

# Introduction

Let's Measure Up! - Book II, covers the measurement topics of: Volume, Mass and Area. The first part of the series, Book I, looks at Length, Time and Perimeter. The activities are designed as extension/independent tasks or can be used as a base for teachers to add further activities.

Let's Measure Up! can be used in two ways:

- teachers use the activities for the whole class or small groups. Where needed sheets can be photocopied for all students;
- pages can be used as activity/learning centers. Teachers choose a topic and copy the sheets. Copied activities can be laminated for future use. Students visit the learning center, select an activity and complete it. They then show the teacher the activity card and their results.

All activities have been used in a variety of classrooms and have been successful.

The activities require only simple Math materials such as blocks, rulers, centimeter cubes etc. that can be found in most classrooms.

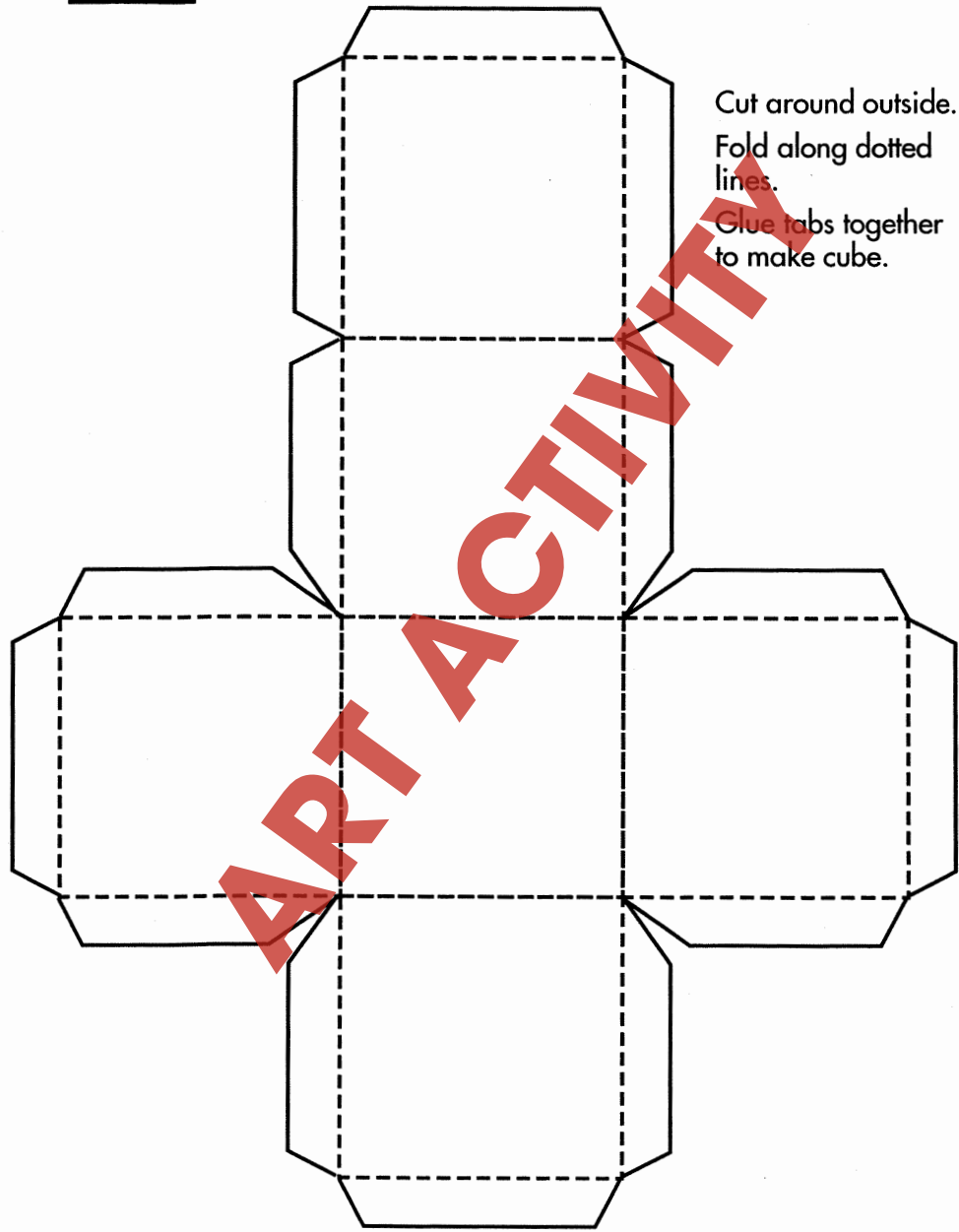
I hope that you find this book a practical and useful addition to your teaching program.

