

# EYFS

**St Mary's**

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# Aims

Explain how we teach calculation across the Early Years Foundation Stage (EYFS)

Share with you some ideas of how you can help your child with their Numeracy at home.

# Numeracy in Early Years

- Maths or Problem Solving, Reasoning and Numeracy, in the Early Years, builds an important foundation for number work and problem solving in Key Stage 1.

# EYFS

- Mathematics curriculum
- Split into two areas
  
- Numbers
  - -numbers as labels for counting
  - -calculating
- Shape, space and measure

# Numeracy through play and practical experiences

- Before calculating
- vital practical processes the children need to experience.
  
- Role play- shops, maths market
- Work stations- child initiated
- Outdoor play- sand, water, games, coins
- Rhymes and songs
- Stories
- Games

# Year 1

- Problem solving, fluency and reasoning
- Number
- Measurement
- Geometry
- **Statistic – now comes in Year 2**

# Phase 1:

## Number words and numerals

- This focuses on the development of children's awareness, understanding and use of the language of number.



# Phase 1

## Counting sets

- This phase focuses on the development of children's early awareness of quantity.



**less**



**more**



# Phase 2:

## Number words and numerals

- The main focus in Phase 2 is the development of children's knowledge and use of the number sequence from one to five, and the recognition of the numbers 1 to 5.



# Phase 2

## Counting sets

- Phase 2 focuses on the development of children's ability to count up to five objects and to recognise, without counting, sets of one, two or three objects



# Phase 3

## Number words and numerals

- Phase 3 focuses on the development of children's knowledge of the number sequence from one to nine and **recognition** of the numerals 1 to 9

**Birds on a Wire!**

A interactive lesson with ordering single digit numbers, even and odd numbers, and greater than or less than with single digits.

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# Phase 3

## Counting Sets

- This phase concentrates on extending children's counting skills to enable them to count up to ten objects, actions or sounds accurately



# Phase 4

## Number words and numerals

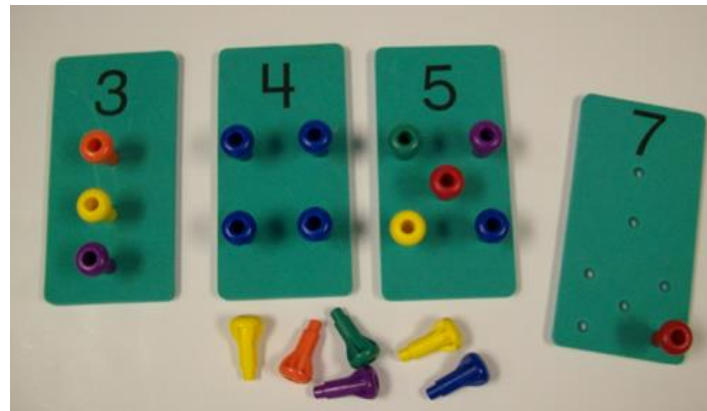
- Phase 4 extends the range of numbers that children can confidently use, including zero and numbers to 20



# Phase 4

## Counting Sets

- Phase 4 focuses on extending children's counting skills to enable them to count up to ten objects accurately, in any arrangement.
- The early stages of addition and subtraction are developed as children begin to partition and combine sets and to remove objects from sets



# Phase 5

## Number words and numerals

- Phase 5 focuses on extending the range of numbers that children can confidently use, to include numbers to 30
- Children also start to explore the sequences of numbers when they count from zero in twos, fives and tens



# Phase 5

## Counting Sets

- Phase 5 focuses on extending children's counting skills to enable them to estimate, count and compare sets of up to 20 objects.
- Addition and subtraction are further developed as children partition and combine sets and count on and back





# Phase 6

## Number words and numerals

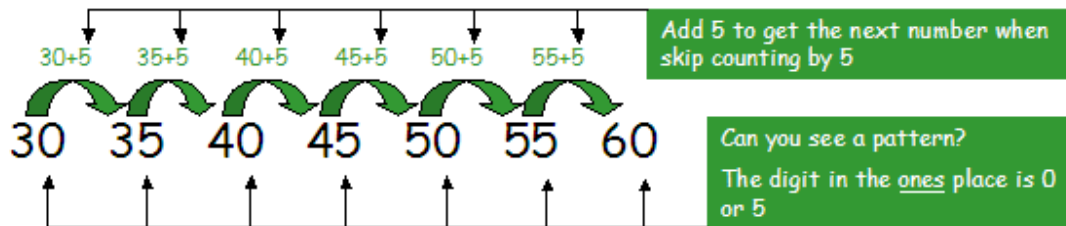
- This phase extends the range of numbers children can confidently use, including numbers to 100
- Children also become more secure in counting forwards and backwards in twos, fives and tens



