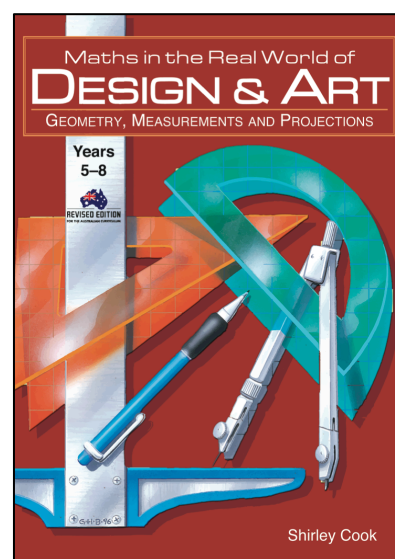


Maths in the Real World of Design & Art: Geometry, Measurements and Projections

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Focus Area: Activities and Exercises, Classroom Practice and Direct Instruction, Curriculum
Key Learning Area: Mathematics, The Arts



Summary:

The *Maths in the Real World* series was designed to help middle years to secondary school students link maths with real-life situations. Instead of producing students who can perform maths functions but cannot use them in everyday circumstances, this series is aimed at creating students who can employ maths operations to enhance their daily experiences.

Maths in the Real World of Design and Art shows students how geometry, measurements and projections work together to create the unique patterns and designs that surround us. Activities in this book cover angles and triangles, polygons and circles, patterns, symmetry, shapes and length, perimeter, area and three-dimensional shapes. Students learn how these geometric principles can be used together to create buildings, clothing, products and artwork. As a culminating project, students will incorporate geometric concepts and measuring skills to create a model Geo-Lab, a special maths laboratory used to further the study of mathematics. While the students work in teams to create the model, they learn to adapt their knowledge of mathematical concepts to a real-life problem and find the solution. This activity provides students with a sense of accomplishment and a greater understanding of how maths is used in the real world.

This revised Australian edition includes a comprehensive table of related Australian Curriculum: Mathematics content descriptions for Years 5–8, helping teachers to plan curriculum-aligned lessons incorporating lessons from this book.

By teaching students how to use numbers constructively, we can open the door to a whole new world for them. This book demonstrates to students that geometry, measurements and projections are integral to design and art, and it shows how they can use maths to better understand their environment.

Supporting Resources:

- *Maths in the Real World of Architecture: Dimensions, Quantities, Shapes and Patterns* (1114)
- *Maths in the Real World of Business & Living: Probability, Statistics and Graphing* (1111)
- *Getting from Arithmetic to Algebra: Balanced Assessments for Transition* (TCP4242)