Communicating: Exploring numeracy and early mathematical understandings



Learning possibilities for data

The beginning step in the process of learning about data is to recognise and identify the attributes of objects. Young children may already have some knowledge of the attributes of objects related to home life such as choosing favourite foods, tidying toys, selecting their favoured colour cups, and choosing clothes to wear. Learning to sort and categorise objects according to an attribute requires lots of hands on experiences where children can test out ideas, and sustained conversations that help to build children's knowledge and use of descriptive language.

Play ideas to try

Choose two games the whole family enjoys, such as Snakes and ladders and Chinese checkers. Pose the question 'How do we decide which game to play?' and introduce the idea of voting to your child/children.

Model writing the name of the games on a piece of paper. Support your child/children to ask each person which game they would prefer to play and make a mark next to that game. When everyone has voted, support your child/children to count the votes and make a simple inference, 'How many voted for Snakes and ladders? That's right, three. How about Chinese checkers? Yes, just one. So which one do you think more

Resources

'Five cheeky possums' (finger play) "Adapted from Five little monkeys"

Five cheeky possums sitting in a tree, (hold five fingers up on left hand)

Teasing Mr Dingo, "You can't catch me!" (wiggle fingers)

Along came Mr Dingo as quiet as can be, (creep right hand towards left hand)

And snapped that possum out of the tree! (right hand grabs a finger on left hand)

Four cheeky possums sitting in a tree... (hold up four fingers on left hand) (continue rhyme until there is one possum left)

One cheeky possum...
"Ha ha! Missed me!"

Video

Possum goes to school

https://www.youtube.com/watch?v=tCHm9gtR8Wc

Website

Brisbane's best recycling guide for households

https://www.brisbane.qld.gov.au/sites/default/files/20190619%20-%20Brisbanes%20Best%20Recycling%20Guide%20for%20Households%202019-20.pdf

Containers for change

https://www.containersforchange.com.au/

Redcycle

https://www.redcycle.net.au/

Recipe

Pikelets

https://www.taste.com.au/recipes/pikelets/598d3bcb-65b0-4948-b0f9-e9b2b7962341

people want to play? You're right, its Snakes and ladders... how could you tell? Yes, three is more than one.' Children often grasp the concept of voting quickly and enjoy applying it to many situations.

- Invite your child/children to plan a dance. Talk about different ways to move their body, such as jumping, wiggling, twisting, hopping and spinning. Encourage your child/children to draw symbols for these on separate pieces of paper and model writing the word below each symbol. Ask your child/children to choose a move and how many times to do it, for example two hops. Support them to record 2 on the hop page using dots, tally marks or writing the number 2. Repeat with the other moves until the dance is complete, for example, two hops, four twists, three spins, one wiggle and five jumps. Choose some favourite music and share the dance with the whole family.
- Encourage your child/children to become involved in sorting your household waste. Talk about the different
 types recyclable (metal, plastic, glass, cardboard, paper), compostable (food scraps, garden waste) and
 general waste. When waste is generated (e.g. preparing meals, unpacking groceries) encourage your
 child/children to identify the type of waste and decide where to put it. Investigate ways your family can be
 more sustainable:



- Take glass, plastic, aluminium and cardboard drink containers to a Containers for Change depot and get 10 cents for each (see the resource box for the website).
- Collect soft plastic wrappers, bags and cling wrap and take them to a Recycle collection point for recycling into playground furniture (see the resource box for the website).
- o Put other recyclables into the yellow top recycling bin.
- o Compost garden waste and food scraps.

Text: Carter, M. 1993, Possum goes to school, Childerset, Cairns

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 the possum make? (screech, screech)
 - 2. (look at the picture of the possum making footprints with paint) What has happened here?
 - 3. What things might be in the sports room?
 - 4. Why do you think they left the possum in the playground?

Play ideas to try

- Invite your child/children to engage in dramatic play about school. Provide props for their play such as dolls, a
 small table and chairs, books, writing/drawing materials, a small whiteboard and dress-up clothing. Encourage
 your child/children to direct the play, consider roles and work out ideas to solve problems as they happen.
 Encourage your child/children to enrich and extend their play by providing additional props, and joining in the
 play.
- Make a batch of pikelets with your child/children (see the recipe link in the resource box). Invite them to gather, measure and mix the ingredients. Talk about ingredients being wet (milk, egg) or dry (flour, sugar) and notice how they change into a runny batter when mixed, and a firm pikelet when cooked. Encourage your child/children to ask each family member what topping they would like on their pikelets and record it on paper, for example a yellow tick for butter and a red tick for jam. Support your child/children to make the pikelets using the data they have collected.
- Share the finger play *Five cheeky possums* with your child/children. Once they are familiar with the rhyme, invite your child/children to pretend to be the possums or dingo, or use soft toys. Encourage them to think of other Australian animals to use in the rhyme and different ways they could show this, for example five cheeky bandicoots (holding fingers like whiskers against their face) underneath a tree.

