

Pre-School Readiness

Early Mathematical Development

Parent - Pupil School Starter Pack



PMP Publications

Other EAL titles available from PMP Publications

English as an Additional Language

PMP EAL Language Builders are written specifically for EAL pupils. The 15 reproducible titles provide a systematic and structured approach to the development and acquisition of the English language.

They are available at pre-school, beginner, intermediate and advanced levels. Each title contains worksheets, teachers' notes and guidance material. This really is THE definitive EAL resource for teacher and pupil.

PRE-SCHOOL READINESS

- * All About Me
- * Early Language Development
- * Early Mathematical Development

BEGINNER LEVEL

- * Book 1
- * Book 1 Reinforcement
- * Book 2
- * Book 2 Reinforcement
- * Book 3

INTERMEDIATE LEVEL

- * Book 1
- * Book 1 Reinforcement
- * Grammar Book 1
- * Grammar Book 2

ADVANCED LEVEL

- * Book 1
- * Book 2
- * Assessment Book 1

Pre-School Readiness

Early Mathematical Development

Parent-Pupil
School Starter Pack

PMP Publications

Copyright © 2010, 2023 PMP Publications

This book is copyright. eBooks and digital resources carry the same copyright restrictions as physical books.

No photocopying of this book is permitted without the express permission of the author and copyright holder. This eBook is not transferable, nor can it be re-sold or uploaded to web or intranet sites.

Whilst every effort has been made to provide totally accurate information, PMP Publications can take no responsibility for inaccuracies and omissions contained herein.

Further copies available from **PMP Publications** online at www.PMPpublications.co.uk.

Graphic design by Peter Whyte Associates, Belfast.

Contents

Introduction	7
How to use this book	7
Key Experience	
Sorting and Matching Objects	9
Activities	
Activity 1	10
Activity 2	11
Key Experience	
One-to-one Correspondence	12
Activities	
Activity 3	13
Key Experience	
Saying Number Rhymes	15
Activities	
Activity 4	16
Key Experience	
Counting to 10	18
Activities	
Activity 5	19
Activity 6	20
Key Experience	
Recognising Basic Shapes	21
Activities	
Activity 7	22
Key Experience	
Understanding and Using Positional Language	23
Activities	
Activity 8 & 9	24

Key Experience	
Using Mathematical Language Related to Size and Quantity	25
Activities	
Activity 10	26
Key Experience	
Compare Sizes of Objects	27
Activities	
Activity 11	28
Activity 12	29
Key Experience	
Making a Repeating Pattern	30
Activities	
Activity 13. What Comes Next?	31
Key Experience	
Sequencing Events	33
Activities	
Activity 14	34

Introduction

Early Mathematical Development is the third part of the PMP *Pre-School Language Readiness Pack* that ensures children progress confidently towards language readiness by engaging parents as partners with their child using this pack of 3 reproducible workbooks.

Enjoyable and fun activities encourage parents to develop their child's language experiences in an engaging and structured manner.

“The material is very carefully written and is perfectly pitched to be helpful to children and to parents as they begin their journey through primary school.”

—Harry Greer, Principal, Harmony Hill Primary School.

This activity book focuses on early language development. It covers the following key learning experiences:

- * Sorting/matching objects
- * One-to-one correspondence
- * Saying number rhymes
- * Counting to ten
- * Recognising basic shapes
- * Understanding and using positional language
- * Using mathematical language related to size and quantity
- * Making repeating patterns
- * Sequencing events



How to use this book



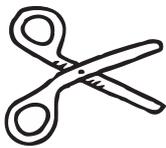
Follow the bear's paw prints throughout this book to help your child develop early mathematical skills and concepts. Parents and children should colour in the paw prints together as activities/key experiences are completed. In doing this together, it will allow your child to see the book as something special that you do just with them.

Do not worry if your child is not ready to complete all the activities. Let your child work at his/her own level and remember each child develops at their own pace.

Start with practical steps and guides before progressing to the Activity Sheets.



If your child is not ready to use a pencil to draw lines or circles, just let him/her point to the correct place on the page instead.



You will need to help your child by cutting out the pictures for him/her in some of the activity pages.

Look for the bear on each page to show you the key learning experience and ways to help your child develop understanding.