# Phase 6

## Counting Sets

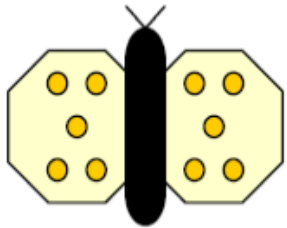
- Phase 6 focuses on using children's counting skills to support addition and subtraction through counting on and back and through counting from the smaller to the larger number to find a difference.
- Children also use their ability to count in twos, fives and tens to count larger groups of objects efficiently.



# Calculation Strategies

Begin to use the + and = signs to record mental calculations in a number sentence

$$6 + 4 = 10$$



$$5 + 5 = 10$$

Know doubles of numbers

Find pairs of numbers that total 10.



# How YOU Can Help...

Do little and often.

Praise.

Play lots of games.

Remember that maths should be FUN!

# Using Rhymes

- • Number rhymes which are repetitive and are related to children's actions and experiences, for example, 'Peter Hammers with One Hammer'
- • Use song and rhymes during personal routines, e.g. 'Two Little Eyes to Look Around', pointing to their eyes, one by one.

# Number bonds to 10

- 0 to 10 are big strong men
- 1 and 9 are feeling fine
- 2 and 8 are never late
- 3 and 7 come from Devon
- 4 and 6 like to play tricks
- 5 and 5 come alive
- 6 and 4 hold open the door
- 7 and 3 visit for tea
- 8 and 2 are feeling blue
- 9 and 1 have just gone
- 10 and 0 are super heroes!!!!!!!



# Using Mathematical Language

- • Use number language, e.g. 'one', 'two', 'three', 'lots', 'fewer', 'hundreds', 'how many?' and 'count' in a variety of situations.
- • Model and encourage use of mathematical language e.g. asking questions such as 'How many saucepans will fit on the shelf?'
- • As you read number stories or rhymes, ask e.g. 'When one more frog jumps in, how many will there be in the pool altogether?'
- • Encourage use of mathematical language, e.g. number names to ten: 'Have you got enough to give me three?'
- • Talk with children about the strategies they are using e.g. to work out a solution to a simple problem by using fingers or counting aloud

