Communicating: Exploring numeracy and early mathematical understandings



Learning possibilities for location 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.
- **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

Invite your child/children to try sewing using open fabric such as hessian, insect netting or tulle; a blunt-ended (bodkin) needle; and a length of wool with a bead or piece of dried pasta tied to the end to prevent it from being pulled out of the fabric. Model how to make a stitch by pushing the needle through the fabric, gently pulling the wool firm, then pushing the needle back through to the front of the fabric again. Repeat one or two stitches so your child/children can see the pattern. Encourage and support your child/children to independently have a go, using words such as in, out and through, up, gently pull, start and end.

- Try some simple yoga animal poses (see the link in the resource box). Together with your child/children, look at the picture and read aloud the description. Encourage your child/children to make the pose, using words to describe the shape and location of their body parts and the feeling it makes in their muscles, for example, 'Stand with your feet wide apart, that's right. Now can you bend over so your hands reach the ground? That's it. Can you feel a stretch in the back of your legs?' Hold each pose for a count of ten, encouraging your child/children to breathe slowly in and out to relax.
- 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 model how to use a hammer and nails to join two items together, paying special attention to safety. Invite your child/children to build and as they do, talk with them about the location (on top, beneath, between, edge, corner), direction (sideways, across, towards), comparison (bigger, wider, small) and movement (hit, roll, slide, twist) of their construction.

Resources

'Five green and speckled frogs' (action song)

https://www.youtube.com/watch?v=ziGG_L9C12o

Five green and speckled frogs,

Sat on a speckled log,

Eating some most delicious bugs,

'Yum, yum!'

One jumped into the pool,

Where it was nice and cool,

Then there are four green speckled frogs,

'Glub, glub!'

(repeat until there are no frogs left)

Video

'Pardon?' said the Giraffe

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

Yoga

Animal poses for kids

https://www.kidsyogastories.com/zoo-animals-yoga/

Song

Mr Frog

https://www.youtube.com/watch?v=61Uttgb4jEg

Leo the Lion

 $https://www.youtube.com/watch?v=TH2JsH3h_m8$

The Hippopotamus song

https://www.youtube.com/watch?v=GM2JYj3QAWY

The Elephant wobbles

https://www.youtube.com/watch?v=aUcg6tiFsYQ



Text: West, C. 1986, 'Pardon?' said the Giraffe, Walker Books, 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 sounds does a frog make? (croak, ribbit)
 - 2. What animal did the frog stand on first? (lion)
 - 3. What made the frog fall down? (the giraffe's sneeze)
 - 4. Why does the frog keep asking 'What's it like up there?'

Play ideas to try

- Invite your child/children to pretend to be the animals in the story. Talk together about what each of the animals looks like (a giraffe is very tall with a long, long neck that reaches high into the trees), how they move (a lion creeps quietly on all four paws then pounces!) and the sounds they make (an elephant goes brrrrrr brrrrr through its long nose). Encourage your child/children to use their whole body when pretending to be animals. The songs in the resource box provide more opportunities to sing, dance and move like the animals.
- Invite your child/children to create animal puppets with collage materials, such as socks, empty boxes (sultana, cereal, muesli bar), cardboard cylinders, fabric off cuts, ice block sticks, buttons, wool, coloured paper, pens and paint. Encourage your child/children to consider their design and select the materials they could use before commencing. It can be useful for them to draw their ideas and explain their thinking aloud. Once they are ready to build, support your child/children by modelling skills such as applying glue, cutting with scissor or tearing off sticky tape, but try to avoid the temptation to do it all for them. Once finished, invite your child to retell the story using their puppets.
- Play a game of Five green and speckled frogs. If you don't have five people, use some soft toys as frogs, or
 adjust the song to match the number of people. Encourage your child/children to choose a location and props
 to play, for example the couch as the log and a tablecloth spread on the floor as the pool. If your child/children
 are unfamiliar with the song, listen to it first (see the link in the resource box) then invite them to join in singing
 and being frogs when they are confident.