Rob Nelson

**Teachers** - please note that inaccurate photocopying could change the dimensions of some shapes in these resources.



# Cube Net



Cut around outside.  
Fold along dotted lines.  
Glue tabs together to make cube.



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### Make a Liter

Find three containers that you estimate in total will hold one liter of water.

Test your estimate.

Change one or more containers until the three containers hold one liter

Record your information in pictures in your Math book.

Record your information in an equation.



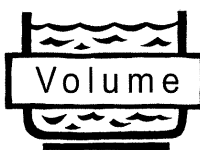
## 9

### Bottle It

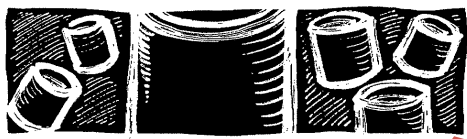
Choose 5 different liquid containers.

Estimate then measure their volume with water.

Graph the results.



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### How Many?

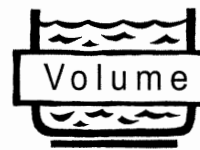
Choose one large container and 5 different smaller containers.

Estimate and then measure how many of each of the smaller containers it will take to fill the large container.

Keep a tally.

Make a bar graph and a picto-graph from the tally. Record in your Math book.

Container	Estimate	Tally	Total
A			
B			
C			
D			
E			



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### Who Holds What?



You have a picture of some containers.

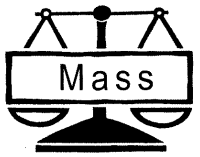
Order the containers from smallest to largest.

Write the names of the containers in order in your Math book.

What items in your house are measured in litres and millilitres?

Make a list of at least 6 items for each on a chart like this.

Milliliters	Liters



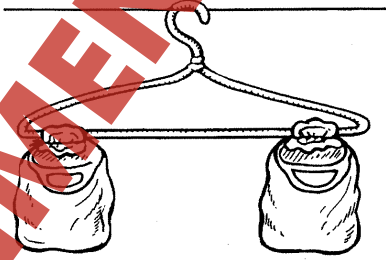
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## Hanging Around

You will need a wire coathanger, two bags and some pencils.

Hang the coathanger, with the bags attached, over a piece of string.



How many pencils balance:

- one cup?
- one orange?
- one wooden block?

Next, find something to balance these objects.

- one eraser
- one calculator.

Record the findings in your Math book.



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## Find Out

Guess the weight of these items and then weigh them with a balance.

Don't forget to write them in grams (g) or kilograms (kg).

Item	Estimate	Actual Weight
• Your left shoe		
• Folder		
• A book		
• A piece of chalk		
• Glue bottle		
• Box of chalk		
• Rock		
• Exercise book		
• Tennis ball		

Record the results in your Math book.



