

Get your brains ready!



What shapes can you see?



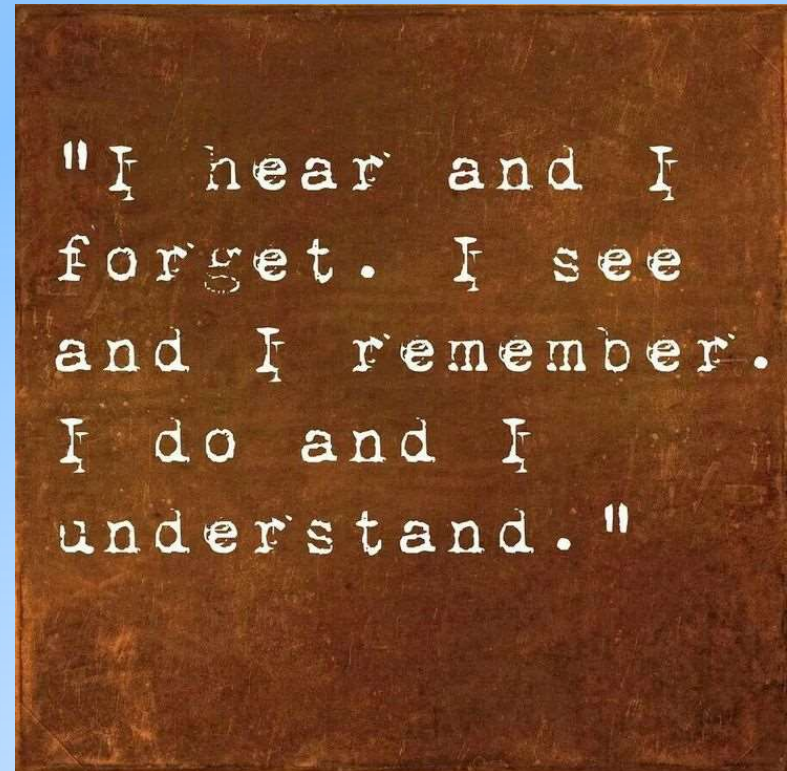
# Welcome to the Reception Maths Afternoon

## Aims

- To outline the key areas of the Maths Curriculum in EYFS.
- Look at the ways we teach Maths at school.
  - Understand what is meant by 'Mastery' in mathematics.
  - Provide ideas that can support Maths at home.

# How do we learn?

Carpet session linked to Maths  
Cross-curricular table top activities  
Lots of talking  
Thinking  
Self-discovery  
Problem solving  
Using songs  
Using stories  
Activities inside and out  
Asking questions  
Real-life learning  
Practical and engaging lessons  
Outdoor learning  
Practical problem solving with peers  
Mathematical opportunities available in all areas of provision



# Mastery Maths

- Whole school approach to teaching mathematics.

It aims to:

- Raise achievement for all pupils
- Deepen pupils' conceptual understanding of key mathematical concepts.
- Children will be taught to use objects and pictures to physically represent mathematical concepts. This helps them visualise abstract ideas, and as they become more proficient, they will gradually stop relying on physical props.

# The EYFS curriculum

There are 7 areas of learning, 1 of them being Mathematics which is split into 2 parts:

- Numbers (This includes calculations)
- Shapes, Space and Measures

# Early learning goal - Numbers

Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.

Children estimate a number of objects and check quantities by counting up to 20. They solve practical problems that involve combining groups of 2, 5 or 10, or sharing into equal groups.

# Understanding the value of numbers

When we say a child "knows her numbers" what we often mean is that she can recite the names of numbers in ascending order. This is quite useful to be able to do, but it means very little in itself.

Children need to understand the value of numbers and be able to subitize and understand the conservation of numbers.

One of the first things they have to learn is about conservation - that 3 is always 3 no matter how it is arranged or presented, whether it is the number 3, the letters for three, 3 bricks, 3 buttons on a coat or 3 Billy Goats Gruff.