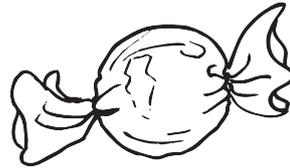
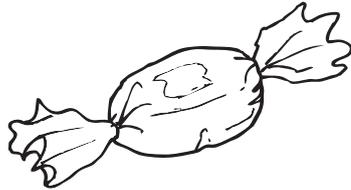


HOW CAN I HELP MY CHILD?

KEY EXPERIENCE: SORTING AND MATCHING OBJECTS



Let your child sort different coloured sweets into groups according to their colour, e.g. red, orange, yellow, green.



HOW CAN I HELP MY CHILD?

- Encourage your child to sort everyday objects eg knives, forks, spoons.



After you have been shopping let your child help you by sorting the contents out in the cupboard eg putting the tins together and the packets together. Help you child to complete **Activity 1**.

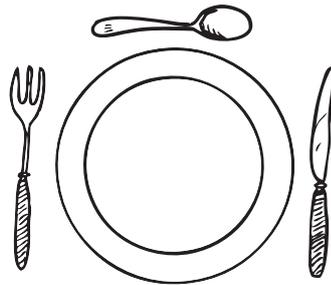


Gather together a variety of objects which you can match, e.g. pairs of socks, knives and forks etc. Talk about how the objects match. Help your child complete **Activity 2**.

KEY EXPERIENCE: ONE-TO-ONE CORRESPONDENCE



Let your child try and set the table. This will help them to develop skills of matching 1 knife, fork and spoon to each person. Let your child see if there are enough for each person.

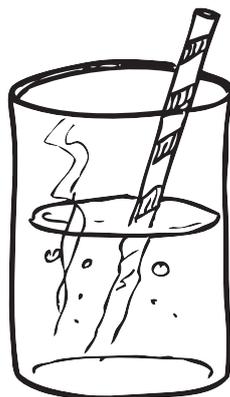


HOW CAN I HELP MY CHILD?

- Letting your child set the table, and match 1 plate and 1 cup for each person.

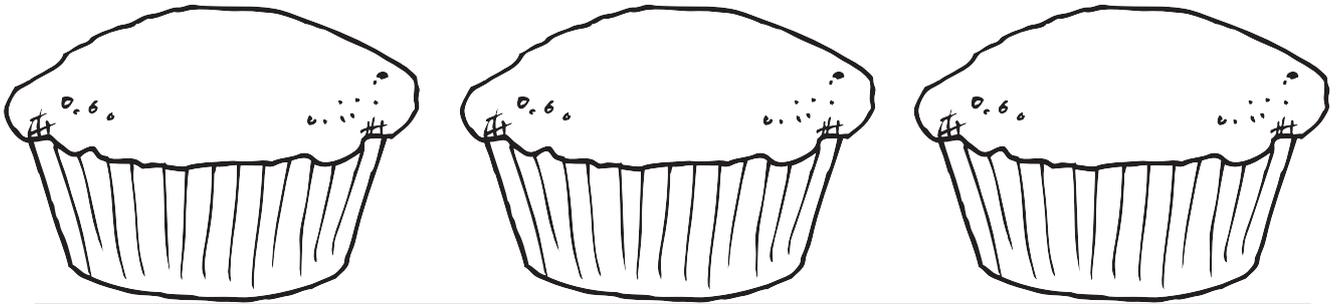


Provide your child with opportunities to match up 1 item to another. For example: To put 1 straw in each glass.

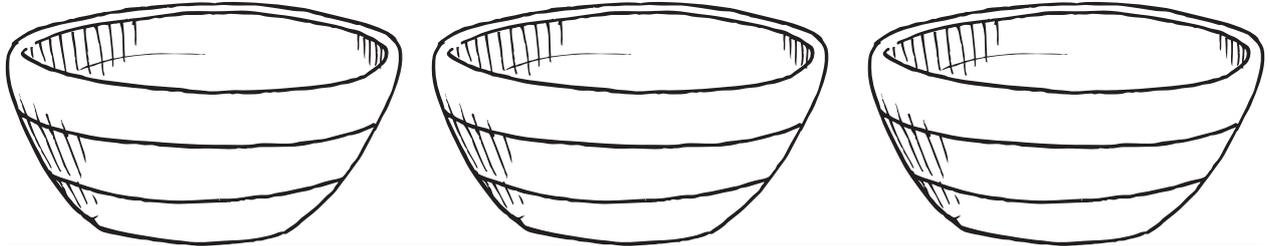


Complete **Activity 3** with your child.

