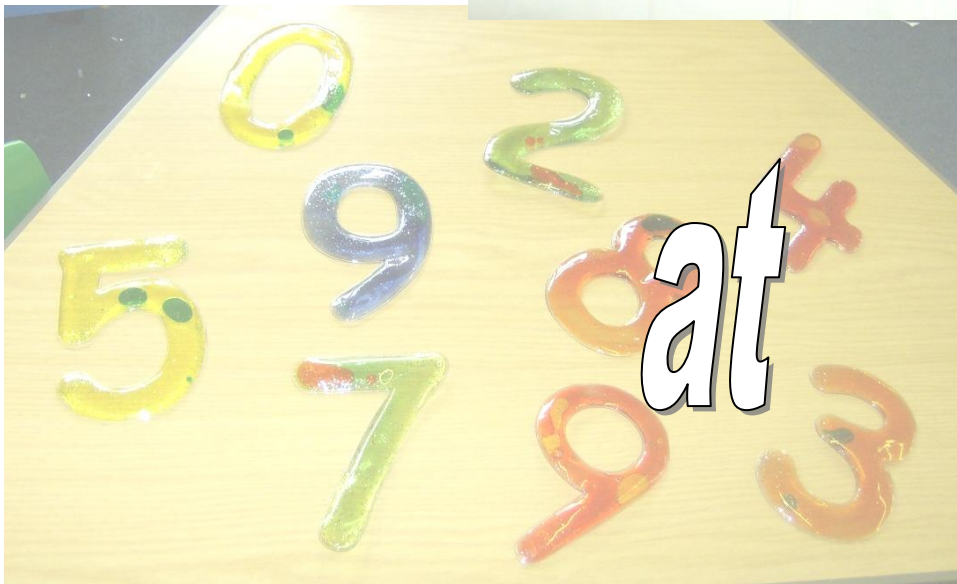
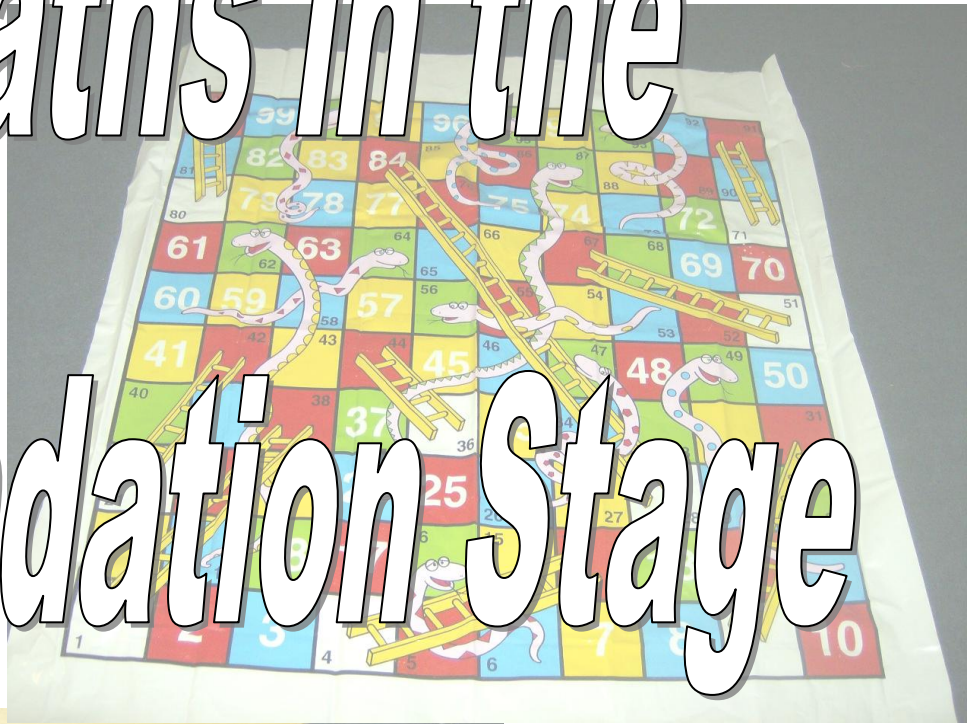


Maths in the Foundation Stage



at

Kirkbymoorside =



Sept 2013

Maths Information for Parents of Foundation children

By the end of Reception your child will have had experience of, but might not necessarily be confident in, the following areas:

