Tea Party
Lesson 1: Discover Phase

Australian Curriculum: Mathematics (Foundation Year)

ACMNA002: Connect number names, numerals and quantities, including zero, initially up to 10 and then beyond.

- Understanding that each object must be counted only once, that the arrangement of objects does not affect how many there are, and the last number counted answers the "how many" question.

Lesson abstract

Students are introduced to the context of having a tea party (or other familiar event with food), and consider the items (e.g. plates) that might be on the table. Students then draw themselves at the table with other people, and label the items on the table. They count the people and items. This context offers a purpose for students to connect number names, numerals and quantities to 10, presenting the classroom teacher with valuable feedback on the counting process students use.

Mathematical purpose (for students)

We will use counting to get the right the number of items needed for a tea party.

Mathematical purpose (for teachers)

This phase establishes the context of having a tea party (or other gathering) as mathematical, by counting to determine the number of items each guest may need. The teacher explains the importance of knowing how many items are needed so that there are enough for each guest. Checking the count will ensure that each guest has their own cup and plate. It may not be obvious to students that the number of plates, for instance, needs to match the number of guests. Students will benefit from representing the same quantities in different ways using drawings and symbols. The intention is that they will observe the use of numbers as labels to represent a quantity.

At the end of the Discover phase, students will be able to:

- Appreciate the usefulness of counting to establish "how many" in a familiar context. For instance, if 6 people go to a barbecue, you can count to ensure there are enough plates and cups for each person. If there aren't enough of each, someone will miss out on their dinner!
- Observe that objects are counted only once, can be counted in any order and that the last number counted answers the "how many" question.

Lesson Length 45-60 minutes

Vocabulary Encountered

- lots of, many, a large number of, enough, more than, less than, same as, quantities
- some number names
- words related to tea party (e.g. cutlery, settings)
- position words (e.g. in front of)

Lesson Materials

- Large box or container filled with items that might be used at a tea party: plates, cups and spoons, serviettes, tablecloth, a teapot, tea bags (enough for the class)
- Paper for students to draw their previous experiences with tea parties or other gatherings
- Picture book "The Doorbell Rang" by Pat Hutchins

We value your feedback after these lessons via https://www.surveymonkey.com/r/CV2TXTT

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Exploring Familiar Events

You may wish to decide in advance what will be served at the tea party (e.g., juice, biscuits) so that students can consider this decision in the next lesson. An example may be that everyone will be icing a cookie on the day so all students will have a cookie on their plate.

Building context

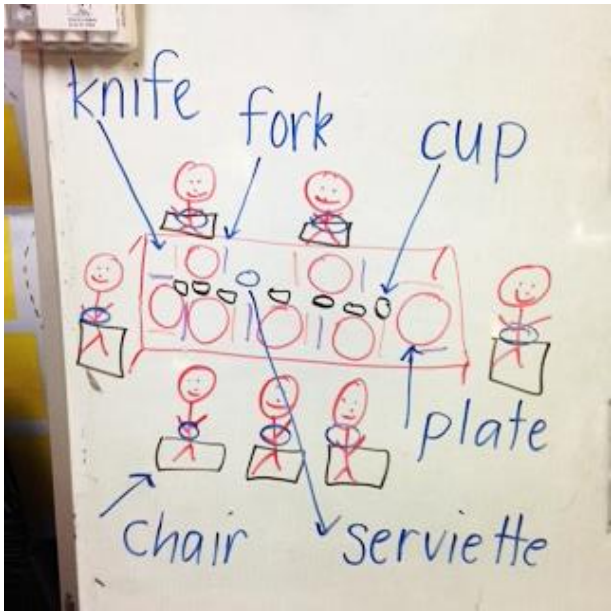
Reading "The Doorbell Rang" is one way that you can introduce a shared experience of people attending an afternoon tea at someone's house. This book can provide a link between context and language for students to use. The shared reading experience could take place prior to the lesson, with another subject are (e.g. English) to shorten the time that students sit on the carpet. Or the teacher could have students move to another location to start the Exploration below.

