

# Have Sum Fun

### Introduction

Numbers are all around us in our everyday life and using numbers can be a fun and exciting way to engage with your children. In this leaflet you will find lots of examples of games you can play with your children to help them develop an interest and love of numbers.

As a parent/carer you can help your children develop their mathematic and number skills by playing these games with them and encouraging your children to ask questions about numbers.

Each game will support your children in practising the skills they need to develop good number skills.

Each game/activity is designed to be fun and needs the minimum of preparation by parents/carers. All you need is some time and lots of enthusiasm! These games are aimed at children aged 3–8.

The games are just a guide. As you play them, you can adapt them to your own situation and play the games your children like the most.

### Calendar game



#### What do you need for this activity?

A calendar/diary and a pen/pencil

#### What is being taught with this game?

Counting

**Patterns** 

Sets

#### Language to use

Yesterday, today, tomorrow, weekend, the day before, the day after

Do you have a calendar in your home?

Mark on it the end of term for school. Talk with your children about how many school days they have left before the next holiday; how many weeks is that?

Mark the days off on the calendar.

Let the children mark off the number of days beside the date - 'January  $8^{th} - 87$  days to go' 'January  $9^{th} - 86$  days to go' etc.

This activity can be done with any event or date coming up that interests your children.

Ask your children some questions:

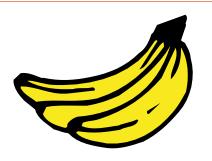
'How many sleeps is it until . . . ?'

'How many days?'

'How many weekends?'

Ask your children the days of the week and the months of the year.

### Supermarket game



#### What do you need for this activity?

Nothing – this game can be played on any trip the family makes to buy shopping for the week. Some examples are given below but you can change and adapt the game to fit you children's interests and abilities. The best thing about this game, other than the fact that it helps your children think about numbers, is that it keeps them busy and engaged on a shopping trip.

#### What is being taught with this game?

#### Counting

Recognising and understanding language of different sizes

#### Language to use

Small, big, nearer, farther, lighter, heavier, shorter, longer

#### In the shop

#### The game

Children can help with the shopping in many ways and this is a great place to develop their number skills.

Get your children to help at various different areas within the supermarket. You could ask your children to:

- pick 4 bananas
- choose 5 red apples and 2 green apples
- choose and estimate 1 kg of potatoes. You can check the weight on the scales in the supermarket
- pick the cheapest tin of beans
- choose 4 different rolls from the pick-and-mix bakery counter
- choose and fill the smallest dish at salad counter.

This game can be played in any way according to what you need to buy.

	In the car park
What is being taught with this game? Counting Travelling time	Play a game with the children to remember where the car is parked – how many rows away from the supermarket front door and how many spaces along in the row?  If you are getting the bus to the supermarket, read the timetable with the children and ask them to remember the time for catching the bus back. How many minutes do you have to shop?
	Using money
What is being taught with this game? Addition Money	You can also play the supermarket game at home with toy money, coins and a till.  You can also use money to help children reach a set amount. Give them a selection of coins and ask them to make up, for example, £1.12 to buy milk, eggs and bread. Which coins can they use? Will they get any change, etc?

## Singing songs/ rhymes

#### What do you need for this activity?



#### What is being taught with this game?

Number recognition

Sequencing

There are lots of rhymes and number songs you can sing with your children. Why not try:

10 green bottles hanging on the wall

10 green bottles hanging on the wall

And if one green bottle should accidentally fall

There'll be . . . 9 green bottles hanging on the wall.

1, 2, 3, 4, 5,

Once I caught a fish alive

6, 7, 8, 9, 10

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 the right

### Play board games

#### What do you need for this activity?



A selection of board games

#### What is being taught with this game

Counting

Sequencing

Addition

Subtraction

**Patterns** 

#### Language to use

Move forward, move backwards

Board games give all kinds of skills to children and it is a great way to spend time with your children.

Let the children roll the dice and work out the number of moves they have to make.

Games that are particularly good for numeracy skills are:

Monopoly

Battleships

Dominoes

Game of Life

Tri-ominos

Uno (card game)

Rummikub

Smath game

Magic Cauldron game

## Read books with a number theme

#### What do you need for this activity?



Access to a public library. These books can all be borrowed free of charge from your local public library.

#### What is being taught with this game?

Reading books with a strong numeracy or counting theme. Example:

The very hungry caterpillar by Eric Carle

The Most Amazing Hide and Seek Numbers Book by Robert Crowther

Is a Blue Whale the Biggest Thing There Is? by Robert Wells
My Granny Went to Market: A Round-the-World Counting
Rhyme by Stella Blackstone and Christopher Corr
When Sheep Cannot Sleep by Satoshi Kitamura
Out for the Count: A Counting Adventure by Kathryn Cave and
Chris Riddell

Maths Curse by Jon Scieszka and Lane Smith

Einstein, The Girl Who Hated Maths by John Agard – Poetry

Mr Magnolia by Quentin Blake

One More Sheep by Mij Kelly and Russell Ayto

The Terrific Times Tables Book by Kate Petty and Jennie Maizels Big Numbers by John Gribbin

A Moose in the Hoose: A Scots Counting Book by Matthew Fitt

One Fish, Two Fish, Red Fish, Blue Fish by Dr Seuss

Ten Little Rubber Ducks by Eric Carle

Ten Wriggly Wiggly Caterpillars by Debbie Tarbett

How do Dinosaurs Count to Ten? by Jane Yolen and Mark Teague

## Play cards with your children

#### What do you need for this activity?



A set of playing cards

#### What is being taught with this game?

Sequencing

Patterns

Recognising numbers

Simple games like snap and patience help with sequencing and patterns in numbers. When playing snap get the children to add up the snap cards, eg snap on two eights. 'What do you get if you add two eights together?' etc.

