Communicating: Exploring numeracy and early mathematical understandings



Learning possibilities for counting

Rote counting

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

When children count each object separately and assign a counting word to the object. Young children may often repeat a counting name, miss an object or count the same object twice.

Play ideas to try

Encourage your child/children to notice things that come in groups around the house or in the garden, for example two gloves, four seedlings, five muesli bars, six buns, twelve eggs. Invite your child/children to photograph or draw pictures of what they find to make a counting book. Your child/children might like to share their book with other members of the family.

Resources

'Johnny works with one hammer' (action song)

Johnny works with one hammer (children hammer with one hand)

One hammer, one hammer

Johnny works with one hammer,

Johnny works with two.

Johnny works with two hammers ... (children hammer with two hands)

Johnny works with three hammers ... (children hammer with two hands and one leg)

Johnny works with four hammers ... (children hammer with both hands and both legs)

Johnny works with five hammers (children hammer with both hands, both legs and head)

Five hammers, five hammers

Johnny works with five hammers

Johnny's work is DONE!

Video

Olivia counts

https://www.youtube.com/watch?v=R8uoFydZyOI

- Play a game with your child/children to make and count with their favourite toys. You will need a dice or number cards (single digit numbers written on squares of paper), and your child/children's choice of blocks, construction bricks, threading beads and string or other toys (at least 10). Invite your child/children to choose a number card or roll the dice. Support them to say the number out loud then make something with that number of items, for example a stack of blocks, a brick tower, a string of beads or a pile of teddies. Support your child to check they have the right number by counting their items, 'Do you have the right amount of bricks? Let's count them and see.', 'Almost there! You have six beads, so how could you make it seven?'
- Invite your child/children to help make a salad or prepare fruit or vegetables for a meal. Encourage them to count whole vegetables such as snowpeas or cherry tomatoes as they add them to a salad, or the number of pieces a carrot is cut into for a snack. Try counting the seeds on a piece of pumpkin and save them for planting with the family. Look for patterns in fruit and vegetables, for example 'Look at the way the seeds are in the apple it's like a star. How many are there?'



Text: Falconer, I. 2001, Olivia Counts, Simon & Schuster, 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. Point to Olivia hammering on page 10 of the story, What is Olivia using here? (hammer)
 - 2. Which toy would you like to play with?
 - 3. If Olivia choose was going to the beach what would she need to take? (sunglasses, cap)
 - 4. Point to Olivia in the monster costume. I wonder Why Olivia is wearing a monster costume?

Play ideas to try

- When playing outside, invite your child/children to think of different ways to use a ball bouncing, catching, and/or rolling it to another person, kicking it into a goal, or tossing it into a bucket. Encourage your child/children to count how many times they manage each skill, for example 'Great counting Maisy, you did five bounces. I wonder how many Harry will do now.'
- Play a dress up game with your child/children using dice and a range of clothing for different purposes (e.g. socks, gloves, scarf, shirt, dress, high-vis vest, long trousers, hat, boots,). Invite your child/children to roll the dice, identify number they have rolled, and then put on that many items of clothing, counting as they go. Take turns at the game and take photos of family members dressed in funny combinations of clothes.
- Gather some timber off cuts, nails (with wide heads if possible) and items to attach (thin pieces of timber, plastic milk bottle lids, cardboard) onto a sturdy outdoor table or workbench. Invite your child/children to watch as you demonstrate how to use a hammer and nails to join two items together, paying special attention to safety aspects. Practise together and then encourage your child/children have a turn themselves. Support them to identify and count items needed for their construction, for example, 'How many bottle tops will you need to make the wheels, Jake? Yes, four like on my car. And how many nails will you need to attach them?'

