

NCCA Primary Mathematics Toolkit – Support material

Number: Numeration and counting - Suggestions for learning at home

Why learning about numeration and counting is important

Numeration and counting are fundamental mathematical skills. When learning in this area, children develop strategies that will help them in their counting. For example, counting forwards and backwards, skip counting, subitising (quickly determining how many items are in a small set without the need to count), knowing the numbers before and after a given number without the need to start from one, and so on. Encouraging your child to count and use money in shops and online can support their ability to navigate mathematical challenges with confidence. Engaging your child in counting activities also nurtures problem-solving and reasoning abilities. These skills form the building blocks for deeper learning, providing a solid foundation for your child's mathematical learning journey.



IDEAS TO SUPPORT LEARNING

- Seize opportunities to count with your child in everyday situations, e.g., count the number of plates, cups, etc. needed to set the table, count coins to see if there is enough to buy a treat, count the pieces of a puzzle when tidying up to ensure nothing is missing.
- Before grocery shopping, ask your child to help you to write a list of what is needed, including quantities. During the shopping trip, support your child in estimating the final bill. Afterwards, review and discuss the receipt.
- Listen to nursery rhymes and popular songs that support counting, e.g., One, Two, Buckle My Shoe, Five Little Monkeys, Count on Me.
- Set up a Counting Scavenger Hunt by giving your child a list of items to find, e.g., five blue items, ten soft items, etc.
- Explore the 'sound of numbers' by dropping cubes into a tin for silent counting.
- Encourage subitising skills, e.g., quickly show your child a card, dice, domino, etc. and encourage them to tell you 'how many' they saw.
- Challenge your child to guess a 'secret number' by asking questions about its properties, e.g., is it less than 5? Is it a 2-digit number? Is it between 20 and 30?
- Talk to your child about approaches to mental calculations as they arise, e.g., what did you do in your head to add 35 and 37? I know that 35 and 35 makes 70, and then I added two more.



BOOKS

- Ten Apples Up On Top!, Dr. Seuss, 4+ years
- Have You Seen My Dragon?, Steve Light, 4+ years
- One is a Snail, Ten is a Crab: A Counting by Feet Book, April Pulley Sayre and Jeff Sayre, 4+
- 1, 2, 3 to the Zoo, Eric Carle, 4+ years
- Leaping Lizards, Stuart J. Murphy, 4+ years
- Double the Ducks, Stuart J. Murphy, 5+ years
- More or Less, Stuart J. Murphy, 6+ years

*Your local library provides a wide range of free books and resources which support in developing children's mathematical learning

GAMES / ACTIVITIES

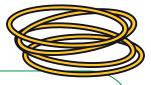
- Ball games: Pass a ball forward and back and count aloud, using different sequences like counting forwards and backwards, counting in halves, ones, twos, and fives. The goal is to see how high you can count in a set time without mistakes.
- · Estimation Challenges: Engage in friendly competition with your child to estimate sets of everyday objects like jars of marbles, piles of books, etc. Encourage children to make initial estimates and then count the actual number to compare.
- Classic games that involve numeration and counting such as Connect 4, Monopoly, Snap, Go Fish, Scrabble and Junior Scrabble, etc.
- Puzzles such as join the dots or spot the difference.



LEARNING ONLINE

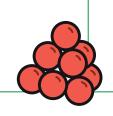
- Help My Kid Learn www.helpmykidlearn.ie
- Scoilnet www.scoilnet.ie/primary/theme-pages/mathematics/
- Maths Week Ireland Parents' Zone www.mathsweek.ie
- Maths Eyes https://haveyougotmathseyes.com/

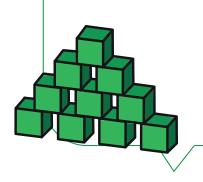
Useful terms to search online: numeration, counting, number, learning, primary, maths, quantities, grouping, estimating, counting forwards, counting backwards, games, activities



ARTS AND CRAFTS

- Counting Collage: Provide magazines, newspapers, or printed images. Children
 to cut out pictures of objects and arrange them into sets based on a specific
 number. They can glue the pictures onto a poster board or paper and label each
 set with the corresponding numeral.
- Counting Bracelets: Give your child beads and string to make bracelets. Count the beads as they string them and create bracelets with a specific number of beads.
- Counting Storybooks: Encourage your child to create their own counting storybooks by illustrating a story with a specific number of characters, objects, or events on each page. They can write the corresponding number next to each illustration.
- Cheerio Octopus: Adding cheerios to each tentacle of an octopus.







YOUR OWN IDEAS

