

# Numeracy and Mathematics



## A Helping Hand From Home

## Introduction

**At Kirkcudbright Primary School, classes spend some time each day, working on Numeracy and Mathematics. Teachers plan learning based on the knowledge, understanding and skills detailed within Curriculum for Excellence. Teachers differentiate learning to ensure each child receives appropriate support and challenge to reach their potential.**

Children's knowledge, understanding and skills in numeracy can be greatly boosted by help at home. We understand that parents are often reluctant to help, worried that they may confuse their child by teaching them different methods. However, at Kirkcudbright Primary School we aim to teach children in different ways, understanding that what works for one child will not always make sense to another and that by giving them a range of different methods they will be well equipped to select one which works for them.

Please explore and talk about numeracy with your child, remembering to use positive language so that your child views it as a positive experience. For example, we can say, 'Can you try again?' 'Let's work together.' 'Look carefully at that number.'

Does it look right?' 'You gave that a good try, but it isn't what I was looking for. Let's look again.' Please do not say things like, 'I can't do maths!' or 'I hated maths at school.' This will have a negative effect on your child's learning.

This leaflet details some ideas of real-life, simple, fun and inexpensive activities you can try at home, to support your child's knowledge, understanding and skills in numeracy, as they enter P1. Soon, you'll find yourself inventing activities of your own.



# Formation of Digits 0 – 9

Please see below, diagrams to show the correct formation of the digits.



## Using Playdough

Here's a simple recipe:

1 Cup of plain flour.

1 Cup of water.

1 Tablespoon of cooking oil.

2 Teaspoons cream of tartar.

Half a cup of salt,

Food colouring, essences and glitter (optional).

Put all ingredients in a large saucepan and heat slowly, stirring all the time until it forms a ball. Take it out of the saucepan and knead it for a few minutes. Allow it to cool. Have fun! Remember to keep it wrapped in cling film or in a covered tub to stop it drying out.



Then...

- Make digits 0, 1, 2, 3, 4, 5, 6, 7, 8 and 9. Trace over them with your finger (in correct formation) and ask your child to copy.
- Make all the digits. Ask your child to close their eyes. Take a digit away. Ask your child to use their pointing finger to write the missing digit on the table.

## Going Shopping

Work with your child to write the shopping list. Ask them to record the number of items needed e.g. ask your child to write the digit 2, if you need 2 eggs.

**Please note:** if your child forms a digit incorrectly, correct in a supportive way. Every incorrect formation doesn't need corrected. It is important to maintain children's self-esteem and build confidence when working with numbers.



## Recognition of Digits, Numerals and Number Names

### In the Street

- Find and say bus numbers.
- Number plate hunt. Who can find a plate with the number 7? Who can find a plate with the numbers 7 and 9?
- Find and say door numbers. Why are they different on the sides? Talk about odd and even numbers.

### On Paper

On a piece of paper, randomly write numerals and matching number names. Work with your child to draw lines to match the numeral to the number name. Discuss the sounds in the number names to help your child remember them e.g. the number name four, begins with a 'f' sound.



Write digits, numerals and/or number names on pieces of paper. Show them to your child one at a time and ask them to say them out loud or lay them out on the floor and ask your child to find a given number –  
*can you find the number 7?*

### Games

- Play board games, involving numbers and counting e.g. Snakes and Ladders, BINGO...
- Roll a die or dice, ask your child to say the number(s) shown quickly.



# Understanding the Value of Numbers

## Doing the Washing

- How many items of clothing are in the basket? How many socks are there altogether?
- Split the washing into different piles - How many items in each pile? Which pile has the most? Which pile has the least?
- Match/pair socks. Count in ones to find out how many pairs there are. Count in twos to find out how many socks there are.
- Show or say a number to your child. Ask them to collect that number of items.

## Secret Number

Write the numbers 0 – 10 (extend to 20 if appropriate). Ask your child to secretly choose a number on the paper. Then ask them some questions to find out what the number is e.g. Is it less than 10? Is it between 4 and 7? Is it even? Is it odd? Once you have found the secret number, it is your turn to choose the number and your child's turn to ask questions.

## Games

Play movement games. Show your child a number, instruct them to make that number of movements e.g. if they were shown the number five, you could instruct them to hop five times, counting whilst doing so.

