Communicating: Exploring numeracy and early mathematical understandings



Learning possibilities for position and direction

Children learn about location and direction from everyday experiences, first by experimenting with ways to move their bodies, to navigate furniture and avoid falls. As they develop physical knowledge of being in a space children begin to see relationships between people and other objects or events. For example, a child may begin to make judgments, such as whether a toy car will fit into a small box or whether they need a larger box.

As your child/children learn about location and direction it's important to introduce spatial language including:

 Position: over, under, above, below, top, bottom, side, on, in, between, outside, inside, around, in front, behind, front, back, before, after, beside, next to, opposite, apart, middle, edge, corner.

Resources

Hokey Pokey (song)

You put your left foot in

You put your left foot out

You put your left foot in

And you shake it all about.

You do the hokey pokey

And you turn around

That's what it's all about.

(repeat using different body parts)

Video

The pear in the pear tree https://www.youtube.com/watch?v=b2PjKS1TZ5k

- **Direction:** left, right, up, down, forwards, backwards, sideways, across, along, through, close, far, near, to, from, towards, away from.
- **Comparison:** wide, wider, widest, loud, louder, loudest, quiet, quieter, quietest, empty, full, half full, same, overflowing.
- Movement: slide, roll, stretch, bend.

Play ideas to try

- Do the Hokey Pokey and invite the whole family to join in. You can help you child/children to differentiate left and right by writing the letter L on the back of their left hand. Encourage your child/children to think of a different body part for each verse (hand, arm, leg, bottom, head, etc.), or innovate on the song by changing some action words, such as *in* and *out* to *up* and *down*, or *turn around* to *jump up and down*.
- Design an obstacle course with your child/children. Encourage your child/children to describe how they move
 through each part of the obstacle course, for example under the table, over the chair, between the cushions,
 through the door. Invite your child/children to draw picture signs to place on each part of the obstacle course
 so others will know what to do.
- Invite your child/children to try weaving. Gather materials such as strips
 of fabric, ribbon or lengths of plastic cut from grocery bags to weave. For
 the weaving frame try cardboard with slots cut in it, a plastic garden
 trellis, the spokes of a bike wheel, a laundry basket or a fence.
 Encourage your child/children to observe as you demonstrate how to
 weave the material, using language such as in, out, under, over and



through, then invite them to have a go. As your child/children become confident with the process, they can try weaving in different directions or patterns, such as through every second hole.



Text: Allen, P. 2000, The Pear in a pear tree, Puffin, Hawthorne, VIC.

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 John and Jane see up in the tree? (pear)
 - 2. How did they try to get the pear? (holding Jane up, climbing a ladder)
 - 3. How do you think the bird felt in the end?
 - 4. Why did the Jane land in the pond?

Play ideas to try

- Together with your child/children, draw the characters on some paper and/or gather together some props to retell the story of *The pear in the pear tree*. Involve your child/children in drawing, cutting out and decorating the paper shapes to make Jane, John, the bird, the pear tree, a pear and a ladder. The paper cut-outs will stick to a board or the fridge using blu-tac or they can be used on a flat surface such as a table. Place the story book nearby for your child/children to look at as they retell the story with the characters and props. Encourage them to innovate on the story to create a different adventure or a new ending.
- Invite your child/children to build a tree house at the base of a tree. Together with your child/children, gather long sticks, palm fronds, or items from around the house, and choose a suitable tree (you can use chairs or a small table if you do not have a suitable tree in your yard). Support your child/children to plan and build their tree house, and solve problems as they arise. Use the language of location as you talk with your child/children about their treehouse, 'I like how you leaned the big branches against the tree trunk and put the palm fronds over them to make the walls. Can you fit inside? Look you can crawl right through!'
- Encourage your child/children to be involved in taking out or putting away items in different locations. For example, invite your child/children to put away their clean clothes, using the language of location, 'That's right, undies go in the top draw. Can you please put your pyjamas in the middle draw?' Encourage your child to problem solve when it comes to accessing different locations, 'Hmm, the cups are a bit high, aren't they. What could you do to reach them? Great idea I will hold the stool while you stand on it. Can you reach the cups now?'