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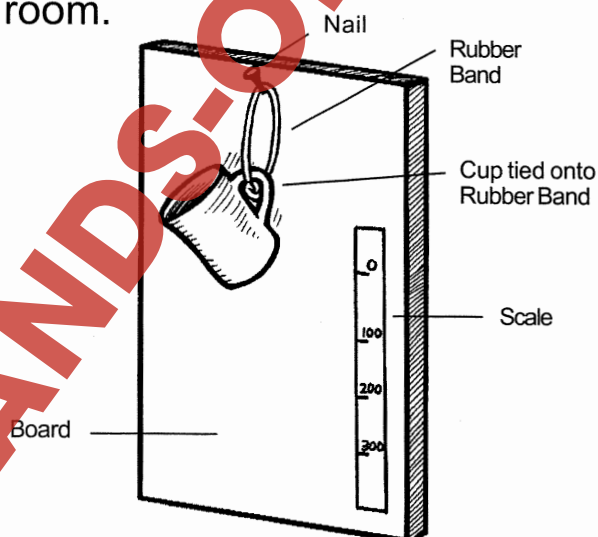
## My Cup Runneth Over

For this activity you will need a cup with a handle, a strong rubber band, a wooden board, a nail, weights and cardboard.

Construct a spring balance (see diagram).

Use the weights to make a scale on the cardboard.

Use your spring balance to find the mass of 10 objects that you have found around the room.



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## Veggie Garden

You have to draw a plan of a vegetable garden. Trace over the 200cm<sup>2</sup> rectangle below. Then find and colour areas for each of the vegetables as listed below:

- potatoes – 70 cm
- peas – 40 cm
- onions – 10 cm
- carrots – 50 cm
- beans – 30 cm

