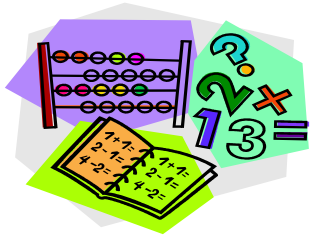


Maths plays an important part in many of our daily activities. Whether we are shopping, cooking, filling the car with petrol, gardening or putting up shelves, we are constantly planning, estimating, measuring, counting, using money and time, and therefore making use of our knowledge of maths. Making use of these everyday experiences with your child can help to develop their understanding of mathematical ideas and can show them that maths is fun!

Much of the maths that four and five-year old children learn comes from their play. For example, they learn about shapes as they build with bricks, sort and match while tidying up, become familiar with numbers as they sing rhymes and notice numbers around them, and learn about money while out shopping.

As adults we can make the most of these opportunities. Through playing with children and listening to and talking about what they are doing, we can help a child to make sense of what they are learning. Using practical everyday activities is an ideal way to develop this understanding.

As parents you can help us to develop the mathematical ideas we introduce in school through the everyday situations that arise at home. We hope that the ideas in the booklet will support you in making the best of these opportunities. Have fun!

Maths Targets - Reception

By the end of the Reception Year, we hope that all children will have reached these targets or beyond.

1. Say number names in order to 20 (forwards & backwards).
2. Accurately count a group of at least 20 objects.
3. Count out a given number of objects from a larger group.
4. Recognise and write the numbers up to 20.
5. Put number cards (1 – 20) in order.
6. Recognise and name shapes: circle, square, rectangle, star and triangle. Talk about the number of vertices (corners) and sides that each shape has. These are known as the properties of shapes.
7. Recognise when things make patterns or sequences. Make own repeating patterns and talk about which part is the repeat.
8. Add and subtract two single digit numbers practically and by counting on or back to find the answer.
9. Begin to solve mathematical problems.
10. Be aware of larger numbers around them.

Every child learns in different ways and often at different rates. By supporting them in the early stages, we can make sure your child feels successful.

Comparing their progress to others or making them feel under pressure to do better will only make it harder for them to succeed.

Encourage sorting, matching and comparing

Let your child help you sort the washing. Discuss the colours and sizes of clothes etc. Which are the same? Which are different? How are they the same / different?

Cook together. Allow children to help weigh out ingredients.

At bath time, fill containers with your child. Discuss words like full, nearly full, half full and empty.

Make collections of things and sort by size, colour and shape. Compare which is the smallest, longest, tallest or shortest. Use language to compare two items (the pencil is longer than the glue stick). Put your collection in order.

Look at photographs with your child and talk about changes in their lifetime.

Looking at Patterns

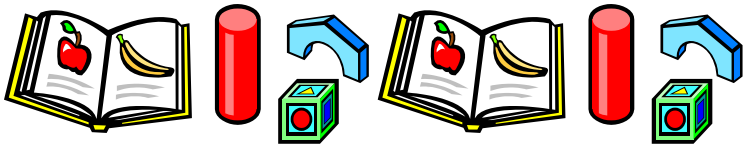
Look at patterns in the home and outside e.g. on wallpaper, bricks and clothes.

Make patterns (e.g. □o□o□o) with toys, coins, bricks, leaves or buttons.

Clap hands and tap feet in a pattern when listening to music.

Put three or four items, such as different toys, in a line and talk about the order of the pattern you have made, e.g. which is first, second? Change the order. Can the child see what you have changed?

Encourage your child to make a pattern when drawing or writing.



Children learn to count by counting!

Count movable items, things in books, and things which can be seen but not touched.

Count and recount the same items in different ways such as in lines, circles and groups.

Count toys by colour and then decide which colour has the most/least number of toys.

Count out a set amount, e.g. get me 6 Lego bricks. Your child will need to remember the number 6 and to stop collecting more bricks once s/he has 6.

Sing counting songs and rhymes. Choose songs rhymes that sequence the numbers forwards ('One, two, three, four, five, once I caught a fish alive) as well as those that count backwards ('5 little ducks went swimming one day…').

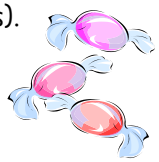
Play counting games and games with dice.

Exploring how numbers are used

Point out numbers in the home and while out walking, e.g. on the telephone, car number plates, clocks and house numbers.

Make a number frieze and use it to talk about number, e.g. which number is after 4, before 6 or which number comes between 3 and 5? Which number is one more than 4? Which number is one less than 3?

Recite number names in order (forwards as well as backwards).



When eating sweets, count out with your child to see how many sweets they have left.

Visit the shops. Allow your child to handle real money. Look for numbers on the shopping when putting it away.

Being aware of Shape and Space

Look at shapes around the home and outside, e.g. name the shapes of windows, packets or toys.

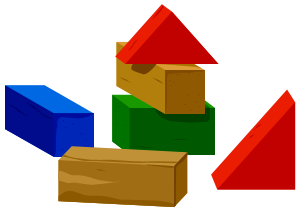
Allow your child to help put away the shopping. Sort it into tins, boxes and packets.

Help your child to complete jigsaw puzzles.

Make models using old boxes, paper or scraps of fabric.

Choose one shape when out walking, e.g. circle. Count how many you can find.

Encourage your child to make pictures and talk about shapes when drawing.



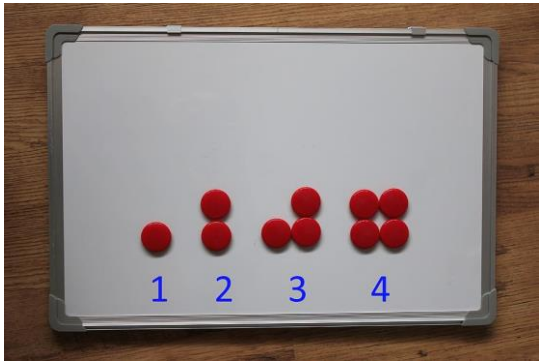
Writing Numbers

Children need lots of opportunities to recognise and write numbers.

Formal written arithmetic (e.g. 2 + 6 = 8) is not appropriate for a Reception child initially. They are not developmentally ready for this kind of work as it is too much of an abstract concept for them. Therefore, our work during the Autumn and Spring terms is practical. We only introduce formal written work when we think each child is ready for it.

The next two pages show how we write our numbers at school. Some children prefer the rhyme version, some children like the red and blue version, because it reminds them of the starting point and direction.

Perhaps you could practice tracing, copying and writing these at home with your child.



These are the rhymes we learn to help us write our numbers correctly.

Around and round and round we go,

When we get home we have a zero.

Start at the top and down we run,

That's the way we make a one.

Around and back on a railroad track

Two, two, two

Around the tree and around the tree,

That's the way we make a three.

Down and over, down some more

That's the way we make a four.

Down and around then a flag on high

That's the way we make a five.

Down we go and make a loop,

Number six makes a hoop.

Across the sky and down from heaven,

That's the way we make a seven.

Make an 's' and do not wait

When it's joined up you have an eight.

Make a loop and then a line,

That's the way we make a nine.

The tiger will remind you to write each digit in the correct sequence.

Remember to start with the red part of the number.