic skills—the fast, accurate, and effortless processing of content information—which frees up working memory for more complex aspects of problem solving" (NMAP, 2008, p. 30).</p>
<p>Formative Assessments Formative assessments occur during the learning cycle and give students feedback on their progress in learning new content.</p>	<p>Student Book:</p> <ul style="list-style-type: none"> • Student Self-Assessments help set learning goals. <p>Teacher Guide:</p> <ul style="list-style-type: none"> • Teacher Assessments 1–3 help teachers monitor students' progress. 	<p>"Teachers' regular use of formative assessment improves their students' learning, especially if teachers have additional guidance on using the assessment to design and to individualize instruction" (NMAP, 2008, xxiii).</p>
<p>Metacognition Students set learning goals and then self-evaluate for clarity and accuracy of their performance. They think about what skills or strategies need to be activated or improved to achieve their next milestone or final goal.</p>	<p>Student Book:</p> <ul style="list-style-type: none"> • Student Self-Assessments 1–5 	<p>"Merging cognitive and metacognitive strategies and direct instruction has shown promising results among students who have difficulty solving mathematics word problems . . . and can result in improved performance across content areas" (Bottge, 2001, p. 102).</p>
<p>Scaffolded Instruction Scaffolded instruction is the gradual withdrawal of support through modelled, guided and independent instruction and practice.</p>	<p>Student Book:</p> <ul style="list-style-type: none"> • Learn About: Modelled practice • Lesson Preview: Guided practice • Lessons 1–20: Independent 	<p>"Scaffolded instruction provides teachers with the support necessary to ensure that students solve mathematical problems with fewer errors as they become more independent" (Montague & Jitendra, 2006, p. 148).</p>
<p>Test-Taking Practice Selected-response and constructed-response test questions are often used on standardised tests.</p>	<p>Student Book:</p> <ul style="list-style-type: none"> • Twenty independent practice lessons with selected-response and constructed-response question formats 	<p>"Segments of mathematical instruction should target teaching students to generate explanations of math concepts in their own words and to justify the methods they use to solve problems" (Baker, Gersten & Dae-Sik, 2002, p. 53).</p>
<p>Think-Aloud Strategy This is a strategy that makes thinking visible or audible to students while solving a problem.</p>	<p>Student Book:</p> <ul style="list-style-type: none"> • Learn About section provides modelling. • Lesson Preview provides guided instruction with annotated answer choices. 	<p>"When a teacher "thinks aloud," particularly during problem solving, his or her verbalizations can be a powerful source of cognitive processing that can be internalized by students" (Martinez, 2006, p. 696).</p>
<p>Word Problem Focus Students solve word problems based in real-world contexts.</p>	<p>Series:</p> <ul style="list-style-type: none"> • Each book level presents 20 word problems along with 4 selected-response questions and 1 constructed-response question. 	<p>"The three skill areas in which teachers report their students have the poorest preparation are rational numbers, word problems, and study habits" (Hoffer, Venkataraman, Hedberg & Shagle, 2007).</p>

BUILDING NUMBER SENSE

		STUDENT BOOKS			TEACHER GUIDES		
Book	Year Level	Item #	Price (Pack of 5)	Qty	Item #	Price (each)	Qty
A	1.0-1.9	CA11212	\$43.95 (Pack of 5)		CA112129	\$15.35	
B	2.0-2.9	CA11213	\$43.95 (Pack of 5)		CA112139	\$15.35	
C	3.0-3.9	CA11214	\$43.95 (Pack of 5)		CA112149	\$15.35	
D	4.0-4.9	CA11215	\$43.95 (Pack of 5)		CA112159	\$15.35	
E	5.0-5.9	CA11216	\$43.95 (Pack of 5)		CA112169	\$15.35	
F	6.0-6.9	CA11217	\$43.95 (Pack of 5)		CA112179	\$15.35	
G	7.0-7.9	CA11218	\$43.95 (Pack of 5)		CA112189	\$15.35	
H	8.0-8.9	CA11219	\$43.95 (Pack of 5)		CA112199	\$15.35	

