

INTRODUCTION

Welcome to **Understanding Fractions Book 1**. This book has been designed for Year 1 students, although it may also be helpful in reinforcing basic fractional concepts for children who are experiencing some difficulties.

The activities in this book allow students to explore and play with fractional relationships and to come to their own understanding. Students are encouraged to analyse shapes, relationships and numbers. They are also encouraged to develop their skills in communicating, reasoning and problem solving.

Book 1 depends primarily upon visual input for students. Most activities require the students to be involved in the manipulation of aids and materials. Teachers are encouraged to allow students to utilise any tools or materials that may assist them in developing their understanding of fractional concepts.

Your organisation of students may vary as you continue to use this resource. The tasks have been designed to be completed in small groups or pairs as the student exchange of ideas increases the power of learning as it uncovers a variety of problem solving strategies. You may, however, prefer that some tasks be completed individually. When this is the case, bring the students back together on completion of the task and share understandings and experiences. This will help you identify students who require further assistance and will reinforce the skills that have been taught. Other students will be ready to expand on the concepts they have understood.

Each activity in **Understanding Fractions Book 1**, focusses on at least one of the curriculum strands of **Space, Number, Measurement** and **Reasoning** strategies. The lessons have been designed to be exploratory and sequentially connected.

Assessment is multifaceted and this resource encourages a range of strategies for assessing students. Each lesson is a part of this process. You can gather valuable information by listening to student's explanations, observing their thinking and examining their writing and reflections. These assessment tools are some methods of exploring student progress and modifying instruction to suit the needs of your students.

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E D U C A T I O N

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LESSON
1

FOCUS: Work with same size and shape
MATERIALS: Pattern blocks, crayons

1. Find this pattern block. 

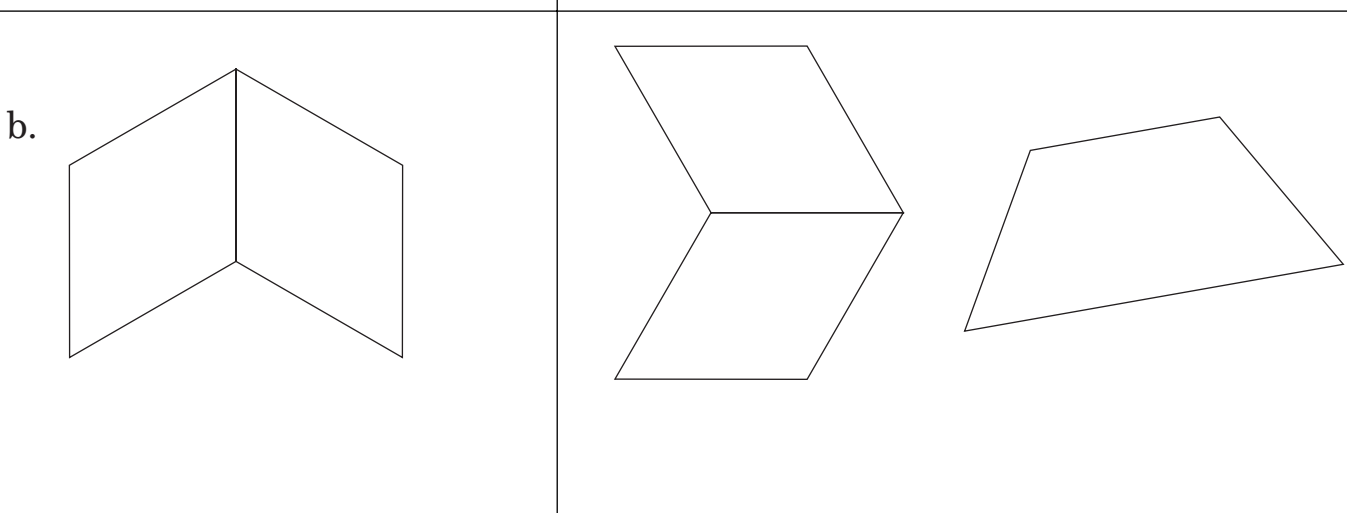
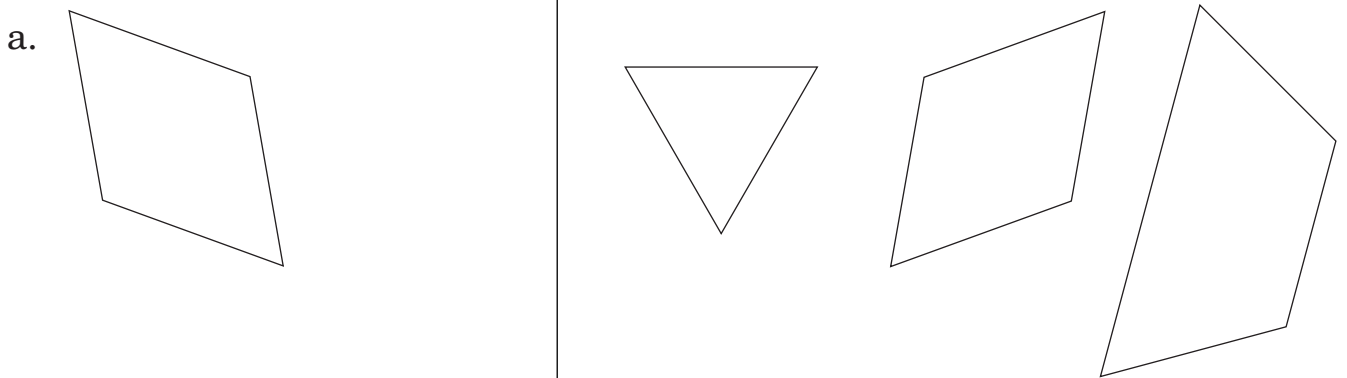
2. Put the pattern block on top of this figure.



