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

This is when children count each object separately and use a number name for each object. Young children may often repeat a number name, miss an object or count the same object twice.

Play ideas to try

 Invite your child/children to draw some circles with chalk on a concrete or paved area and support them to write a number (less than 10) in each circle – it does not matter how many circles they choose to make. Encourage your child/children to have a treasure hunt around the

Resources

'Five little ducks' (finger rhyme)

Five little ducks went out one day (hold up five fingers)

Over the hills and far away (hold arm across body and tuck fingers behind shoulder on the opposite side of the body)

Mother Duck said, 'Quack, quack, quack, quack' (use other hand to make a Mother Duck beak; open and close hand to quack)

But only four little ducks came back. (bring first hand back to the front with four fingers showing)

(continue until no little ducks came back)

Poor Mother Duck went out one day,

Over the hills and far away,

Mother Duck said 'Quack, quack, quack, quack'

And all of those five little ducks came back.

Video

K. Baker's Quack and Count https://www.youtube.com/watch?v=qyFWbhR7MOA Song Six little ducks that I once knew https://www.youtube.com/watch?v=YGYatJXkP7Y

yard or in the house to find objects to match the number in each circle. They may choose different items, for example a pebble, a feather and a toy car to put in the 3 circle; or they may choose like items, such as three pebbles to put in the 3 circle, and four toy cars to put in the 4 circle. Encourage your child to talk about their collections to you, 'Tell me about what you have collected in this circle, Jemima. That was great counting. And you are right, a marble, a bottle top and a sticker do make three, and there is the number 3.'

Invite your child/children to help peg clothes on the washing line. Encourage them to count the pegs as they
use them or as they pass them to you if the line is too high to reach. If possible, make a lower line available.
Show your child/children how to manipulate the pegs and how to place the clothes over the line before using
the peg. Invite your child/children to experiment with hanging small items such as face washers, socks and
underpants, or dolls clothes. Encourage them to count the number of pegs they have used and the number of
items they have hung, and investigate questions such as 'Why do you think there are more pegs than clothes
on the line?'



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 animals are in the story? (ducklings)
 - 2. How many ducklings are there all together? (seven)
 - 3. Why do you think the ducklings flew up into the sky? (they have grown up/learnt to fly)
 - 4. What do you think the ducklings might do now that they have left the pond?

Play ideas to try

- Invite your child/children to create ducklings from materials at home. Gather items such as different sized empty boxes (sultana, cereal, muesli bar), cardboard cylinders, fabric off cuts, coloured/wrapping paper, cellophane, pencils, felt pens, glue, sticky tape, scissors, paint and craft supplies. Encourage your child/children to consider their design and select the materials they could use before they start. Encourage your child/children to draw their ideas and explain their thinking aloud. You can support this process by asking questions that help them to problem solve, for example, 'That would make a great beak Owen. What will you use to join it to the duckling's head?' Support your child/children in the making process by modelling skills how to apply glue, cut with scissors and tear off sticky tape. Once finished, offer to help find items, for example brown fabric for the mud and blue fabric for the pond. Invite your child to retell parts of the story or to create a new adventure for their duckling.
- Invite your child/children to help make duck biscuits. Choose a basic biscuit dough recipe that can be rolled
 and cut. Encourage your child/children to help gather ingredients by identifying images or familiar letters on
 the pack (F for flour, like in your name Fiona), or by recognising the look of the ingredient, 'Yes, that is the
 flour. You remembered what it looked like from when we made pizza.' Invite your child/children to help
 measure (using mathematical words like half, full, empty) and count ingredients (two teaspoons of ground
 ginger). Encourage your child/children to mix the ingredients and notice how they change as it forms a dough.
 Next, demonstrate how to roll and cut the dough Use a duck or Use an upturned cup or egg ring to cut out
 circles and let your child/children roll little legs for their duck. Invite your child/children to press sultanas, nuts,
 chocolate chips or other edible decorations into the top of each biscuit.
- Encourage your child/children to notice ducks or other birds that live in the local area. Sit together in the shade to quietly observe the birds and listen deeply to their sounds and other sounds in the environment. Take pencils/felt pens and paper on a clip board and invite your child/children to draw what they can hear and see, or take photos on a phone or other device. Support your child/children's observations by asking 'I wonder...' questions, 'I wonder what made that sound? There it is again, did you hear it?', 'I wonder where that bird lives?', 'I wonder where the birds go when it rains?'

Basic biscuit recipe

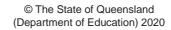
Ingredients



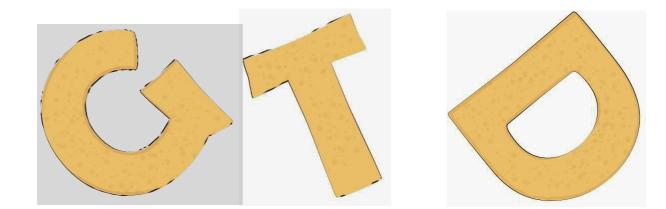










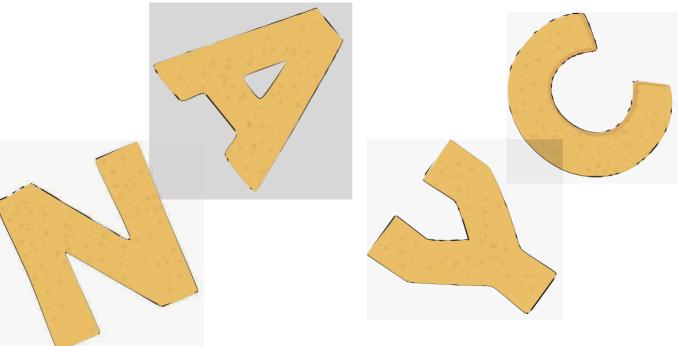


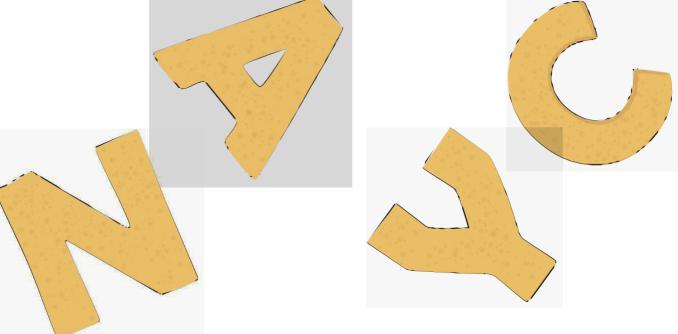


- When mix is light and fluffy, add egg and beat well. 2.
- Add sifted flour and cornflour and mix well. З.
- Divide the dough into 2 halves. Flatten each half into a round disc and **4**. wrap in baking paper.
- Let the mix rest in the fridge for 20 minutes. 5.
- Heat oven to 160°C. Line two trays with baking paper. 6.
- Roll discs between two sheets of baking paper until they are 3cm thick. 7.
- Use alphabet cutters and cut out biscuit dough. Place on trays and cook 8. for 15 minutes until lightly golden. Leave on the trays for 5 minutes, then transfer to a wire rack to cool.



Method





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