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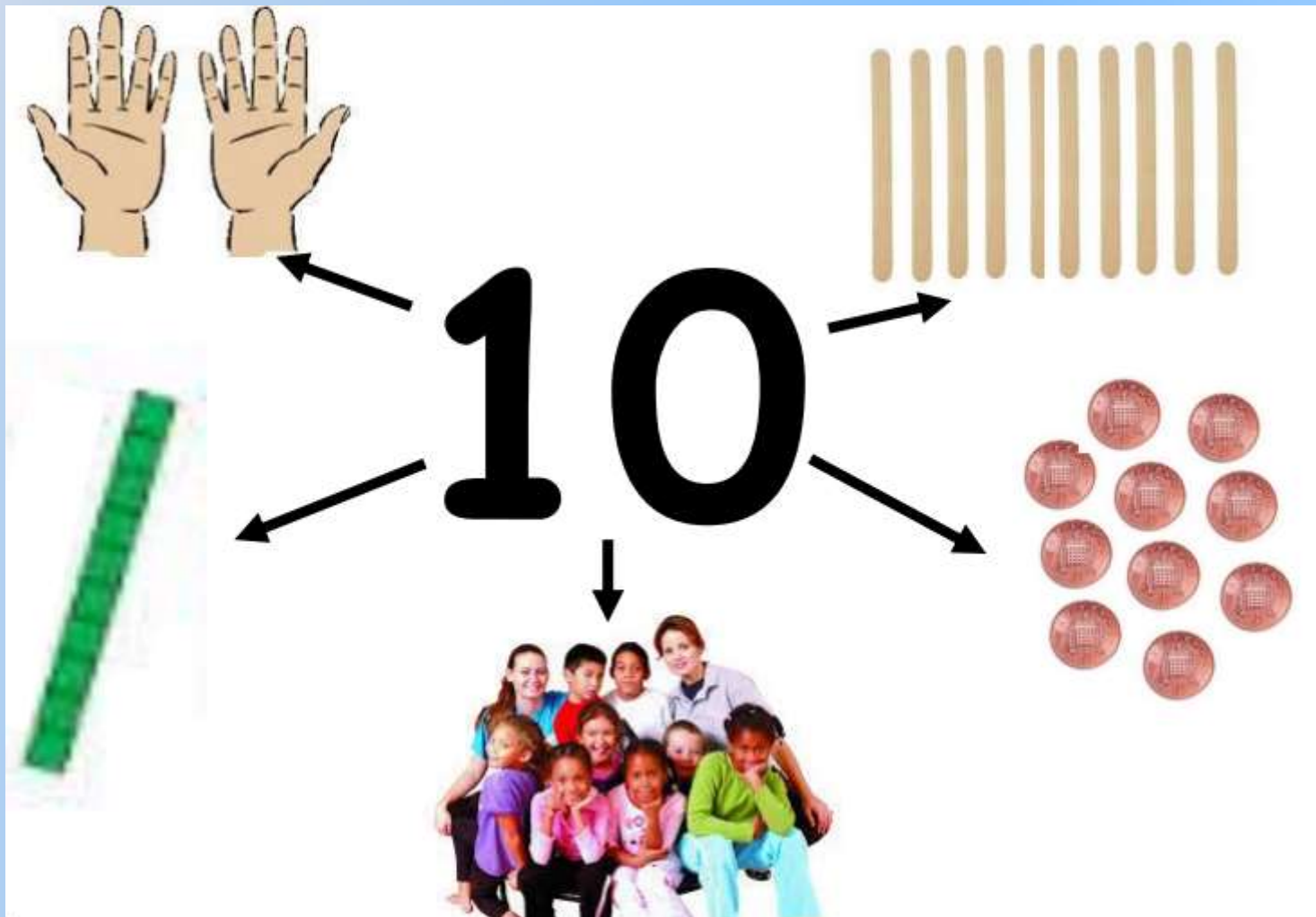
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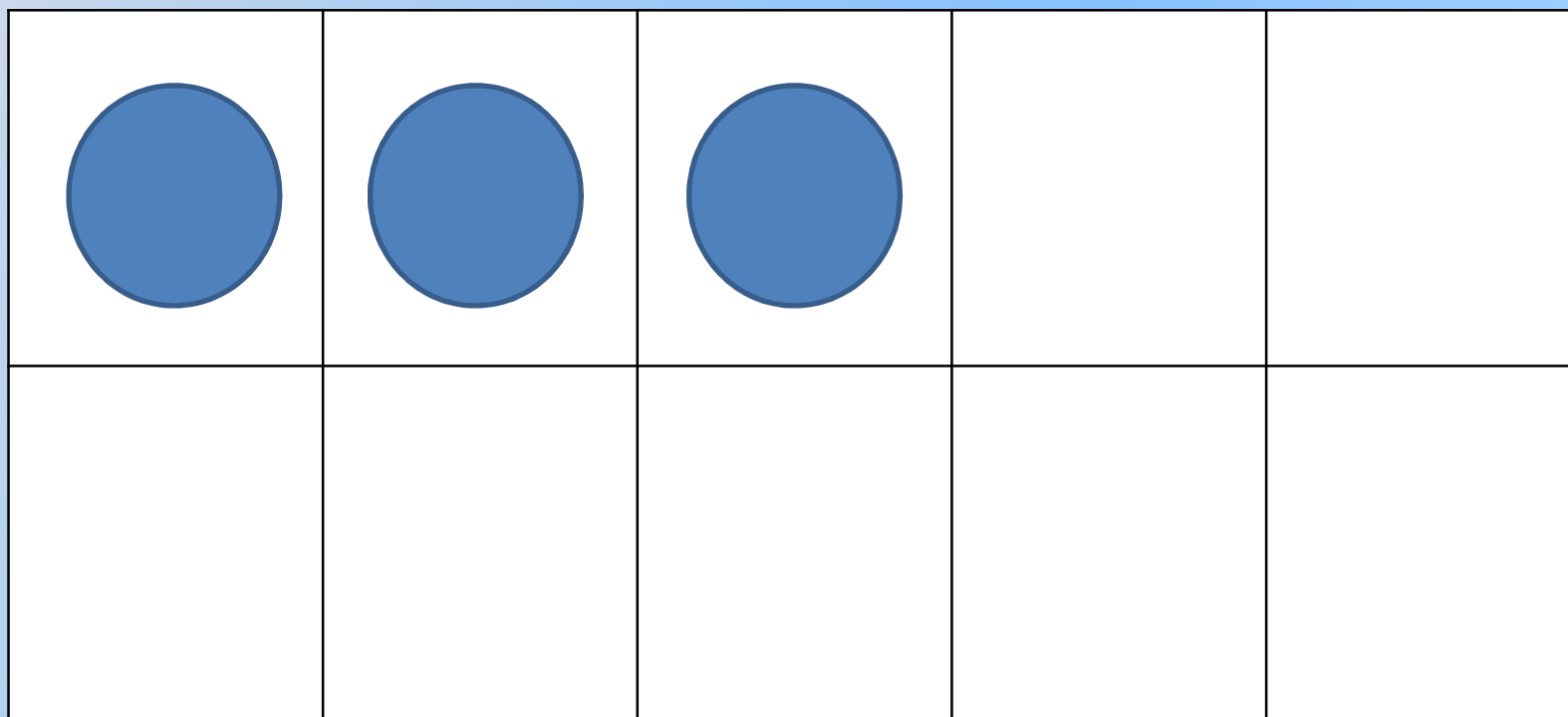
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# Understanding the value of numbers