## Play darts with your children

#### What do you need for this activity?



A set of darts and a dartboard

#### What is being taught with this game?

Counting

Subtraction

Addition

#### Language to use

Doubles, trebles, bull's-eye

Darts is also a fun way to play numeracy games with your children. Get them to throw the dart, add up their score and subtract from 501. They will need help with this.

It is okay to use a pencil and paper but try to get the children to work this out in their head – don't let them use a calculator!

### Playing snooker/ pool with your children

#### What do you need for this activity?



Access to a pool/snooker table

#### What is being taught with this game?

Addition

Patterns

Sequencing

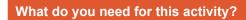
Numbers linked to colours

Snooker/pool is a great way to teach children all about numbers and sequencing, and to practise addition.

Teach your children how much each coloured ball is worth.

Add up scores for each ball potted.

# Fridge Magnets



Some magnetic numbers and a fridge/magnetic surface!



#### What is being taught with this game?

Addition

Subtraction

Multiplication

Division

Is your fridge covered in magnetic letters and numbers?

How about setting your children a number task to complete on the fridge every morning?

Your children can then set you a number task to complete.

Just make sure you have all the numbers you need to answer the puzzle.

Newspaper Game	What do you need for this activity?
TODAY'S NEWS!	A selection of newspapers
What is being taught with this game  Number recognition	Looking at the newspaper with your children, read the stories of the day.
	Try to spot the numbers in the stories
	You can have a bonus number of the day. The first person to spot the number 15 in a story wins. The person to see the biggest number in the newspaper wins the game!
	You can take this game a step further, especially in a car/train/bus. Have a sheet of paper with numbers on it and get your children to cross out the numbers they spot on the journey. Numbers can come from road signs, buses, number plates, etc.

### Hobbies

#### What do you need for this activity?



Depending on the children's hobby, some access to materials to support the hobby, eg list of football teams

#### What is being taught with this game?

**Averages** 

Sequencing

Counting

Do you have a boy that is mad about cars or a girl that loves football?

Try to talk to them about numbers within their hobby. Engine size, speed of car, mph, mpg, 0–60, bhp,  $CO_2$  emissions – if there are two cars in the family the children can compare the performance.

Who is the top goal-scorer? How many goals has he scored this season compared to last? Where are the team in the league; how many teams are in the league; how many leagues are there? How many players are there on the pitch at one time? etc

### Baking and cooking

#### What do you need for this activity?



Baking materials, set of scales. Food at tea-time

### What is being taught with this game? Weights

Measurement

#### Language to use

Heavier, lighter, more, less, thick, thin

Fun activity for the whole family.

If you are making the family meal or baking a cake for a special event, why not get your children to help? Baking and cooking is all about weights and measurements and this is great way to help your children practise looking at the measurements in a cookery book and making something special at the end.

Try making simple things to start with using only a few ingredients, for example pancakes.

Take this a step further by looking at portions.

If you don't want to make anything from scratch, let your children help you divide up the food at meal time. For example, how many sausages does each person get, how many potatoes, how many carrots and so on?

## Maps, timetables and phones

#### What do you need for this activity?



A selection of timetables/maps, a mobile phone

#### What is being taught with this game

Distance

Time

Number recognition

Help your children to use timetables for the bus or train.

Use maps to find your way about.

Use the mobile phone to enter numbers.

All the activities above help with developing numeracy skills.

When travelling ask your children to estimate how long the trip will take and the distance. How many miles/kilometres have we travelled?

Skills improve the more you do this game and the children get to understand the relationship between distance and time.

Count the number of blue cars, red cars, etc and then use these totals to find a grand total. 'How many more red cars than blue cars did we count on our way to school?'

Get your children to plan the journey to a friend's house.

Bingo!	What do you need for this activity?
TOP-GEN-T	Paper and pen/pencil and a set of numbers
What is being taught with this game?	Children love this game and all you need is paper and a pen.
Number recognition	Have children make up a bingo card with a variety of different numbers from 1–90.
	Make up a master set of the numbers on the bingo cards.
	Pull the numbers from the bag one at a time.
	The children cross out the correct number on their 'bingo card'.
	This is a great game to play with groups of children on a rainy afternoon.
	A prize can be offered to the child that crosses all their numbers out first.
	This helps children recognise and practise looking for specific numbers.
	Change the game to make it a bit harder, for example instead of writing the number '8' write 'eight' or '7+1'.

# Maths yes/no guessing game

#### What is needed for this activity?



Nothing - just enthusiasm

#### What is being taught with this game?

Logic

Reasoning

Communication

The only rule for this game is that the child can ask you questions but you can only answer yes or no.

Practise yes or no questions before so that your children know the kind of questions to answer.

Think of a number.

The aim of the game is for the children to guess the correct number.

Children ask a series of questions, for example:

Is the number less than 250?

Is it even or odd?

Is it more than 45 but less than 90?

Does it have a 5 in it?

etc

# Watching movies/ favourite TV shows

#### What is needed for this activity?



A newspaper with TV listings

#### What is being taught with this game?

**Planning** 

Comparisons

Negotiation skills

Time

Does everyone want to watch different TV programmes? How long do the shows last? Can we watch all that we want in the time? Do we have to record one of the programmes? Which tape is long enough to let us record our TV programme, etc?

How long is the film – will it go past bedtime? How much will we manage to watch before bedtime?

