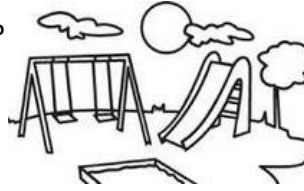


### In the park:

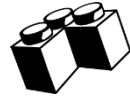
- Let's run five steps and walk five steps. Let's walk ten and hop two.
- Are the plants arranged in rows?
- Are they in a pattern: pink, red, pink, red?
- How many swings are full?
- Is there room for us?



### Toys and Play

#### Construction toys, building bricks

- Which tower is the tallest? Shortest?
- How many bricks make the tower?
- Which shaped bricks fit together?



#### Dolls and teddies:

- Which clothes do they need today?
- Will this coat fit teddy? Is it too big?
- Are all the buttons on teddy's coat done up?



#### Toy vehicles:

- Is the train fast or slow?
- Can you design a new train track?
- Will the train go round the bend safely? Is the track straight or curvy?
- Can you build a bridge to go over the track?



#### Garden

- Plant seeds to develop an understanding of the passage of time and life cycles.
- Measure the plants, compare tall/short plants.
- Talk about seasons, plant different things at different times of the year to compare colours, flowers, smells.



#### Songs, stories and games

- See Flagg song booklets
- Stories such as the Three Little Pigs, Three Billy Goats Gruff will help to understand the conservation of number.
- Jigsaws help with shape and space (spatial skills).
- Games such as snap, dominoes, ludo, snakes and ladders and other dice games, orchard toys games eg Incy Wincy for 1 to 1 correspondence.
- Flashcards, number magnets and foam numbers: recognition and ordering

# DEVELOPING MATHS SKILLS IN THE EARLY YEARS

Play is the natural way in which children learn. They use play in order to make sense of something new. Maths is everywhere in the home and in the environment. With the support of parents, children can grasp many mathematical concepts through their play. Children need to:

- Know and understand early maths language of measurement, shapes, space, position, numbers, order and patterns
- Begin to understand positional words: eg in, on, under, in between
- Show an awareness of time: eg sequencing the day
- Be aware of shapes in their environment
- Know the sequence of numbers
- Be aware of 1:1 correspondence (saying one number name for each item)
- Learn number rhymes and songs, see songsheets
- Be aware of conservation of number
- Recognise the numbers and put them in the right order

When we say a child knows their numbers what we often mean is that they can recite the names of the numbers in ascending order. This is a useful pre-counting skill but it means very little in itself. Children need to understand what the number system really means and they can be helped to do this through play.

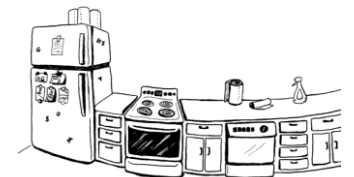
One of the first things they have to learn about is conservation, that 3 is always 3 no matter how it is arranged or presented, whether it is the number 3, 3 bricks, 3 buttons on a coat or 3 Billy Goat's Gruff. Before a child can understand that numbers can represent things which cannot be seen (3 years old, 3 miles), they need to handle real objects and have a chance to count them.

There are many ways you bring maths into everyday life:

### In the kitchen

#### Exploring cupboards:

- What goes in here?
- Where do the saucepans go?
- What shapes can you see in the cupboards?



### Stacking pots and pans:

- Which is the biggest? Heaviest?
- Which one goes at the bottom?



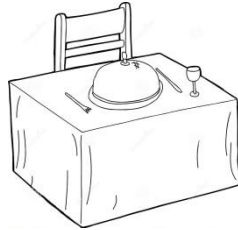
### Cooking and baking: using jugs, cups, spoons for measuring:

- Which one is full, which one is empty?
- Half-full?
- How many cupfuls?
- What shape is the tin?
- How many grams/ounces?
- Is this heavy or light?
- How many eggs do we need?
- How long does it go in the oven for? - use a timer, look at the clock.



### At the table:

- How many knives do we need?
- Count them with me.
- How many more do we need?
- Do we have too many?
- Do we have enough?
- How many big plates are there?
- What colour are they?
- What shape are they?
- How many pieces shall we cut the cake into?
- How many pieces do we need?
- Let's cut the toast/apple in half, we'll share it.



### Daily Routines

#### Breakfast time and bed time:

- Is it light?
- Is it time to get up?
- It's 7 o'clock.
- I need to put my clothes on in the right order.
- Then we have breakfast, what are we doing next?
- We go swimming on Fridays.
- Let's count the stairs as we go to bed.
- Which clothes do we take off first?
- What do we take off next?



- Let's count our fingers, toes.
- I need to put my pyjamas on –first one leg (or left leg) then the other.
- Now it's time for a story.

### Bathtime:

- Let's play floating and sinking.
- Can you make little splash?
- How far does the water go?
- What if you make a big splash?
- Let's brush our teeth: up and down.
- The towel is too small. This towel is big enough.
- Will this float?
- Can you blow big bubbles?
- This bottle of shampoo is empty.
- Which bottle holds more water?



### Doing the laundry:

- The washing is heavy when it is wet and lighter when dry.
- Sort the laundry into different colours.
- These socks are long and these are shorter.
- Match the socks into pairs.
- Who does this big shirt belong to?



### Out and about

#### Looking at houses:

- How many doors? How many windows?
- Is there a square window? Is there a round window?
- What other shapes can you see?
- Does the house have a number?



#### At the shops:

- Do we want a big box of cereal or a small one?
- Are they on the top, middle or bottom shelf?
- They are next to the cheerios.
- We need 5 apples, can you help me count them?
- Is this heavy or light?
- Shall we go to the wide check out or the narrow check out?