# Tens Frame



# Bar Model

7

The diagram shows a large white rectangle with a black border. Inside the rectangle, the number '7' is written in the center. Below the '7', the rectangle is divided into two equal-width, empty rectangular sections by a horizontal line and a vertical line. This structure is used to represent a whole of 7 being split into two unknown parts.

# You can help at home by...

- Using number songs to familiarise your child with the numbers repeated in order. Singing songs that take away or add things e.g. 10 green bottles, 1 man went to mow, 5 current buns.
- Count for fun during a spare minute of the day - don't always start at zero or one. Can they start from a higher number?
- Count candles on a cake- "How many do we need if you are 5?"
- Exploit all counting opportunities - count stairs, count buttons, count lampposts on a walk, count 'red' cars on a journey etc.
- Commercial games such as snakes and ladders - these help with the counting on strategy.

## You can help at home by...

- Throwing beanbags/balls at numbered targets and adding up scores - who scored the most? The least?
- Practise counting in 2s, 5s and 10s.
- Look for numbers whilst walking or on a journey.
- Use magnetic numbers. Put them in order. Miss one out of a sequence - do they know which one is missing?

# Counting for a purpose

- Begin with small sets of 2 or 3 and ask your child how many there are.
- Get your child to touch each object as they count. Move and recount - conservation of number.
- Increase the number of objects to count as your child becomes confident - when he/she is ready, they will begin to count without touching each object.

