

## Dimension Math<sup>®</sup>PK-5

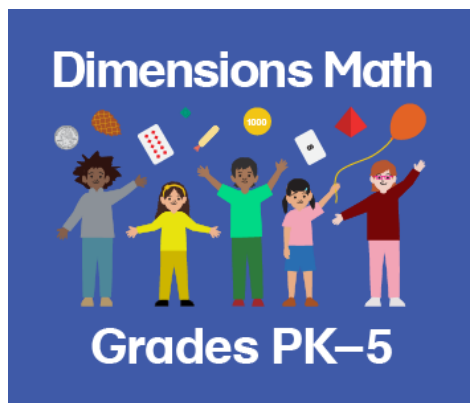
Dimensions Math PK-5 is our latest Singapore math curriculum. The series features vibrant imagery and the content that defines Singapore math, including the CPA (Concrete, Pictorial, Abstract) progression, number bonds, bar models, and mental math. We've refined aspects of existing Singapore math programs to be more educator-friendly while preserving the fundamentals of this unique approach. Written by a team of teachers and trainers with more than 100 years of combined classroom experience, it is a rigorous and engaging curriculum for classrooms and homeschool.

Dimensions Math PK-K cover all the numbers, operations, and problem-solving skills to prepare students for elementary math.

Dimensions Math 1-5 provides the comprehensive and deep elementary math foundation that will serve students throughout their math careers.

The Dimensions Math resource site includes videos, Blackline Masters, letters home, and more.

### Take a Look Inside



### Components

Textbook lessons build on prior knowledge and develop concepts in an accessible way. There are two textbooks (A and B) for each grade corresponding to the two halves of the school year.

Workbooks offer independent practice while maintaining the careful progression of exercise variation. There are two workbooks (A and B) for each grade corresponding to the two halves of the school year.

Teacher's guides are a comprehensive resource that help teachers understand the purpose of each lesson within the framework of the curriculum. They include detailed teaching notes and activities to achieve lesson objectives.

Test books help teachers systematically evaluate student progress. Tests align with the content of textbooks. Grades 1-5 have differentiated assessments: Test A focuses on key concepts and fundamental problem-solving skills, while Test B focuses on the application of analytical skills and heuristics.

Ebooks are available for schools (not for homeschool at this time). Textbooks, digital annotation workbooks, and wrap-around teacher's guides are all on the platform. Teachers can plan, prep, assign, and review lessons online. Students access textbooks and complete workbook assignments through their school's LMS portal.

## **Lesson Flow**

Throughout the series, five characters offer suggestions on how to think about problems, remind students of strategies they've learned, and point out important information to encourage students to come up with their own solutions.

Lessons begin with a problem for students to solve, setting the stage for discussion. Students who need additional support can spend more time working with manipulatives or using other strategies as outlined in the Teacher's Guide, while teachers can listen for common misunderstandings and encourage students to solve problems in various ways until they internalize concepts.

Once students have mastered a concept with the use of concrete and pictorial aids, they are ready to take on more abstract mathematical problem sets. They reach fluency by collecting various strategies along the way.

Finally, students work through word problems that give them a sense of real-world application of math. Students use the strategies they learned in earlier phases to both understand and solve these problems.

Nearly all lessons have a corresponding workbook exercise, which extends independent practice of mathematical concepts. A thoughtful progression pattern followed throughout the series covers the fundamental concepts, offers practice exercises with pictorial representations, and challenges students with abstract exercises.

## **How does it compare to Primary Mathematics?**

Dimensions Math PK-5 features all of the same fundamental Singapore math methods as Primary Mathematics. It emphasizes the CPA (Concrete, Pictorial, Abstract) approach, bar modeling, and mastery of mental math to gain number sense, computational fluency, and logical thinking. Like Primary Mathematics, Dimensions Math has minimal vocabulary and textual information. Instead, concepts are conveyed through images and careful sequencing.

Unlike Primary Mathematics, the Dimensions Math program is a cohesive PK-5 series (Primary Mathematics is 1-6). It includes more teacher-friendly materials, including guidance on hands-on components. The Dimensions Math teacher's guides are in full color and include reduced-size copies of textbook and workbook pages for easy reference to every lesson. The guides give more ideas for differentiation and include math literature suggestions.

## Standards Alignment

Dimensions Math PK-5 covers the Common Core Standards in its own progression.

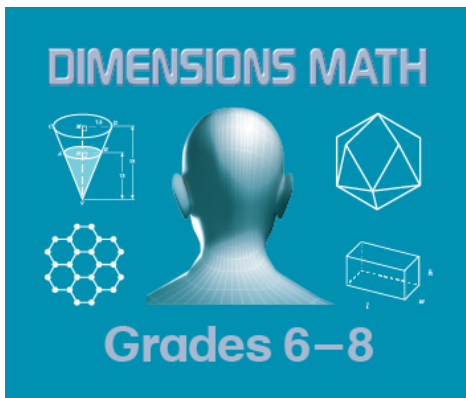
## Scope and Sequence

## Placement Tests

## Dimension Math 6-8

Dimensions Math 6-8 brings the Singapore Math Approach into middle school, emphasizing problem solving and empowering students to think mathematically. Thoughtful sequencing helps students build a complex understanding and apply math concepts to situations outside the classroom. This rigorous series integrates pre-algebra, algebra, geometry, and some trigonometry and advanced math topics.

## Take a Look Inside



## Components

Textbooks introduce concepts using different approaches to facilitate understanding and stimulate interest to further explore math topics.

Workbooks offer more opportunities to practice concepts covered in the textbooks. These exercises help students polish their analytical skills and develop a stronger foundation.

Teacher's Guides (Grade 6) provide teaching suggestions and important information for educators to help students achieve math mastery. Teaching Notes and Solutions (Grades 7-8) contain detailed notes and fully worked solutions for all questions and problems in textbooks. Workbook Solutions provide detailed worked solutions to all problems in workbooks.

## Lesson Flow

Lessons begin with a class activity to encourage discovery. Worked examples of new concepts are followed by similar questions for students to solidify their understanding.

Exercises include:

- **Basic Practice:** Simple questions that drill comprehension of concepts
- **Further Practice:** More challenging questions that involve direct application
- **Challenging Practice:** Questions that require synthesis
- **Maths@Work:** Questions that apply mathematical concepts to real world situations
- **Brainworks and Enrichment:** Questions involving higher order thinking or an open-ended approach to problems.

Each chapter is followed by a review exercise. The Extend Your Learning Curve activity encourages students to consider math outside the classroom with questions requiring sentence or paragraph reflections on their learning experiences.

The right margins contain important information, ideas, and definitions. These helps students recall content covered earlier as it relates to current material, and discuss interesting puzzles or facts that are related to math.

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## **Scope and Sequence**

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