- Recognising numerals 1 to 9.
- Counting reliably up to 10 everyday objects.
- Saying number names in order to at least 10.
- Ordering numbers to 10.
- Beginning to count beyond 10.
- Using language such as 'more' or 'less' to compare two numbers.
- Finding one more or one less than a number from 1 to 10.
- In practical activities and discussion beginning to use the vocabulary involved in adding and subtracting.
- Beginning to relate addition to combining two groups of objects and subtraction to taking away.
- Using language such as 'heavier', 'lighter', 'greater', 'smaller' to compare quantities.
- Ordering two or three items by weight, length or capacity.
- Showing an awareness of symmetry.
- Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes and mathematical terms to describe shapes.
- Talking about, recognise and recreate simple patterns particularly with shape and colour.
- Using everyday words to describe position .
- Using language such as 'circle' and 'bigger' to describe the shape and size of solid and flat shapes.
- Using developing mathematical ideas to solve practical problems.

To help your child at home you can:

- Sing number songs and rhymes.
- Play board games e.g. games using dice such as snakes and ladders.
- Play number games e.g. dominoes, bingo, number snap
- Spot numbers and shapes when inside and outside your home environment e.g. numbers on road signs, shapes of packets in the supermarket!
- Counting around the house e.g. when laying the table, when tidying toys away
- Counting aloud, forwards and **backwards** from different starting points.
- Using hands to help when counting - knowing we have 5 fingers on one hand and therefore not needing to count them! Using knowledge of this to help count on when adding to find a total.
- Finding a missing number. Lay out number cards in order with a number(s) missing and ask your child to identify the missing number or jumble the numbers up and ask your child to put them in order.
- When constructing models or towers count the number of bricks, wheels, windows etc Ask questions such as, “How many would there be if you add one more?”
- Demonstrate how arranging objects in rows can help when counting large amounts.
- Make up number stories such as “It was Tom’s birthday and he had 5 presents, and then Annie arrived and gave him 2 more. How many presents does he have now?” Encourage your child to make up their own stories too.
- Modelling mathematical language when describing shapes, position, direction and measures.
- Weighing ingredients when cooking, and looking at the numbers/amounts in recipes.
- Read books about numbers, both fiction and non fiction. (list to follow)

Many of these things you will do already without even realising you are doing them!

Calculations

The following information is taken from the school's Guide to Calculation.

Addition

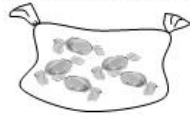
FOUNDATION

Calculation Strategies

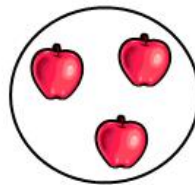
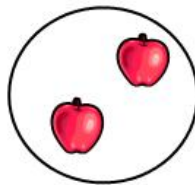
Counting on from a number to find the total

I have 5 pennies in my tin. I put in one, two, three pence more. How many pennies are in the tin now?

Use moveable objects when finding totals.
Touch and align each object as it is counted.



Count first group, start count from first group's total when counting second group



3



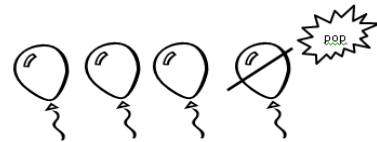
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Subtraction

FOUNDATION

Calculation Strategies

Subtraction as taking away



There were 6 people on the bus. Four people get off. How many are left?

There were 4 balloons. 1 popped. How many are left?



Number Facts

Jill had 10 cars. She parked one in the garage. How many are left outside?

Subtraction as finding the difference



The difference in the number of stripes is?

Multiplication

FOUNDATION

Calculation Strategies

Laying foundations for multiplying by maximising opportunities when counting

Number rhymes such as two, four, six, eight
Ten fat sausages



Counting in pairs

e.g. pairs of children
pairs of socks
pairs of animals
eggs in an egg box



Hop along in twos on a large number track




Animals in 2s on farm


Calculation Strategies

Laying foundations for grouping and sharing by maximising opportunities when counting



Number rhymes such as two, four, six, eight,
Ten fat sausages



Counting in pairs
e.g. pairs of children
pairs of socks
eggs in an egg box
pairs of animals



Hop along in twos on a large number track

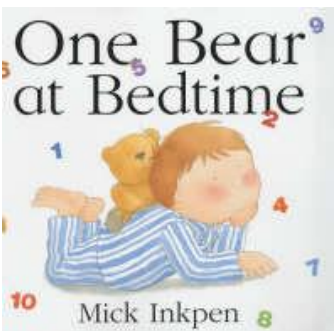
Animals in 2s on farm

Count in ones but every other number in a whisper

Children's picture books that teach mathematics concepts

Picture books are frequently requested parents as a way to introduce children to mathematical concepts in a meaningful and applicable way. These books are recommended for children aged 4 - 8.