Exploration

1. **Introduce** to the class **a large box or other container** with an unknown number of items inside. Ask students to guess what you might be planning to do with the items in the box, or where you might use all these things. Reveal one object at a time until students correctly identify that these items could be used to have a tea party, then stop revealing items.
2. **Brainstorm** with the students when we might use these things and collate ideas on the board. Suggestions might include a birthday party, the dinner table, Christmas dinner, a picnic, party or restaurant, a BBQ, or a party in the park. Choose a relevant context for your students.
3. Ask students to predict how many items might be in the box. Write the numbers students suggest on the board and ask students why they might predict this number. It is not necessary to confirm the number. Use language of *lots, many, quite a large number, enough, more than one* and familiar number names to describe the quantity within.

Links to prior experience

4. **Make connections to the lives of students** by asking them to reflect on times when they have been at a tea party, teddy bears' picnic, yum cha, family barbecue, local café with parents or having afternoon tea with a friend or family member. Ask students to share personal recollections. If time permits, provide time for students to play with the tea party items during group rotations.
5. Inform students that they will be drawing themselves at an event they remember, or at an imaginary tea party. The drawing will include them sitting at a table to have something to eat with other people.
6. Ask students what objects they might include on the table in their picture. Model how to draw items and label them. This will provide students with language to include in their own drawings e.g. plate, cup, fork, knife, serviette.
7. Encourage students to label the items they draw.
8. Create a word wall using the names of simple items that students may include in their illustrations.



Model one way that students can draw themselves at their event.

Focus on Counting

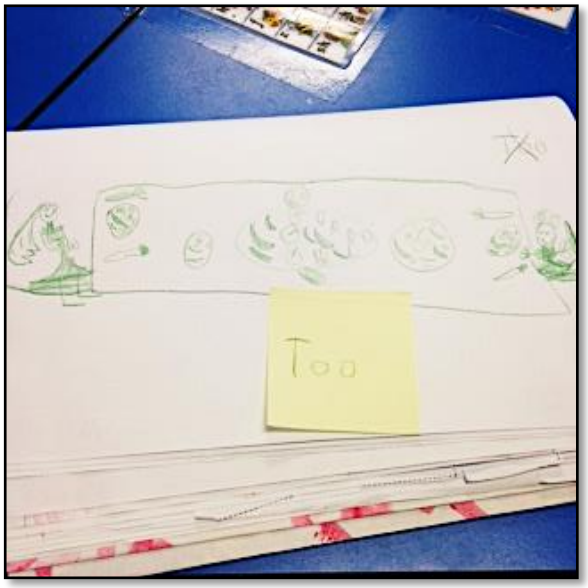
9. **Allow students to view the drawings** others have made. Identify drawings where objects on the table are clearly drawn and can be counted. Students will benefit from representing the same quantities in different ways using drawings and symbols and will come to recognise the use of numbers as labels to represent a quantity (The State of Queensland, 2006).
10. **Gauge** how students count. Focus a discussion on the number of key items in their pictures.

    > *Teacher: I can see that you have drawn some plates. How did you know how many plates to draw in this picture?*
    >
    > *Johan: I drew John and I drew a plate for him. Then I drew Ranjana and I drew a plate for her.*
    >
    > *Teacher: Johan has drawn one, two (counts) guests. And there are one, two (counts) plates. If you know there are two guests at the party then you can count to make sure you have the right number of plates so that each person has one.*

11. **Check** if students demonstrate one-to-one correspondence as they count the objects in their drawings. Model counting by placing your finger on each item while counting.
12. Recount in another order to demonstrate the arrangement does not affect how many there are.
13. Restate the last number counted as the total number of objects (cardinal principle).
14. Students write on a post-it note, the total number of objects on their drawn table in numerals and words. Stick this on to the drawing to refer to in the next lesson.
15. **Compare drawings** that have different numbers of items in the picture. Count the key objects drawn and use language of *more than*, *same as* or *less than* to compare the numbers.

Expected Student Responses

This student has drawn herself and 4 guests at a tea party. A post-it note shows how many people are at the party. Connect the number of people to the number of objects on the table.



This student has drawn himself and one other guest at the table.

References

Hutchins, Pat (1989). *The Doorbell Rang*. Greenwillow Books.

The State of Queensland (Queensland Studies Authority) (2006). *Early years curriculum materials: Developing early mathematical understandings*. Retrieved from https://www.qcaa.qld.edu.au/downloads/p_10/ey_lt_maths_understandings.pdf