ACTIVITY 3



Let your child match up and stick 1 cherry on top of each bun.



Match and stick a spoon in each bowl.



Match and stick an egg in each egg cup.

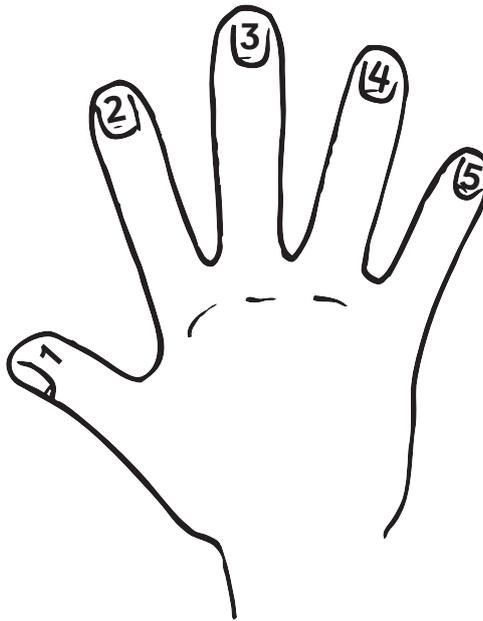
KEY EXPERIENCE: SAYING NUMBER RHYMES



Use the counting rhymes from **Activity 4** to help your child become familiar with number names and counting in sequence.



Use your fingers when singing the rhymes to help reinforce to your child the concept of 'How many'.



Read stories that involve counting and numbers with your child. Encourage your child to join in with the counting or rhymes in the story.

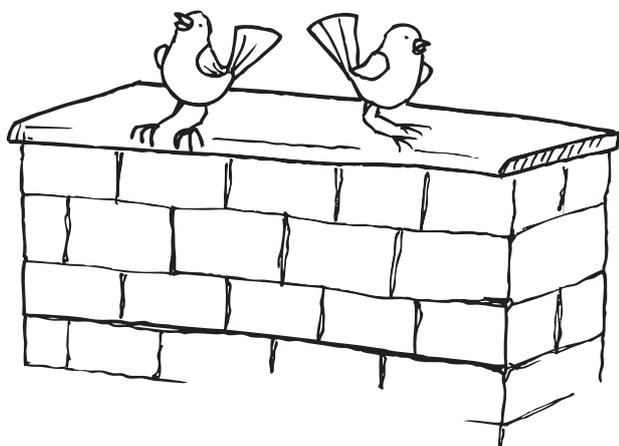
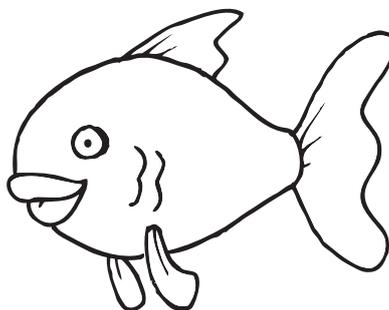


HOW CAN I HELP MY CHILD?

- Have fun saying and singing counting rhymes together.
- Read stories with your child that involve rhymes, counting and numbers.

ACTIVITY 4

One, two, three, four, five,
Once I caught a fish alive.
Six, seven, eight, nine, ten,
Then I let it go again.
Why did you let it go?
Because it bit my finger so.
Which finger did it bite?
This little finger on my right.

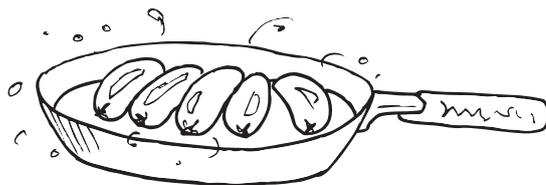


Two little dickie birds
Sitting on the wall,
One called Peter and
One called Paul.
Fly away Peter,
Fly away Paul,
Come back Peter.
Come back Paul.

5 fat sausages sizzling in the pan
All of a sudden 1 went bang.

4 fat sausages ...

(repeat until 1 Fat Sausage)



5 currant buns in a baker's shop,
Round and fat with sugar on the top.
Along came a boy with a penny one day,
Bought a currant bun and took it away.

4 currant buns ...

(repeat until none are left)

KEY EXPERIENCE: COUNTING TO 10



ROTE COUNTING

When playing with your child say the number names in order from 1-5 and then progress onto 1-10. Encourage your child to repeat them and say them to you.