# Recognising and writing numerals

- Match number cards to it's corresponding amount.
- Match numerals to number words ( 1 to one, 2 to two )
- Play number Bingo.
- Create simple dot-to dot pictures for your child.
- Look for numerals in the outdoor environment e.g. out shopping, driving
- Put sugar/ flour in a tray to practise forming numerals correctly.
- Dice games, cards games

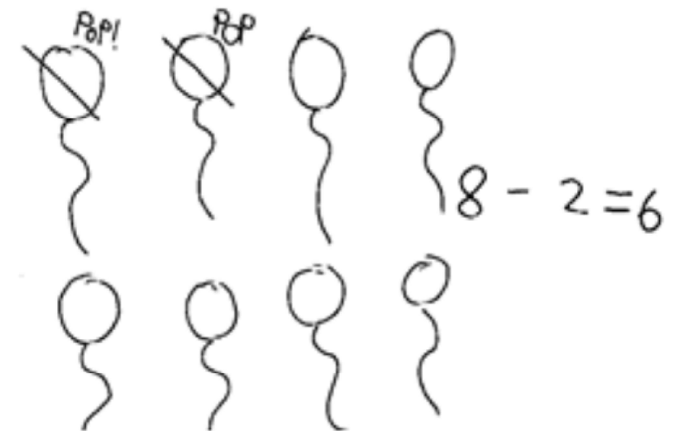
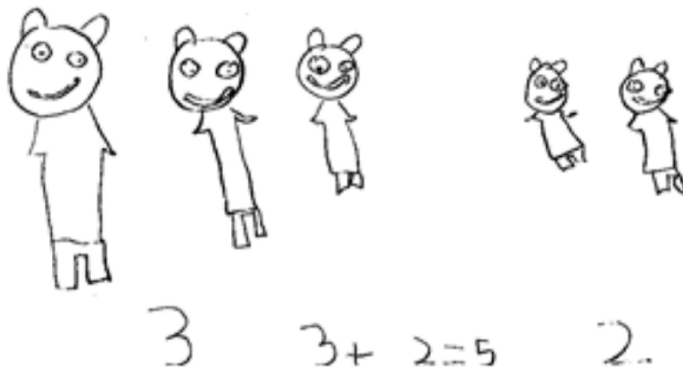


# Adding and Subtracting- How can you help at home?

- Practical contexts daily e.g.  
" Pass your two forks and add them to my 3 - let's see if we have enough for teatime."
- Use word problems to add and subtract - make them up yourself. e.g. " I have 10 apples and I am going to eat 1, How many will be left?"

*There were 8 balloons. Two popped. How many are left?*

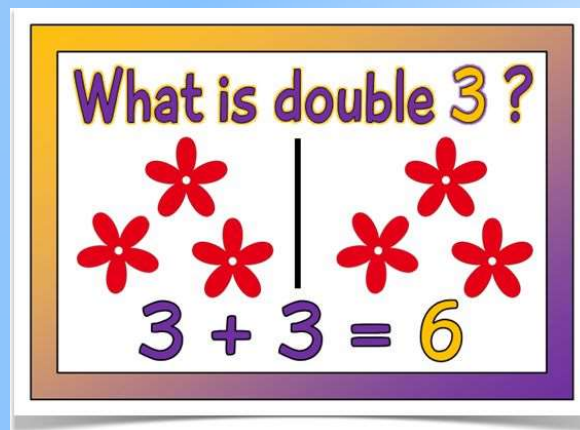
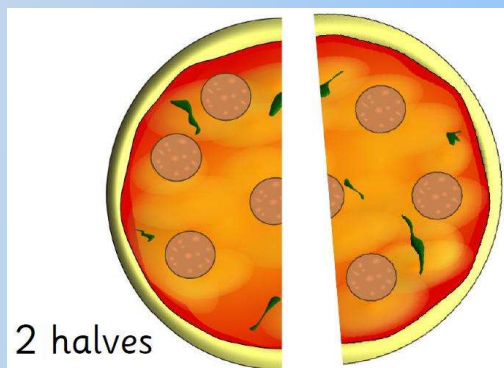
*Jane had 3 bears. She was given 2 more. How many does she have now?*





# Doubling and Sharing- How can you help at home?

- Games where food/objects have to be shared fairly.
- Using language of 'the same' or 'equal'.
- Is that fair?
- Set the table- e.g. 1 cup for me, 1 for you
- Pairing socks- "I have 2 pairs but we need double. How can we do that?"