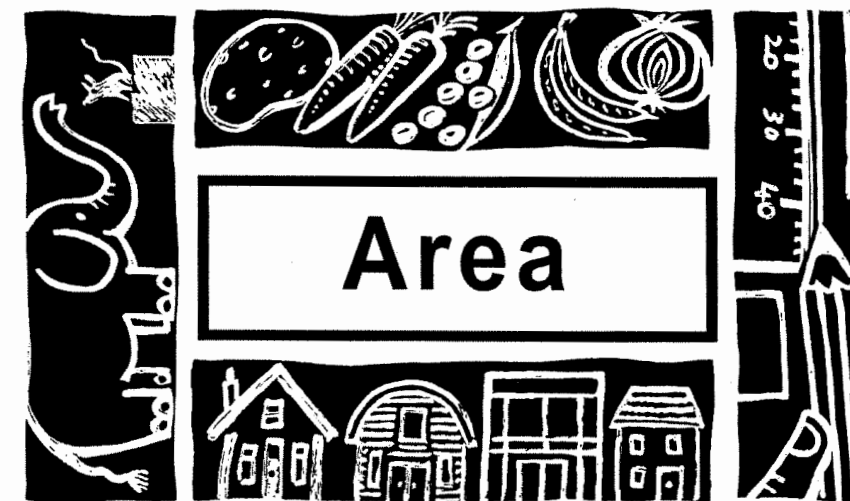
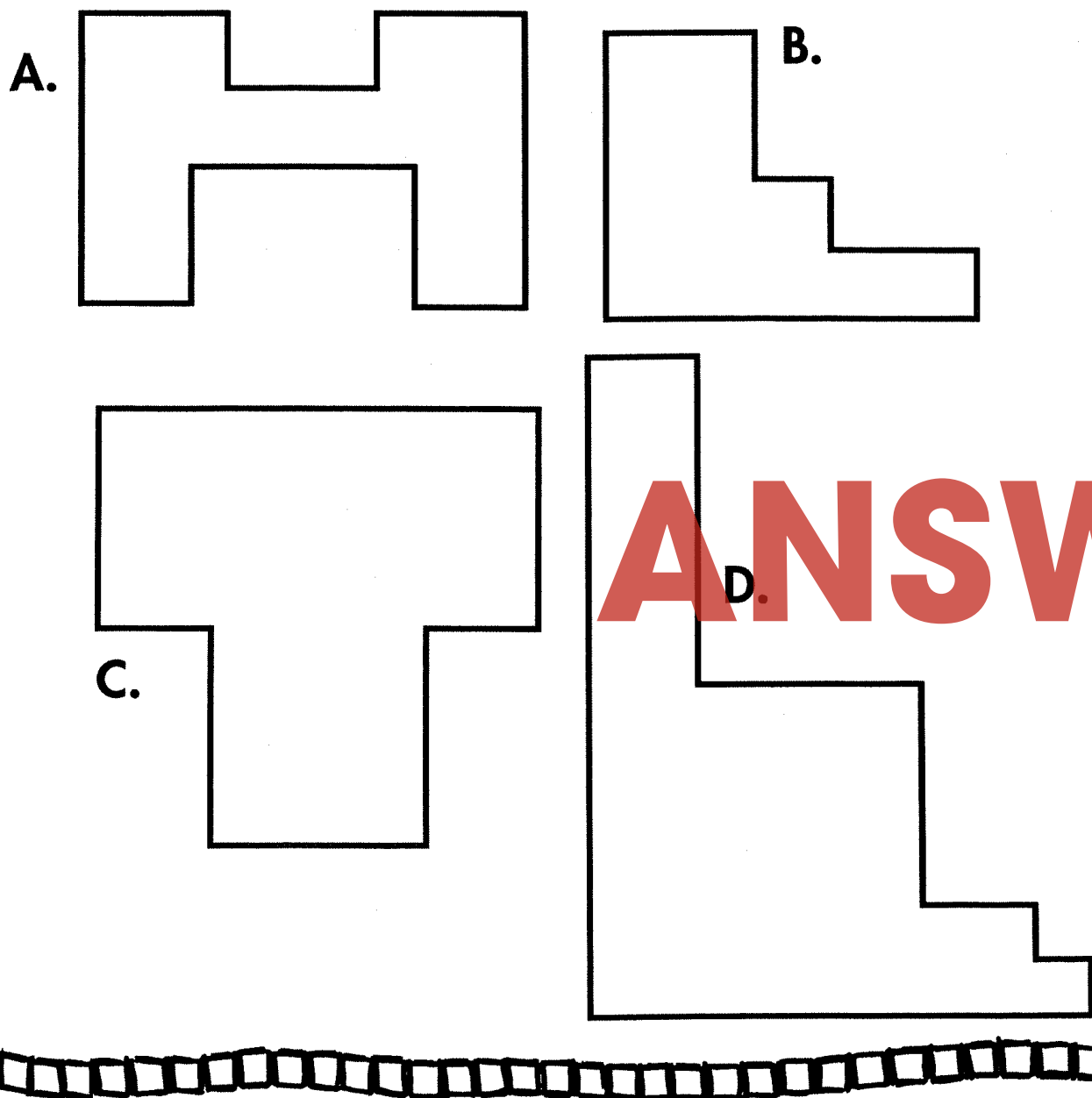




## Odd Shapes

Use cubes to find the area of each of these shapes.

Record the answers in your Math book.



## Area

### ACTIVITY

- That's Handy!
- Shape Up
- Twelve
- Table It
- On the Tiles
- Shapes
- Leftovers
- Up
- 3 Objects
- Vegie Garden
- Rule an Area
- Lend a Hand!

### ACTIVITY

- A Square Meter
- Pattern It
- Odd Shapes
- Our House
- Put it Together
- 5 Shapes
- Arrange by Area
- Rogue's Gallery
- Geometric Areas
- How Big?
- 100cm

**ANSWER KEY**

### Answers for Area Questions

Answer for 1cm cubes A-45. B-100. C-143. D-72.

Answer for 1cm cubes A-36. B-35. C-36. D-42.

A-16. B-12. C-27. D-35.

Laundry (6cm); Study (10cm); Bathroom (10.5cm); Kitchen (13.5cm); Family (22.5cm); Bedroom 2 (22.5cm); Main Bedroom (24cm); Lounge (54cm).

30 cubes.