USING ESTIMATION

		STUDENT BOOKS			TEACHER GUIDES		
Book	Year Level	Item #	Price (Pack of 5)	Qty	Item #	Price (each)	Qty
A	1.0-1.9	CA11244	\$43.95 (Pack of 5)		CA112449	\$15.35	
B	2.0-2.9	CA11245	\$43.95 (Pack of 5)		CA112459	\$15.35	
C	3.0-3.9	CA11246	\$43.95 (Pack of 5)		CA112469	\$15.35	
D	4.0-4.9	CA11247	\$43.95 (Pack of 5)		CA112479	\$15.35	
E	5.0-5.9	CA11248	\$43.95 (Pack of 5)		CA112489	\$15.35	
F	6.0-6.9	CA11249	\$43.95 (Pack of 5)		CA112499	\$15.35	
G	7.0-7.9	CA11250	\$43.95 (Pack of 5)		CA112509	\$15.35	
H	8.0-8.9	CA11251	\$43.95 (Pack of 5)		CA112519	\$15.35	

USING ALGEBRA

		STUDENT BOOKS			TEACHER GUIDES		
Book	Year Level	Item #	Price (Pack of 5)	Qty	Item #	Price (each)	Qty
A	1.0-1.9	CA11236	\$43.95 (Pack of 5)		CA112369	\$15.35	
B	2.0-2.9	CA11237	\$43.95 (Pack of 5)		CA112379	\$15.35	
C	3.0-3.9	CA11238	\$43.95 (Pack of 5)		CA112389	\$15.35	
D	4.0-4.9	CA11239	\$43.95 (Pack of 5)		CA112399	\$15.35	
E	5.0-5.9	CA11240	\$43.95 (Pack of 5)		CA112409	\$15.35	
F	6.0-6.9	CA11241	\$43.95 (Pack of 5)		CA112419	\$15.35	
G	7.0-7.9	CA11242	\$43.95 (Pack of 5)		CA112429	\$15.35	
H	8.0-8.9	CA11243	\$43.95 (Pack of 5)		CA112439	\$15.35	

COMPLETE SETS

		STUDENT BOOKS			TEACHER GUIDES		
Book	Year Level	Item #	Price (Pack of 6)	Qty	Item #	Price (each)	Qty
A	1.0-1.9	CA11324	\$49.45 (Pack of 6)		CA113249	\$81.35	
B	2.0-2.9	CA11325	\$49.45 (Pack of 6)		CA113259	\$81.35	
C	3.0-3.9	CA11326	\$49.45 (Pack of 6)		CA113269	\$81.35	
D	4.0-4.9	CA11327	\$49.45 (Pack of 6)		CA113279	\$81.35	
E	5.0-5.9	CA11328	\$49.45 (Pack of 6)		CA113289	\$81.35	
F	6.0-6.9	CA11329	\$49.45 (Pack of 6)		CA113299	\$81.35	
G	7.0-7.9	CA11330	\$49.45 (Pack of 6)		CA113309	\$81.35	
H	8.0-8.9	CA11331	\$49.45 (Pack of 6)		CA113319	\$81.35	

USING GEOMETRY

		STUDENT BOOKS			TEACHER GUIDES		
Book	Year Level	Item #	Price (Pack of 5)	Qty	Item #	Price (each)	Qty
A	1.0-1.9	CA11252	\$43.95 (Pack of 5)		CA112529	\$15.35	
B	2.0-2.9	CA11253	\$43.95 (Pack of 5)		CA112539	\$15.35	
C	3.0-3.9	CA11254	\$43.95 (Pack of 5)		CA112549	\$15.35	
D	4.0-4.9	CA11255	\$43.95 (Pack of 5)		CA112559	\$15.35	
E	5.0-5.9	CA11256	\$43.95 (Pack of 5)		CA112569	\$15.35	
F	6.0-6.9	CA11257	\$43.95 (Pack of 5)		CA112579	\$15.35	
G	7.0-7.9	CA11258	\$43.95 (Pack of 5)		CA112589	\$15.35	
H	8.0-8.9	CA11259	\$43.95 (Pack of 5)		CA112599	\$15.35	