## Early learning goal - Shape, Space and Measures

Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

Children estimate, measure, weigh and compare and order objects and talk about properties, position and time.

# The steps to developing mathematical understanding:

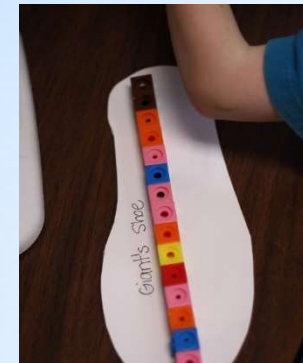
Beginning to use mathematical vocabulary in everyday situations.

Some of these words are: big and small, tall and short, fat and thin, empty and full, near and far, first and last, high and low, in and out, few and many, light and heavy, all and none, hot and cold, same and different, more and less.

Use and model as much mathematical vocabulary as possible!

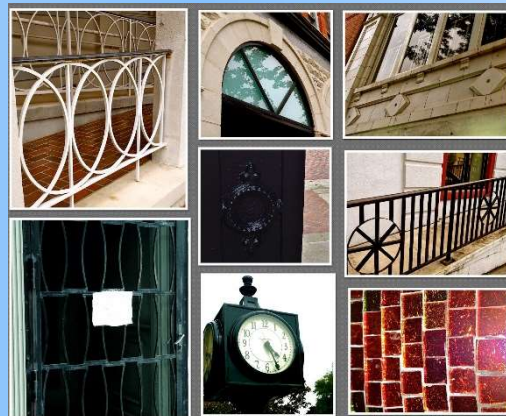
# Measurements- You can help at home by..

- Begin ordering by size using blocks, books, pencils, etc.
- Talk about size and lengths and compare them. E.g. "Can you find a long piece of material?"
- Order by weight, length, capacity.
- Explore capacity- "Fill the cup"
- Order 3 pencils from tallest to shortest.
- Sort the washing e.g. big/small t-shirts
- Measuring yourself and others - compare different heights.
- Playing in the bath- filling and emptying containers