# Counting

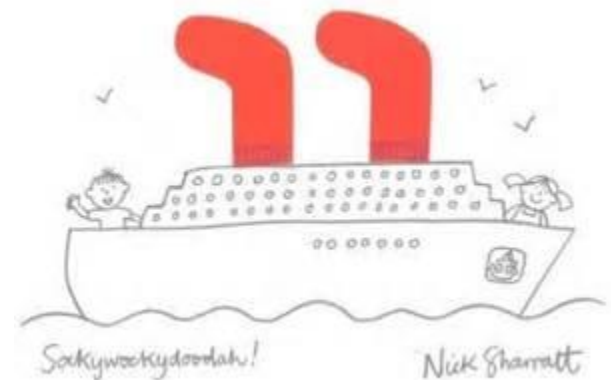
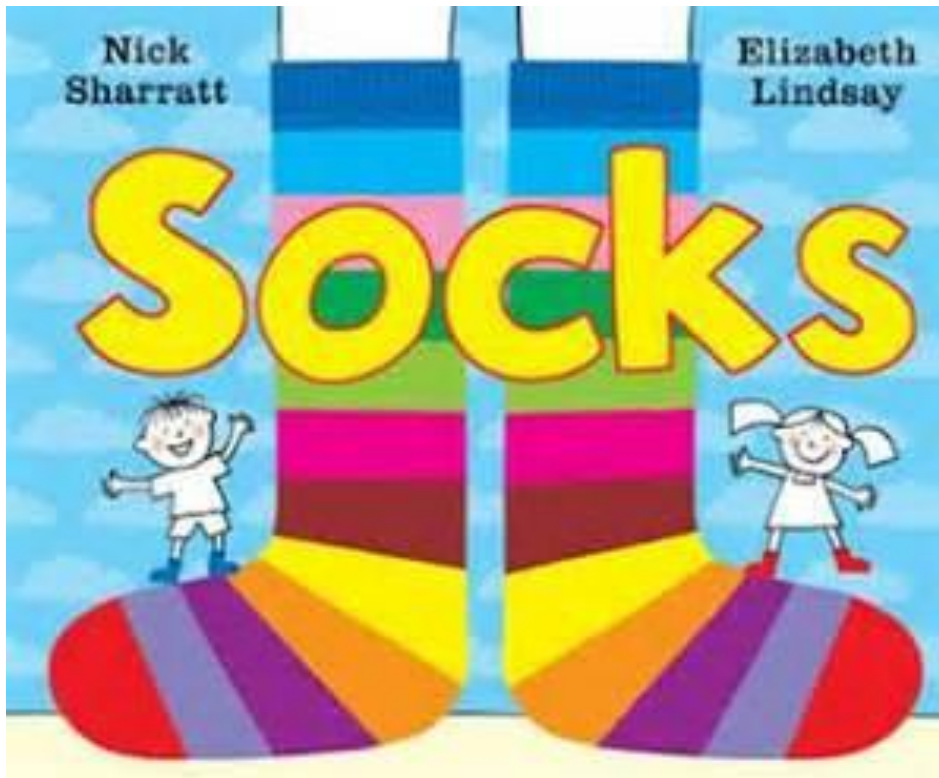
- • Model counting of objects in a random layout, showing the result is always the same as long as each object is only counted once.
- • Support children's developing understanding of abstraction by counting things that are not objects, such as hops, jumps, clicks or claps.





# Maths in Books

## ■ Socks



# Problem Solving, Reasoning and Numeracy

Use mathematical language – greater, heavier, longer, smaller, under, beside

Identify patterns

Identify and describe shape

Recognise and name coins and learn to use them in practical experiences

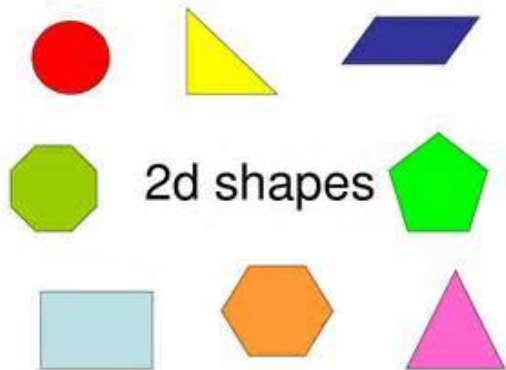
# What is the odd one out?



# Odd one out



# What do we have in common?



- What do we have in common?
- Sort into group – no more than two to start with
- Tell you why they have sorted them that way (Identify characteristics of each set)

# What is similar, what is different?



Help them to compare:

Size

Colour

Use

Materials

Parts

Shape

# Same, similar or different?



- Show two identical objects – are they the same? How do you know they are the same?
- Then show two not identical objects – same? Different? What is the same? What is different?



# Problem Solving

- Estimating how many apples/sweets?





# Wool and string

- Coloured wool – cut into 1m strip
- Walk round – what can they see? What can they find out?
- Get them to take it home
- 3m piece of string
- What could they do?



# Noah's ark - Building and construction



- Read Noah's Ark
- Practice counting in twos
- Can they build an ark to house their animals?
- How many legs does 2 giraffe have?

# The Great Pet Sale

'EVERYTHING MUST GO!'  
said the sign on the pet shop  
window.

In the window was a rat.  
I looked at him. Half of his  
whiskers were missing.

'I'm a bargain!'  
called the rat  
through the glass.

'I'm only **1** p!  
Choose me!'



- If a rat with half the whiskers cost 1p. How much would a rat with all of his whiskers cost?
- What is a half?
- Show me 1p

# The Great Pet Sale

Inside the shop there was  
a tiny terrapin for 2 pence,  
a turtle for 3 pence  
and a tortoise,  
a great big one,  
for 4 pence.



- Pick out a 2p
- How could we make 3p?
- How could we make 4p?
- If I bought a terrapin and a tortoise how much would it cost?
- How much change from 10p?