DETERMINING PROBABILITY AND AVERAGES

		STUDENT BOOKS			TEACHER GUIDES		
Book	Year Level	Item #	Price (Pack of 5)	Qty	Item #	Price (each)	Qty
A	1.0-1.9	CA11220	\$43.95 (Pack of 5)		CA112209	\$15.35	
B	2.0-2.9	CA11221	\$43.95 (Pack of 5)		CA112219	\$15.35	
C	3.0-3.9	CA11222	\$43.95 (Pack of 5)		CA112229	\$15.35	
D	4.0-4.9	CA11223	\$43.95 (Pack of 5)		CA112239	\$15.35	
E	5.0-5.9	CA11224	\$43.95 (Pack of 5)		CA112249	\$15.35	
F	6.0-6.9	CA11225	\$43.95 (Pack of 5)		CA112259	\$15.35	
G	7.0-7.9	CA11226	\$43.95 (Pack of 5)		CA112269	\$15.35	
H	8.0-8.9	CA11227	\$43.95 (Pack of 5)		CA112279	\$15.35	

INTERPRETING GRAPHS AND CHARTS

		STUDENT BOOKS			TEACHER GUIDES		
Book	Year Level	Item #	Price (Pack of 5)	Qty	Item #	Price (each)	Qty
A	1.0-1.9	CA11228	\$43.95 (Pack of 5)		CA112289	\$15.35	
B	2.0-2.9	CA11229	\$43.95 (Pack of 5)		CA112299	\$15.35	
C	3.0-3.9	CA11230	\$43.95 (Pack of 5)		CA112309	\$15.35	
D	4.0-4.9	CA11231	\$43.95 (Pack of 5)		CA112319	\$15.35	
E	5.0-5.9	CA11232	\$43.95 (Pack of 5)		CA112329	\$15.35	
F	6.0-6.9	CA11233	\$43.95 (Pack of 5)		CA112339	\$15.35	
G	7.0-7.9	CA11234	\$43.95 (Pack of 5)		CA112349	\$15.35	
H	8.0-8.9	CA11235	\$43.95 (Pack of 5)		CA112359	\$15.35	

CLASS SETS (30 Student Books, 6 Teacher Guides)

Book	Item #	Price	Qty
Class Set A	CA11314	\$355.74	
Class Set B	CA11315	\$355.74	
Class Set C	CA11316	\$355.74	
Class Set D	CA11317	\$355.74	
Class Set E	CA11318	\$355.74	
Class Set F	CA11319	\$355.74	
Class Set G	CA11320	\$355.74	
Class Set H	CA11321	\$355.74	

FOCUS COLLECTION

Year/Reading Level Collections include:

One pack of 5 Student Books and 1 Teacher Guide for each of the six strategy titles in your chosen level (A-H). Total of 30 Student Books and 6 Teacher Guides.

An Example: **Class Set A** – If ordering Class Set A you would receive

- **Building Number Sense** – 5 x Student A Books + 1 x Teacher A Guide
- **Using Estimation** – 5 x Student A Books + 1 x Teacher A Guide
- **Using Algebra** – 5 x Student A Books + 1 x Teacher A Guide
- **Using Geometry** – 5 x Student A Books + 1 x Teacher A Guide
- **Determining Probability and Averages** – 5 x Student A Books + 1 x Teacher A Guide
- **Interpreting Graphs and Charts** – 5 x Student A Books + 1 x Teacher A Guide

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