# Counting

Counting is one of the first experiences of maths for young children.

Learning to say numbers often begins with a favourite song or rhyme and the repetition of the number names. Children will often say the numbers before they visually recognise and identify individual numbers.

# Here are some activities and tips to engage your child with counting:

- » Listen for the counting sequence in these songs and rhymes, which can all be found on www.youtube.com:
  - Five Little Ducks
  - Ten in the Bed
  - 1, 2, 3, 4, 5, Once I Caught a Fish Alive
  - Ten Green Bottles
  - Five Little Monkeys
  - 1, 2, Buckle My Shoe
- » Children will begin by counting all objects in a group, for example fingers and toes, the buttons on their clothes, steps to the house, or their toys.
- » As children move on to counting a set of objects, they begin to link each object with one number. In the beginning, encourage your child to touch each object as they say the matching number.
- » When beginning to count a group of objects, children may need to arrange the objects in a line to help them count. Later they will be able to start counting from any object without arranging the objects.

» Once your child is confident, use different numbers as the starting point for practising counting. For example, start counting from 6 or 10. Ask your child to count forwards and backwards. Ask what number comes before, or what number comes after, a given number.

## Counting everyday

## You can incorporate counting into everyday activities such as:

- » Cut fruit into six pieces and ask your child to count the pieces.
- » Count the pieces of toast you cooked at breakfast.
- » Add the total number of cutlery items at the table.
- » Count the number of people travelling in the car or on the bus.
- » Count the number of houses as you walk along the street.
- » Count how many steps it takes to walk from the kitchen to the bathroom.
- » Practise counting when grocery shopping with your child (for example, counting the number of apples you put into the bag).
- » Encourage your child to talk about the number of things in the pictures they draw.

# Hunting for numbers

Number hunts are a fun and engaging activity for your child. Ask your child to find numbers around you. Look at and say the numbers on car number plates, signs, calendars, newspapers, shopping catalogues, speed signs, and houses.



## Using playing cards

Playing with cards is always a fun activity, particularly on a rainy day or on holidays.

#### You can:

- » Play matching number games like 'Snap' with playing cards.
- » Order the numbers on the cards from smallest to largest, or largest to smallest.

# Playing shop

Playing shop helps ground your child's maths learning in the real world while also developing their social skills. One way to play shop is to create a mini-shop at home.

### Here are a few tips and activities:

- » Collect food and grocery items and label them with prices written on sticky notes, or prices cut out of shopping catalogues.
- » Talk about how we pay for items using coins, notes and cards.
- » Make paper money or use play money to buy and sell goods from the mini-shop.
- » Collect old receipts or price tags and use them in the minishop.
- Notice the features of different coins, including their shapes and the animals and people shown. Discuss the differences.
  Create coin rubbings with pencils and paper.
- » Encourage your child to order food items by height (tallest to the shortest) or by cost (least expensive to most expensive).
- Introduce kitchen scales to the mini-shop to weigh foods, such as a box of tea bags or a bag of rice, and order items by weight.

## Understanding fractions

Fractions is a maths topic that is very relevant to everyday life. We use our knowledge of fractions to solve problems and make decisions all the time.

Support your child by using mathematical language to talk about fractions.

Here are some maths language terms your child uses at school:

**Fraction** – any part of a whole, a group or a number (for example,  $\frac{3}{8}$ )

**Numerator** – showing the number of parts of the whole (for example, in the fraction  $\frac{3}{8}$ , the numerator is 3)

**Denominator** – shows how many equal parts the whole is divided into (for example, in the fraction <sup>3</sup>/<sub>8</sub>, the denominator is 8)

**Proper fraction** – when the value of the numerator is less than the denominator (for example,  $\frac{3}{8}$ )

Improper fraction – when the numerator is greater than or equal to the denominator (for example,  $\frac{5}{3}$ )

**Equivalent fraction** – fractions that have the same value or amount (for example,  $\frac{2}{3} = \frac{4}{6}$ )

Mixed numbers – a whole number and a fraction (for example, 1½)

Children begin by learning that there are many numbers between whole numbers. A number line is an effective model to help your child understand this:

0	3⁄8	5/8	1
4			->

Your child also begins to develop an understanding of the relationship between fractions, decimals, ratios and percentage.

**Decimals** – a fraction that is made by dividing a whole into ten equal parts (tenths) or one hundred equal parts (hundredths). For example, 75 red pens of 100 total pens can be rewritten as 0.75 or .75

**Ratio** – a comparison of two or more amounts. For example, in a fruit bowl there are 3 apples and 4 pears. This ratio of apples to pears is represented as 3:4.

**Percentage** – is the number of parts out of 100. For example, in a collection of 100 buttons, 75 are red. This can be represented as 75 per cent or 75%.

Talk positively about how you use fractions in everyday life. Making models of fractions for your child will support their understanding of fractions.

## Try some of these ideas by making use of everyday objects:

- » Can you show me halves and quarters as you cut the orange?
- Can you cut up the apple to make six equal pieces? What fraction of the whole apple is one piece? Four pieces? How else could you say that?
- » What percentage of the glass is filled with water? What is the ratio of water to air in the glass?
- » How do the hands on the clock face show the time quarter past? Why do we use the word 'quarter' when telling the time?
- » If you fold a towel three times equally, what fraction does it show?

