Communicating: Exploring numeracy and early mathematical understandings



Learning possibilities for counting

Rote counting

This is when children memorise the name of numerals and can recite them, for example: as they walk up the stairs, count some toys, count the number of grapes in their bowl. Young children may often leave out numbers or get the counting order confused.

Remember, like any other aspect of your child/children's development accurate counting skills take time and practice to develop.

One-to-one correspondence

This is when children count each object separately and use a number name for each object. Young children may often repeat a number name, miss an object or count the same object twice.

Resources

'Five little monkeys jumping on the bed' (action rhyme)
Five little monkeys jumping on the bed,
One fell off and bumped his head.
Took him to the doctor and the doctor said,
'No more monkeys jumping on the bed!'

Four little monkeys jumping on the bed ... (continue until there are no monkeys left)

Video

Let's count goats! https://www.youtube.com/watch?v=wL3pCMXUO18

Play ideas to try

- Invite your child/children to play 'Five little monkeys jumping on the bed'. They can choose to be the monkeys
 or use some favourite soft toys. As you sing the rhyme together ask how many monkeys are left after each
 verse, 'Oh-oh Isla, how many are left now? We had three and one fell off. That's right, there are two left. Two
 little moneys jumping on the bed...'
- Together with your child/children, draw a hop-scotch with chalk on a concrete or paved area. Invite your child/children to hop or jump with two feet between the squares. Support them to count forwards and backwards as they land on the numbers.
- Make a sorting experience from an empty muffin tray and a range of household items, such as beads, buttons, shells, seedpods, small plastic bricks, pebbles, leaves, feathers and marbles. Invite your child/children to count and sort the items in different ways. Encourage them to talk about how they have sorted their items, 'Tell me about your sorting I can see you have put the buttons, beads and the marbles together... Yes, they are all round.'
- There are many ways to sort, for example size, shape, colour, texture, weight, purpose, likes and dislikes. It's
 important to let your child/children make their own choices about sorting and then tell you about their decisionmaking to encourage creative thinking and problem-solving.

Text: Fox, M. and Thomas, J. 2010, Let's count goats! Beach Lane Books, New York.

Engage

- Step 1. If you have this book at home, encourage your child/children to predict what the story is about from the cover. If not use the suggested video link in the resources box and watch the story together.
- Step 2. Read/watch the story.
- Step 3. Here are some questions to ask your child/children about the story.
 - 1. What is the winter goat throwing? (snowball)
 - 2. Tell me what the seaside goat is doing? (biting the beach umbrellas)
 - 3. What do you think caused the smoke?
 - 4. Why is there nothing left to mow for the summer goat? (he ate all the grass)

Play ideas to try

- Make some patty cakes with your child/children. Cooking provides many opportunities to use mathematical language, for example measuring (we will need half a cup of sugar), counting (there are twelve patty pans in this tray) and capacity (fill the cup measure up to the top). Talk about how the ingredients change as they are mixed together, and again when they are baked, to support your child's scientific learning. Invite your child/children to decorate the patty cakes or add candles for a pretend birthday party.
- Invite your child/children to play an imaginative game of fire fighters. Encourage them consider what props
 they may need for their game and help to locate these items, for example 'A hose. Hmm, what could you use
 for a hose? Yes, a cardboard tube will be great. I think there is one in the kitchen.' Let your child/children
 identify roles for themselves and others in the game, and to set the play storyline joining in to support as
 necessary.
- Recall and share the traditional story 'Three billygoats gruff'. You can retell it from memory, or by reading it or viewing/listening to it online. Model using ordinal numbers (first, second, third) to describe the three billygoats. Invite your child/children to dramatise the story through small world play using toy animals, blocks and fabric as props or playdough. Encourage your child/children to take turns in the roles of billygoats and troll.