## Using Ordinal Numbers

### In the Garden

- Have a race. Identify who came 1st, 2nd, 3rd ...
- Have a scavenger hunt. Ask your child to collect different items in sequence e.g. 1st, collect a small stone; 2nd, collect three blades of grass; 3rd, collect two toys...

### On T.V.

- Watch competitive sports e.g. athletics, rugby, football... Discuss who came 1st, 2nd, 3rd...
- Look at the date on the screen. Discuss the date e.g. today is the 3rd of September, what will tomorrow be?
- Play an age appropriate competitive game e.g. MarioKart. Discuss which character came 1st, 2nd, 3rd...

# Sequencing Numerals

## At the Park / In the Wood

- Collect sticks to make and lay out numbers in order (left to right) essentially making a visual number line. Ask your child questions e.g. What's before six? What's after nine? What's between four and six?

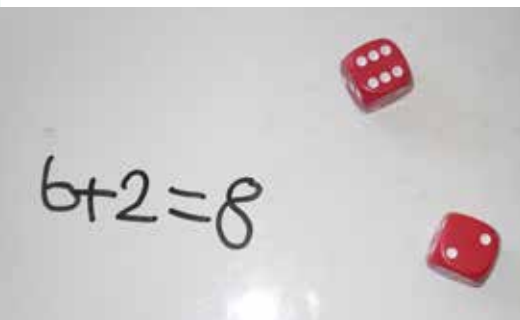
## Messy Play

- Spread flour, shaving foam... over a table or work surface. Work with your child to sequence numbers (left to write). Ask your child questions e.g. What number's after nine? What two numbers come between seven and ten?
- Boil a type of pasta e.g. spaghetti, spirals... and allow it to cool. Use the pasta to make and lay out numbers in order (left to right), essentially making a visual number line. Ask your child questions about the sequence e.g. What's the number between nine and eleven?





# Addition and Subtraction (+/-)



## Number Rhymes and Songs

- Sing rhymes and songs e.g.

*5 little monkeys jumping on the bed,*

*One fell off and bumped his head,*

*Mummy called the doctor and the doctor said,*

*“No more monkeys jumping on the bed!”*

*4 little monkeys jumping on the bed ...*

Discuss what's happening e.g. one monkey is taken away each time.

## In the Kitchen / At the Shop

- Addition - Gather an item e.g. 4 potatoes, put them in a bowl, pot, basket, bag... Say, “I have four potatoes and I need two more.” Ask your child to add more. Say, “How many now? How many altogether?” Ask your child use their counting skills to answer the question. Discuss what happened e.g. we ended up with more potatoes than when we started, because we added two more. This can be repeated with different numbers and different items.
- Subtraction - Gather an item e.g. 9 tomatoes, put them in a bowl, pot, basket, bag.... Say, “I have 9 tomatoes, that's three too many.” Ask your child to take them away. Say, “How many now? How many are left?” Ask your child to use their counting skills to answer the question. Discuss what happened e.g. we ended up with less potatoes than when we started because we took three away. This can be repeated with different numbers and different items.

## Roll the Dice

Roll two dice. Work with your child to say the numbers shown then add or subtract them.



## Ipad Apps

- Number Quiz Free – the numbers tracing game.
- Maths Age 3-5 and 4-6, by onebillion.
- Year 1 Maths Learning Games, by Studypad Inc.

## Useful Websites

**[www.topmarks.co.uk](http://www.topmarks.co.uk)**

A website containing a wealth of interactive learning games.

**[www.crickweb.co.uk](http://www.crickweb.co.uk)**

A website containing a wealth of interactive learning games.

**[www.doorwayonline.org.uk](http://www.doorwayonline.org.uk)**

A website containing interactive learning games, mostly pitched at early level.

**<http://www.primarygames.com/curriculum/math.htm>**

A website containing a wealth of interactive learning games.

**[www.youtube.co.uk](http://www.youtube.co.uk)**

A fantastic resource for number songs and video clips.

## Glossary of Terms

Digit	= the numerals 0 - 9, which are used to form numbers.
Numeral	= a number.
Number Names	= a numeral in word form e.g. four, six, nine...
Formation	= the way in which a number or letter is written.
Ordinal Number	= a number used to put things in sequence e.g. 1st, 2nd, 3rd, 4th...