Counting



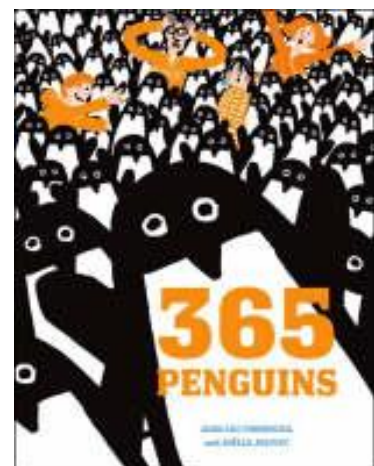
- [Five Little Monkeys Play Hide-and-Seek](#) by Eileen Christelow
- [Follow the line](#) by Laura Ljungkvist
- [One Bear at Bedtime](#) by Mick Inkpen
- [One Frog Sang](#) by Shirley Parenteau
- [One Gorilla](#) by Atsuko Morozumi
- [One Hundred Days of Cool](#) by Stuart Murphy
- [The Shopping Basket](#) by John Birmingham
- [Ten Apples Up On Top](#) by Theo LeSieg
- [Uno's Garden](#) by Graeme Base
- [The Very Hungry Caterpillar](#) by Eric Carle

Addition

- [365 Penguins](#) by Jean-Luc Fromental and Joelle Jolivet
- [The 500 Hats of Bartholomew Cubbins](#) by Dr. Seuss
- [The Great Pet Sale](#) by Mick Inkpen
- [Hardworking Puppies](#) by Lynn Reiser
- [Leaping Lizards](#) by Stuart Murphy
- [Safari Park](#) by Stuart Murphy
- [Uno's Garden](#) by Graeme Base
- [The Very Hungry Caterpillar](#) by Eric Carle

Subtraction

- [Dora's Chicks](#) by Julie Sykes
- [Five Little Monkeys Go Shopping](#) by Eileen Christelow
- [Hardworking Puppies](#) by Lynn Reiser
- [One Frog Sang](#) by Shirley Parenteau
- [Safari Park](#) by Stuart Murphy
- [The Shopping Basket](#) by John Birmingham
- [Six Chicks](#) by Henrietta Branford



Multiplication

[365 Penguins](#) by Jean-Luc Fromental and Joelle Jolivet

[The Doorbell Rang](#) by Pat Hutchins

[Leaping Lizards](#) by Stuart Murphy

[Uno's Garden](#) by Graeme Base

Division

[The Doorbell Rang](#) by Pat Hutchins

[Henry's 100 Days of Kindergarten](#) by Nancy Carlson

[The Little Mouse, The Red Ripe Strawberry and The Big Hungry Bear](#) by Audrey and Don Wood

[The Pigeon Finds a Hot Dog!](#) by Mo Willems

[Safari Park](#) by Stuart Murphy

Even and Odd Numbers

[My Even Day](#) by Doris Fisher and Dani Sneed

[One Odd Day](#) by Doris Fisher and Dani Sneed

Geometry

[The Secret Birthday Message](#) by Eric Carle

[Mouse Shapes](#) by Ellen Stoll Walsh

Measurement

[Counting on Frank](#) by Rod Clement

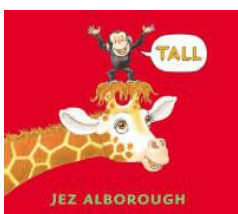
[Jim and the Beanstalk](#) by Raymond Briggs

Ordinal Numbers

[10 Rubber Ducks](#) by Eric Carle

[20 Hungry Piggies](#) by Trudy Harris

Size



[The Bad-Tempered Ladybird](#) by Eric Carle

[The Blue Balloon](#) by Mick Inkpen

[Hop! Plop!](#) by Corey Schwartz

[A House for Birdie](#) by Stuart Murphy

[Just Teenie](#) by Susan Meddaugh

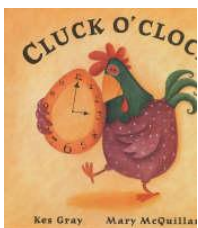
[Tall](#) by Jez Alborough

[Titch](#) by Pat Hutchins

[Watch Out Big Bro's Coming!](#) by Jez Alborough

[Who Sank The Boat?](#) by Pamela Allen

Time



[The Bad-Tempered Ladybird](#) by Eric Carle

[Cluck O'Clock](#) by Kes Gray

[Five Minutes Peace](#) by Jill Murphy

[My Grandmother's Clock](#) by Geraldine McCaughrean

[One Hundred Days of Cool](#) by Stuart Murphy

[What Time is it Mr Crocodile?](#) by Judy Sierra