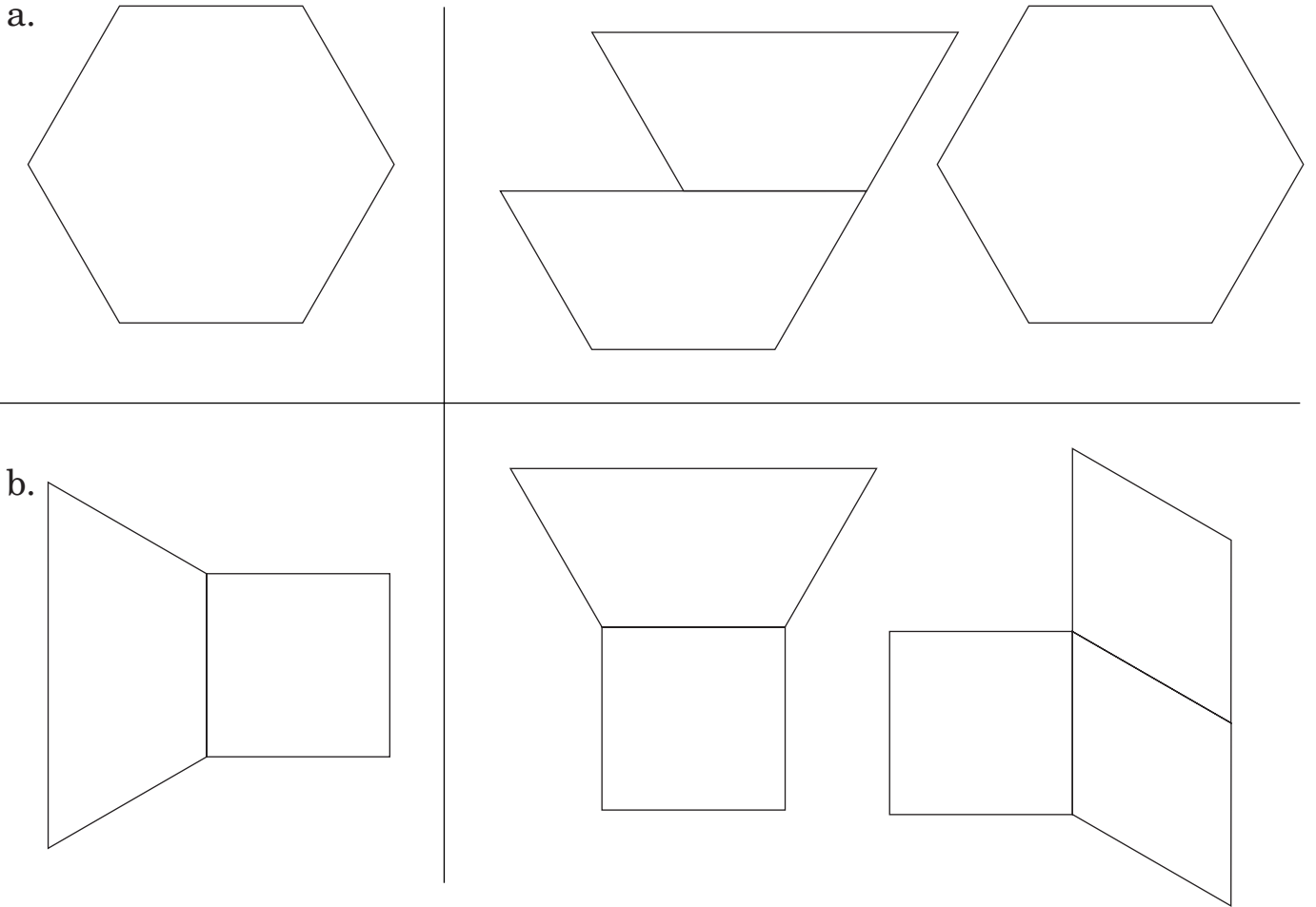
3. Are they the same size? _____

4. Are they the same shape? _____

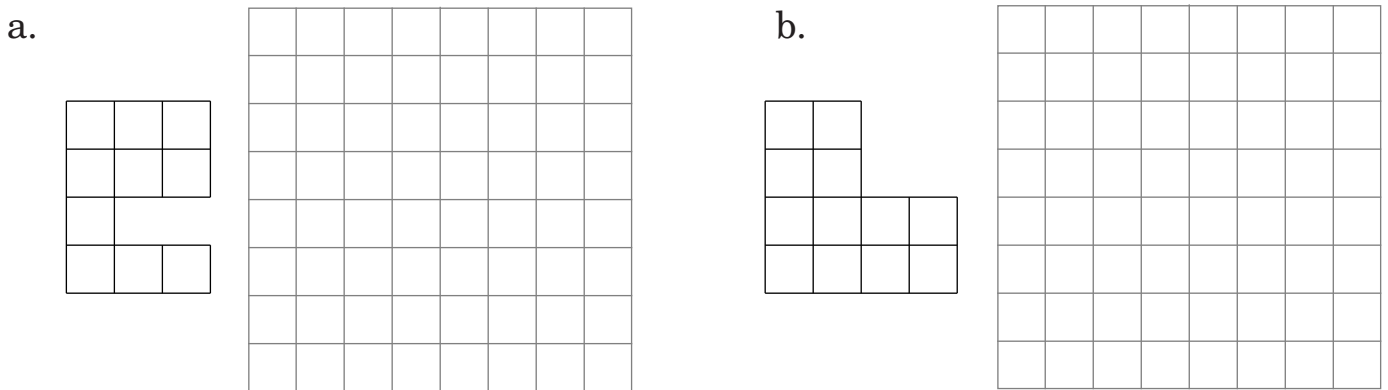
5. Which figure is the same size and shape? Colour it.



6. Which figure is the same size and shape? Colour it.



7. Draw a figure the same size and shape. Colour it.



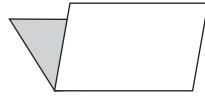
LESSON
2


FOCUS: Introduce symmetry

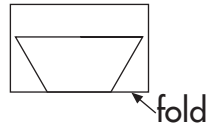
MATERIALS: Paper, scissors, pattern blocks

You may use pattern blocks.

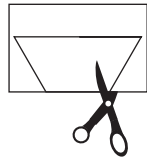
1. Fold the paper.



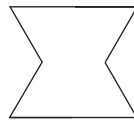
2. Trace the .



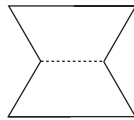
3. Cut it out.



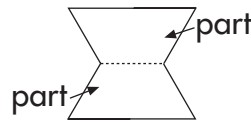
4. Open the .



5. Draw the fold line.



6. Look at the two parts.



7. Are the two parts the same size? _____

8. Are the two parts the same shape? _____

9. Do this with a different figure.