TOUCH COUNTING

- Once your child can say the numbers in sequence encourage them to attempt to count out objects as they play.
- Start with asking your child to count out 2 sweets from a packet.
- Once your child can accurately count out 2 objects, you may encourage them to count out 3, 4 or 5 objects.
- If your child can count out 5 objects accurately, you may progress onto counting out up to 10 objects, for example: grapes.



When playing Board Games with your child, see if they can count and move the marker on the correct number of spaces.

Complete **Activities 5 and 6** with your child to reinforce counting to 10.



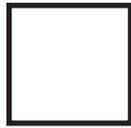
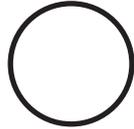
HOW CAN I HELP MY CHILD?

- Encourage your child to say number names in sequence from 1-10.
- Count the number of steps as you climb up or down.
- Encourage your child to count out objects as they play.

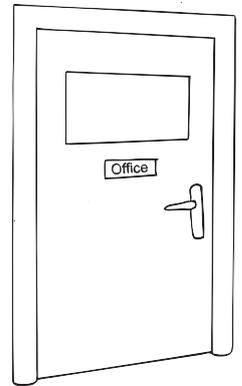
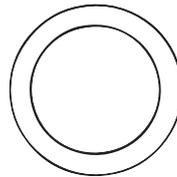
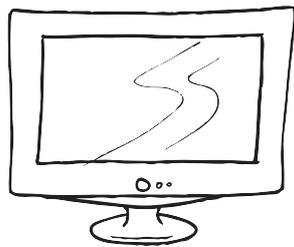
KEY EXPERIENCE: RECOGNISING BASIC SHAPES



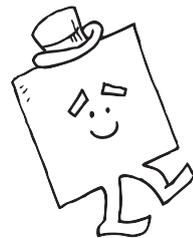
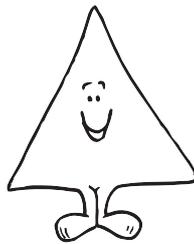
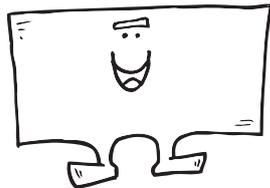
Look for different shapes when out with your child or playing. Begin to reinforce the names of the shapes.



When playing at home, see if your child can recognise the names of the shapes of everyday objects: door, TV, plates, etc.



Play I spy with your child. "I spy with my little eye, something on the table that's a circle."



Complete **Activity 7** to reinforce naming and recognising basic shapes.



HOW CAN I HELP MY CHILD?

- By reinforcing the names of basic shapes.
- Helping your child to identify basic shapes.

KEY EXPERIENCE: UNDERSTANDING AND USING POSITIONAL LANGUAGE

Positional Language –

refers to words such as: **in, out, up, down, in front, behind, beside, below, above and under.**



When playing with your child, encourage them to develop an understanding of positional language, by asking them to show you:

- What's behind the yellow block?
- Put the doll beside the teddy.
- Let the fireman climb up the ladder.

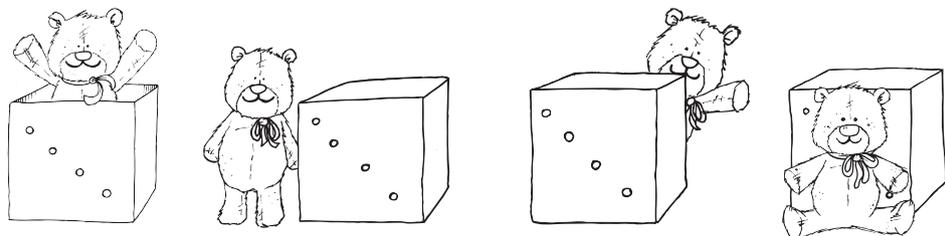


Once your child understands what these words mean, encourage them to use these words for him/herself by asking appropriate questions when playing or reading stories:

- e.g. Where is the dog sitting?
- e.g. Where is the boy hiding?



Play **Activities 8 and 9** with your child to reinforce the use and understanding of this language.

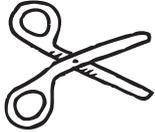


HOW CAN I HELP MY CHILD?

- By reinforcing positional words.
- By encouraging your child to use positional words.

