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

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

 Play a game of 'Ten in the bed'. Invite your child/children to gather ten favourite teddies or dolls and line them up in a bed or on the couch or floor. Encourage your child/children to count the teddies and dolls to be sure they have the right number.

Resources

'Ten in the bed' (song)
There were ten in the bed
And the little one said,
"Roll over! Roll over!"
So they all rolled over and
One fell out
There were nine in the bed
And the little one said,
"Roll over! Roll over!"
So they all rolled over and
One fell out
Continue singing until there is one in the bed

Story

10 little dinosaurs https://www.youtube.com/watch?v=br6i4xNz03g Song Dino Stomp https://www.youtube.com/watch?v=kuh49qCrMHU

Begin by singing the first verse of 'Ten in the bed' Invite your child/children to count how many teddies and dolls are left before continuing with the next verse and encourage them Pose a problem solving question, 'There were seven and one fell out, how many do you think are left now David? Let's count and see if you are right. Well done! You worked it out.' Extend the game by inviting the whole family to play a real life game of "Ten in the bed".

- Invite your child/children to play a game of rocket ships. Crouch down low and count backwards slowly from 10 to 0, encouraging your child/children to join in then shout 'blast off!' Zoom around the garden/room like rockets and land on another planet. Ask your child/children where they have landed (it could be a real or imaginary place) and encourage them to describe it, 'Wow! You have landed on the moon Michael! What can you see? Is it cold there?' Invite your child/children to play again and blast off to another planet.
- Gather a range of materials for threading (buttons, beads, plastic bottle caps or pieces of card with a hole punched in them, patty cake papers) and something to thread onto (shoelace, pipe cleaner, fishing wire, curling ribbon, wool). If you wind some sticky tape around the top of the curling ribbon or wool it will make threading easier for your child/children. Put a large knot or bead/button tied on the end to stop your child's threaded items sliding off. Invite your child/children to thread items to make a necklace, bracelet or decoration. Support your child/children to count the items they have threaded, 'How many beads have you threaded now? That's right, there are five just like you you are five.'



Text: Brownlow, M & Rickerty, S. 2015, 10 Little Dinosaurs, Hachette Children's Group, London

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 did the dinosaurs hatch from? (eggs)
 - 2. Where did the ten little dinosaurs go stomping? (in the mud)
 - 3. How do you think the one little dinosaur feels when he is the last one left? (scared)
 - 4. What do you think the mummy dinosaur said to the baby dinosaurs when she found them all?

Play ideas to try

- Invite your child/children to create a dinosaur cave. Build a cubby using sheets, blankets or table cloths over furniture. Add cushions for rocks, blue fabric as water, scrunched up paper for a fire or lava, and cardboard tubes with plastic bags in the end for plants. Invite your child/children to add soft toys and plastic animals and to pretend to be dinosaurs living in the cave. Find opportunities to include counting in the imaginative dinosaur play, for example 'Let's find some food for the stegosaurus babies. How many are there? Okay, so can you count out six leaves for them please?', 'This cave is getting very full of dinosaurs! How many are in here now?', 'I think four dinosaurs should go out to hunt for food'.
- Make sprouted dinosaur eggs. Wash and collect empty egg shells, an egg carton and some seeds to sprout from the pantry (sunflower seeds, dry beans, mustard seeds, pumpkin seeds,) or garden (nasturtiums, marigolds). Support your child/children to count the spaces in the egg carton, then place an empty egg shells in each space, counting as they go. If you don't have enough egg shells, notice the empty spaces, 'We counted 12 spaces in the egg carton and you have put in nine egg shells. Can you see how many empty spaces are left? That's right, there are three.' Encourage your child/children to put cotton wool in the egg shell and place one seed in each. Provide a spray bottle, if available, for your child/children to water the seeds. Leave them in a sunny place and encourage your child/children to water them daily and draw pictures of the changes they observe. Count the seeds that sprout each day.
- Talk with your children about what kind of animals hatch from eggs (known as 'oviparous' animals such as dinosaurs, birds, frogs, reptiles, insects, sea creatures), drawing on their knowledge. Encourage your child/children to draw all the egg laying creatures that they can think of (or make with playdough) then support your child/children to count them. Use the song below to play a game where your child/children pretend to be one of the animals hatching from an egg. Invite your child/children to crouch down like an egg while you sing. When you get to 'out jumped a...', encourage your child to jump up and say the name of an animal, then run/fly/slither/crawl away. Encourage your child/children to join in as they learn the words to the song.

One little egg was lying on the ground, all by itself with no one around. It began to wobble and began to sway, out jumped a.... (animal name)... and went away. (sung to the tune of 'Five current buns')

