

# **Primary Mathematics Toolkit - Support material**

## Number: Uses of number - Suggestions for teaching

#### **FOSTERING PRODUCTIVE DISPOSITION**



- Highlight for children how they and their families use number in various ways in everyday life for labelling and identifying (e.g., house numbers, page numbers, jersey numbers), for describing quantities or amounts (e.g., two feet, 100 points, five dolls), for describing order or positions (e.g., first place, step 4, the third floor) and for measuring (e.g., 1kg flour, 2 minutes, 5km).
- Provide opportunities for children to engage with hands-on activities and manipulatives like blocks, counters, household items, etc. in their exploration of uses of number.
- Connect uses of number to children's interests and hobbies, e.g., explore number in sports, music, stories, games, nature, etc.

#### **ENCOURAGING PLAYFULNESS WITH MATHEMATICS**

- Read or encourage children to create maths-themed stories or comics and incorporate numbers into storytelling to provide a fun context for learning about numbers.
- Explore the use of number in music, e.g., teach children about rhythm, beats, and patterns in music notation, encourage them to create their own musical compositions, and incorporate songs and nursery rhymes that feature various uses of number.



- Set up exploration stations with various resources that connect with number such as playing cards, counters, dice, measuring jugs, rulers, calendars, etc. and allow the children to freely explore and play with these tools to explore and discuss number.
- Incorporate games that feature numbers into Maths lessons and throughout the day, e.g., *board games and card games*, *sequencing games*, *hopscotch*.

#### **USING COGNITIVELY CHALLENGING TASKS**



- Promote exploration of uses of number in artistic and/or dramatic contexts, e.g., reenact the Three Little Pigs, highlighting how number was used throughout.
- Pose fun and collaborative open-ended problems involving numbers, e.g., how many elephants would fit into the classroom?, put these animals in order according to how suitable would be as a pet and allow time for children/groups to present and justify their solutions.
- Take Maths outside the classroom and engage children in indoor and outdoor trails or activities that involve numbers, e.g., count the number of steps it takes to walk from A to B, search for Room 7, wave at the third person you meet on the school corridor.

#### **EMPHASISING MATHEMATICAL MODELING**

- Use experiences such as visiting the shop (real or play) to support modelling, e.g., find different ways of representing €5 to pay for a toy.
- Support children to demonstrate and present quantities and measures through practical activities, e.g., organise and lay out 100g flour, 4 eggs, etc. for a recipe.
- Involve children in daily routines that involve various uses of numbers, e.g., grouping themselves for games, lining up
  in order for break-times, checking 'how many' of an item are needed for an activity and distributing accordingly.



### **PROMOTING MATHS TALK**



- Introduce a "Number of the Day" where the children discuss different uses of that number, e.g., 5 can describe a person's age, the number of fingers on a hand, a date in the calendar.
- Incorporate whole class or small group 'maths talks' where children can share their thoughts and ideas about the various uses of numbers, and provide prompts to support this discussion, e.g., include images of a zoo with a variety of animals, staff and visitors, a souvenir stand with prices, opening hours, queues, etc.
- Use posters, photographs, graphs and timetables as stimuli for children to create and share number stories that illustrate different real-life situations where numbers are used, e.g., examine and identify the numbers on a bus timetable and what they represent (the date, hours, minutes, labels of buses, order of stations/stops).