ACTIVITIES 8 & 9

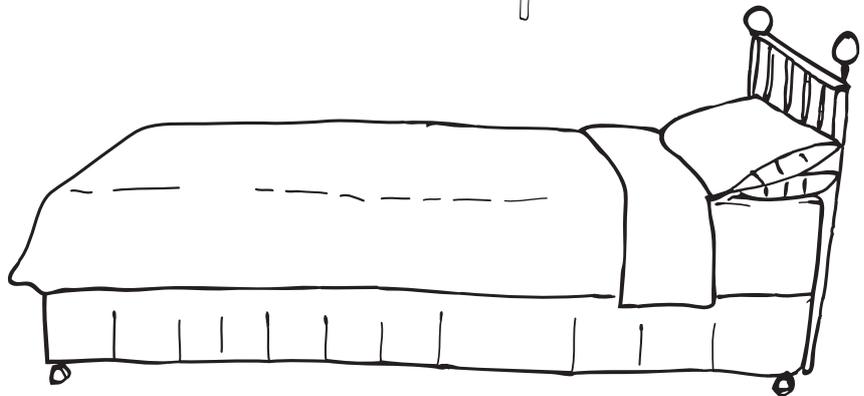
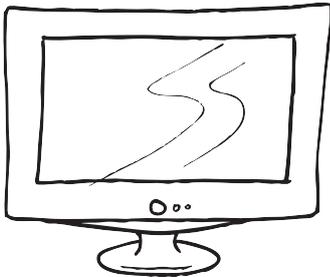
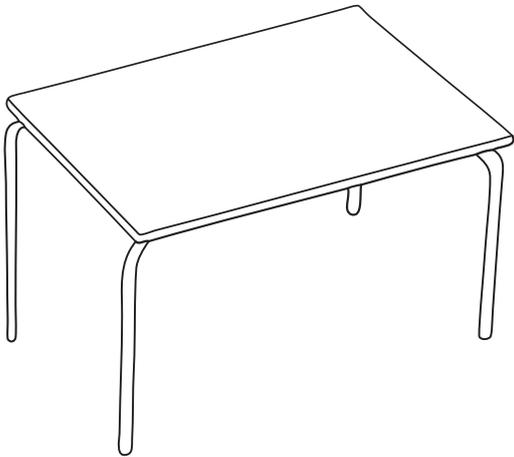
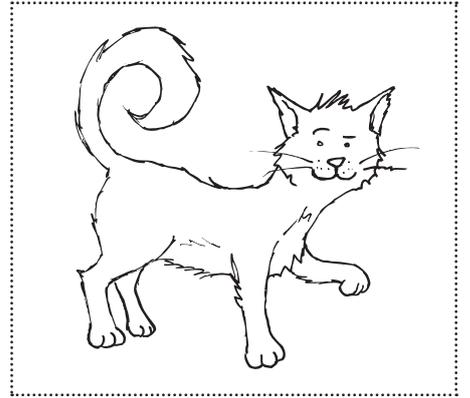
ACTIVITY 8: NAUGHTY CAT!



Cut out the picture of the cat.

Move the 'naughty cat' on top, in front, beside and under the furniture.

Let your child tell you where the cat is sitting, e.g. "Naughty cat, you're on top of the TV."



ACTIVITY 9: GAME – WHERE IS IT?

Play this game of Hide and Seek with your child.

- Hide a chocolate bar, and give your child questions and clues to help find it.
- Ask an "up" question, e.g. is it up on the shelf?
- Ask an "under" question, e.g. what is it under?
- Swap round. Get your child to hide it and ask you "Where is it?" questions.

KEY EXPERIENCE: USING MATHEMATICAL LANGUAGE RELATED TO SIZE AND QUANTITY



Look at the clothes your child wore as a baby. Show your child the small baby clothes and the bigger clothes they wear now.



When your child is drinking out of a cup, show your child the cup “full” of juice and when it is finished reinforce the word “empty”.



Let your child hold a tin of beans and then an empty plastic bottle. Talk about which one was heavy, and which was light.



Complete **Activity 10** by emphasising the language of size to your child. Then see if your child can use the correct words.



HOW CAN I HELP MY CHILD?