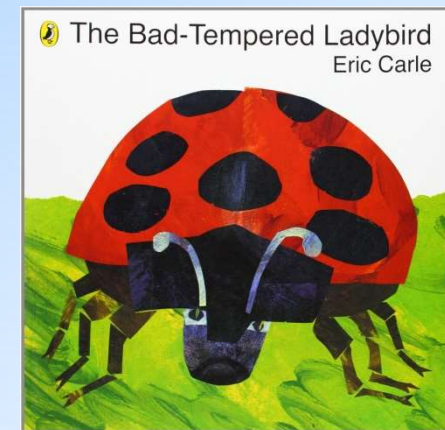
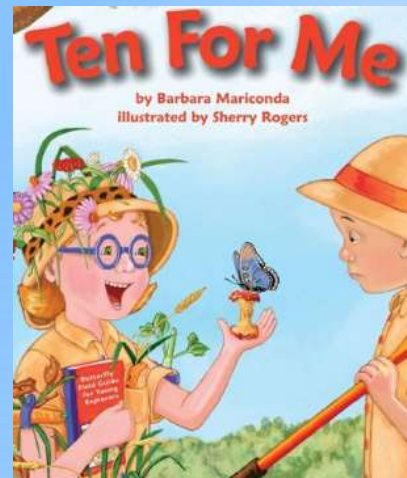
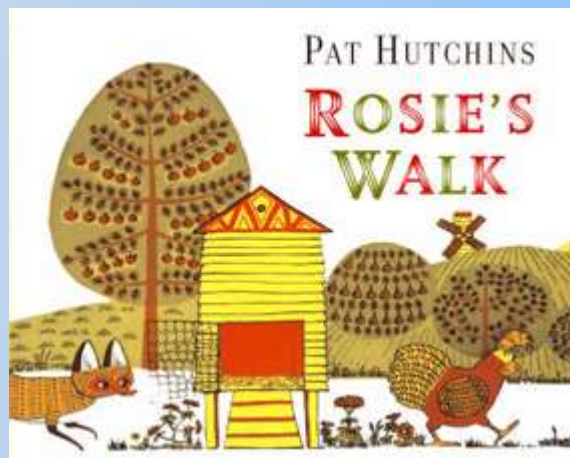
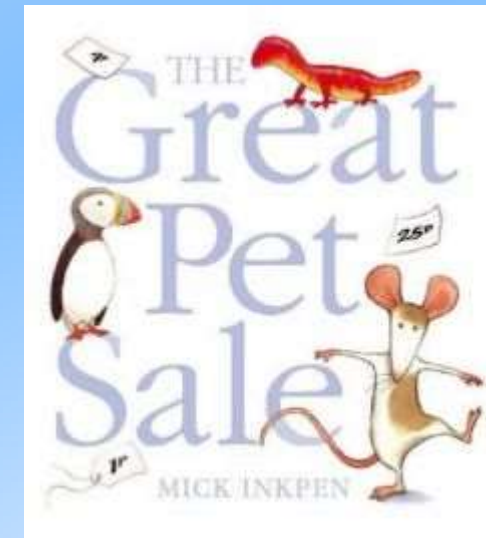
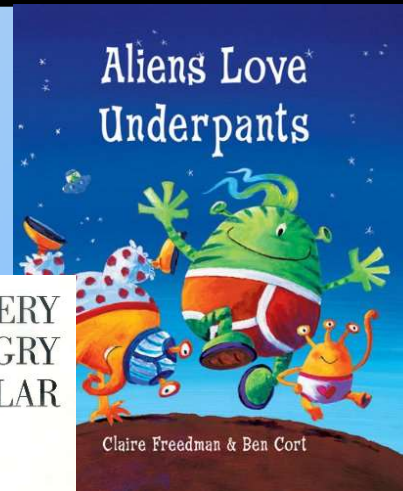
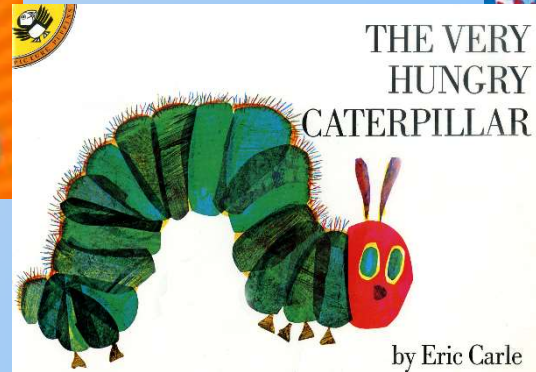
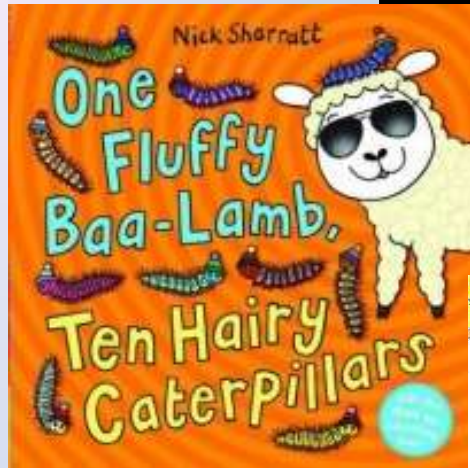


# Describing shapes - How you can help at home:

- Children need to be able to talk about shapes, not just name them- common that children lack the vocabulary to describe shapes. e.g. curved, straight, round
- Look for shapes in the environment- get your child to take photographs.
- Building models- "what shapes have you used?" "Tell me about your shapes."
- Tins/ food items for baking- weigh them. Are they the same shape?



# Maths through books:



## Websites with relevant maths games:

<http://www.coolmath-games.com/>

[http://www.bbc.co.uk/cbeebies/games/theme/braint\\_easers/page/all](http://www.bbc.co.uk/cbeebies/games/theme/braint_easers/page/all)

<http://www.mathszone.co.uk>

<http://primarygamesarena.com/Year-1>

<http://www.ictgames.com/resources.html>

<https://www.topmarks.co.uk/maths-games/5-7-years/counting>

<http://www.crickweb.co.uk/Early-Years.html>

### **Apps:**

**Little digits**

**Kids Academy**

**Number Monster**

**Shape Monster**

**Wee kids maths**

**Message to take away-**  
**be creative to make Maths**  
**Fun!!!!**

You now have an opportunity to look at a selection of activities which can be used at home to support maths.

Please take the time to complete the short evaluation of today's session. Do take the opportunity to suggest areas you would find useful to be covered in an future parent workshops.

Thank you for coming.