# Communicating: Exploring numeracy and early mathematical understandings

## Kindergarten

Learning possibilities



#### **Rote counting**

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 practise 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

 Make some playdough with your child/children. As they help to make the dough talk about mathematical concepts for example, adding more flour, 'Mmm the dough's a bit sticky I think we might need to add

#### 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

Mr. Benz Reading of Eric Carle's 10 Little Rubber Ducks https://www.youtube.com/watch?v=sKLDxilFFIA Eric Carle's 10 Little Rubber ducks http://www.youtube.com/watch?v=9VrqDbKkVRs

some more flour.' The recipe says we need X cup of oil, can you help me measure that please Katie.' 'Great job, can your pour that in please.'

- When playing with playdough, incorporate objects for counting, e.g. plastic numerals, milk bottle lids, ice block sticks, coloured matchsticks. Also use this experience as an opportunity to talk about the texture a, feel and smell of the dough, playing with lots of descriptive words for your child/children to hear. 'Ooh lovely dough it's squishy, squashy and I'm going to squeeze and squish it and roll it into a ball.' Encourage your child/children to talk about how they are using the dough, for example that might say, 'I'm making some little cakes for Casey's birthday. He's 5 so I'm going to make 5 cakes for him!'
- Play some throwing and scoring games outside:
  - Set up a plastic bucket, laundry basket, cardboard box or hoola hoop on the lawn and play a game where your child/children attempt to throw pegs into the container. Encourage them to count how many pegs went into the bucket. 'Can you believe that Sally, you got 5 pegs straight into the bucket' 'You are going to be 5 on your next birthday'. 'I wonder how many pegs daddy can get into the bucket?'
  - Try a game of skittles outside and see how many skittles your child/children knocks down as they bowl a ball. Encourage your child/children to count how many skittles fall down each time they have a turn.
- When it's time for a snack draw your child's attention to counting concepts in a conversational way.' Hey look at my orange it's got lots of seeds inside for us to count, that's 1,2,3,4. If I can find one more how many seeds will we have?



Text: Carle, E., 2005. 10 Little Rubber Ducks, Publisher, New York.

### 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. As you read/watch the story encourage your child to talk about what they notice on each page.

- Step 3. Here are some questions to ask your child/ children about the story.
  - 1. What noise did the rubber duck machine make? (chucked- chuck, chuck)
  - 2. What colours were used to paint the ducks? (red bills and blue eyes)
  - 3. How many ducks were packed into each box? (ten)
  - 4. What happened to the ducks when they were on the cargo ship?

#### Play ideas to try

- Add blue food dye and water to a plastic container with a plastic rubber duck for your child/children to use in their play.
- Talk about all the animals that appear in the story as the rubber ducks move across the sea.

The 1<sup>st</sup> rubber duck has a dolphin jump over it

The 2<sup>nd</sup> rubber duck has a seal bark at it

The 3<sup>rd</sup> rubber duck has a polar bear growl at it

The 4<sup>th</sup> rubber duck has a flamingo stare at it

The 5<sup>th</sup> rubber duck has a pelican chatter at it

The 6<sup>th</sup> rubber duck has a turtle glide past it

The 7<sup>th</sup> rubber duck has an octopus blink at it

The 8<sup>th</sup> rubber duck has a seagull screech at it

The 9<sup>th</sup> rubber duck has a whale sing to it

The 10<sup>th</sup> rubber duck meets a mother duck and her ducklings

- Encourage your child/children to act out the story as you tell it with them pretending to be all the animals, birds and sea creatures that feature in the story.
- Make a batch of finger paint to use outside on a child sized table, plastic tray or plastic sheet. As your child/children experiment with the finger paint invite them to think about different patterns that they can make with their hands in the paint. If your child/children are interested press a piece of paper into the paint and as you peel it back they will be able to see a copy of the patterns that they made.