- By encouraging your child to use and understand these words:

Big Small Tall Short Heavy Light Full Empty Thick Thin

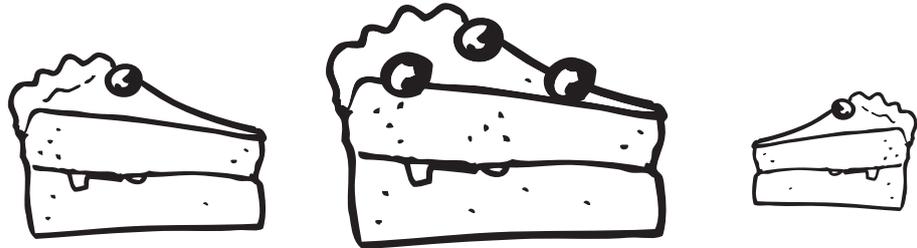
KEY EXPERIENCE: COMPARE SIZES OF OBJECTS



Look at 3 pencils each of different lengths with your child and talk about which one is longest and shortest.



Cut up a cake into slices of different sizes and talk about which slice is biggest and which is smallest.



Complete **Activities 11 and 12** with your child to reinforce understanding of mathematical language related to the comparison of size.



HOW CAN I HELP MY CHILD?

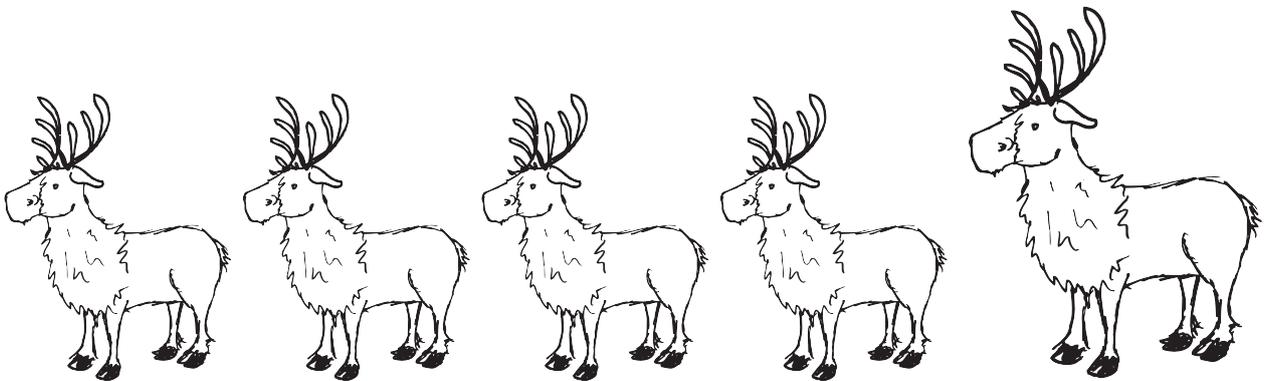
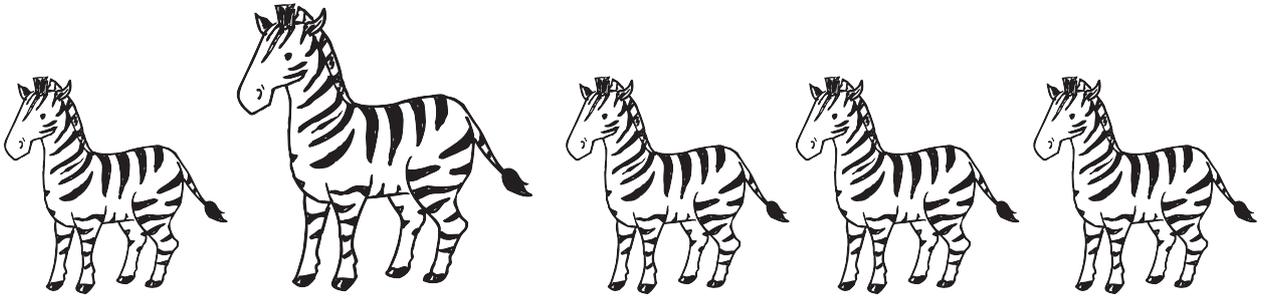
Compare sizes of objects and reinforce use and understanding of language:

- Biggest, smallest
- Shortest, tallest
- Heaviest, lightest

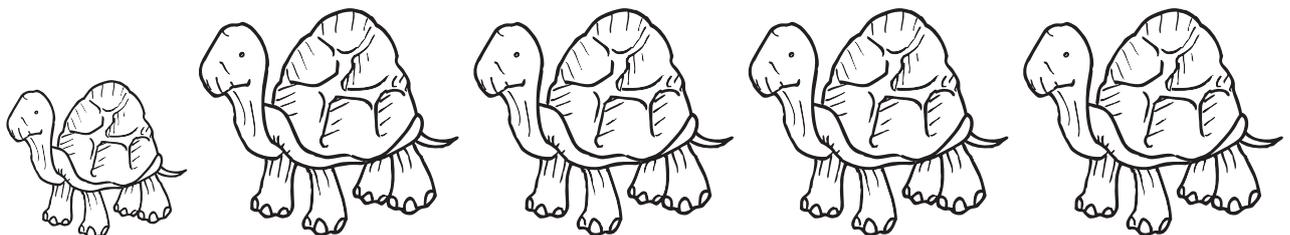
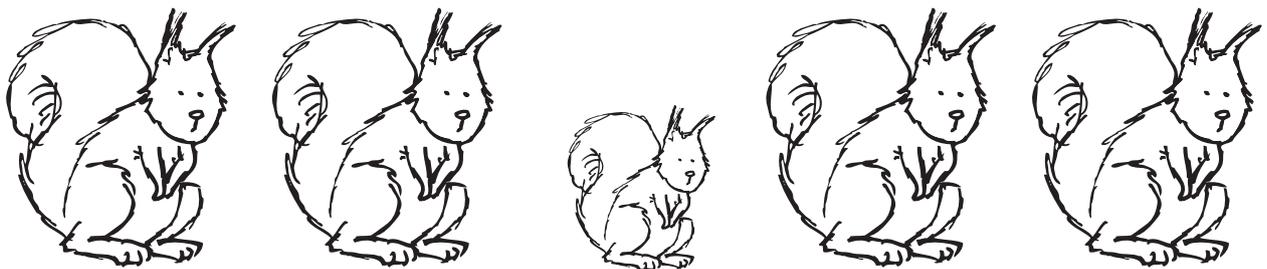
ACTIVITY 11



Point or draw a circle round the animal that's bigger.



Point or draw a circle round the animal that's smaller.



KEY EXPERIENCE: MAKING A REPEATING PATTERN



Using coloured beads which thread on a string or laying coloured blocks along a ruler. Make a pattern which repeats itself.



red bead yellow bead red bead yellow bead red bead yellow bead



Let your child try and copy your repeating pattern.



Once your child has grasped this, make another pattern.



blue bead green bead blue bead green bead blue bead green bead

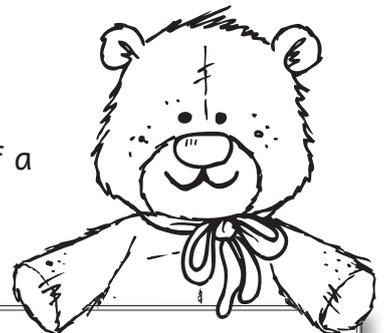
- Let your child continue the repeating pattern by finding the correct colour of bead.



Let your child make his/her own repeating pattern using 2 different colours.



Complete **Activity 13** with your child to encourage him/her to grasp the concept of a repeating pattern.



HOW CAN I HELP MY CHILD?

By encouraging your child to:

- Copy a repeating pattern
- Continue a repeating pattern
- Create a repeating pattern

KEY EXPERIENCE: SEQUENCING EVENTS



Begin to reinforce the concept of time to your child by talking about what they did **yesterday**, what they are doing **today** and what they are going to do **tomorrow**.



Help your child to sequence everyday routines by talking to them about what they do when they get up and before they go to bed.



Complete **Activity 14** and talk to your child about the changes in each picture:
What happened first, next ... then what happened.

- Go over the rhymes and sequence the pictures in the correct order.



HOW CAN I HELP MY CHILD?

- By talking about significant times during the day – Getting breakfast, nursery, dinner, bath and bed time, helping your child to put these into sequence.

This activity book is designed for parents to work alongside their pre-school child to help them develop early mathematical skills. The activities in the book have been written to ensure the whole learning process is fun and enjoyable and that children progress confidently towards school readiness.

The Activity Book:



Is a useful reference file providing an easy to follow outline of the early mathematical skills children should be developing.



Includes a series of fun activities to help you and your child enjoy learning together.



Is written to enable parents to become integral and informed partners in their child's early learning experiences.



Is written by an experienced nursery practitioner in a structured and highly visual format.



PMP Publications

You can contact us by email at contactus@pmppublications.co.uk

All our books are available online at www.pmppublications.co.uk