Random name generator

NEW August 2025

Year level: 3

Approximate number of lessons: 1

Learning goals

- Engage in chance-based investigations about games and everyday situations to:
  - identify possible outcomes
  - collect and record data
  - create visualisations for frequencies of outcomes (e.g., lists, picture graphs)
  - describe what these data visualisations show
  - answer chance-based investigative questions
  - notice variations in outcomes

Resources

- Y3 Random name generator teaching notes
- Two cups, one labelled 'coming up soon', one labelled 'have had a go'.
- Iceblock sticks labelled with names, one for each ākonga.
- Other cups for group work, two for each group.
- A class list of names, one for each group.
- Recording sheet master, one copy for each group.

Activity

Introduction

This anticipation activity provides a discussion opportunity where ākonga are supported to anticipate the likelihood of a name being chosen from a cup. It may form one lesson, or a longitudinal series of lessons that develop over the course of the year to meet ākonga needs. It may start using the vocabulary of impossible, possible, and certain and, towards the end of the year, start to make use of the expression of probability as a fraction, as ākonga are moving towards a Year 4 level.

❓PROBLEM:

Class Setup
- Kaiako introduce a discussion of fairness around turn taking. This may be around a special daily job that one ākonga may get to do, or a role they play within the classroom.
- Ākonga offer suggestions for ways to make turn taking fair.

📋PLAN:

- Kaiako introduce two cups, one labelled 'coming up soon' full of ice block sticks with ākonga names, and one empty cup labelled 'have had a go'. Ākonga will probably be familiar with this tool as it is very common in many classrooms.
- Kaiako support ākonga to identify
  - How many ākonga are there in the classroom?
  - How many ākonga can be chosen at one time? (one)
  - What is the chance that you will have your name chosen?
- Kaiako model choosing an ākonga (ice block stick), the ākonga performs an action, say a star jump, kaiako move that ākonga stick to the other 'have had a go' cup.

- Kaiako discuss a second draw.
  - What is the likelihood that the ākonga just chosen will be chosen again?
  - What is the likelihood that another particular ākonga will be chosen?
  - How many ākonga names are in the 'coming up soon' cup now?
- Kaiako model choosing a second ākonga (ice block stick), the ākonga performs an action, say a star jump, and kaiako move that ākonga stick to the other 'have had a go' cup.

- Kaiako discuss a third draw.
  - What is the likelihood that the ākonga just chosen will be chosen again?
  - What is the likelihood that another particular ākonga will be chosen?
  - How many ākonga names are in the 'coming up soon' cup now?
  - What pattern do you notice?

⠳DATA:

- Ākonga move into small groups. Each group has two cups labelled 'coming up soon' and 'have had a go' and a class list of names. Ākonga cut each name out and place it into the 'coming up soon' cup.
- Ākonga draw names out and move them to the other cup as they discuss and fill in the following table.

Draw Number	Name of ākonga chosen	Number of names left in the 'coming up soon' cup after the draw.	Number of names left in the 'have had a go' cup' after the draw.
1	Jake	24	1
2	Soane	23	2
3	Ana	22	3

- The table is completed with as many rows as there are ākonga in the class so that everyone is chosen.

▄▄ANALYSIS:

- Kaiako support ākonga to identify
  - the patterns in the table and why that pattern occurs.
    - understanding that because the name is not replaced in the 'coming up soon' cup there is one less in that cup, but placed in the 'have had a go' cup, so this cup has one more.
  - that the columns of changing numbers add to show how many ākonga are in the class altogether.
  - that names in each table are different, because this is a random draw.
  - the numbers in the 'coming up soon' and the 'have had a go' are the same, why?

💡CONCLUSION:

- Kaiako support ākonga to complete the following statements using impossible, possible or certain.

  - It is _____ that ākonga names from the 'coming up soon' cup will be chosen next.

  - It is _____ that ākonga names from the 'have had a go' cup will be chosen next.

Notes for teachers

- Some random name generators do not discard names as they are chosen. Each generation is independent of the others. These generators, for example a spinning wheel, would not be suitable for this activity. This might be something you could explore as an extension.
- It is important to note that confusion may occur when discussing absent ākonga. These ākonga are able to be chosen because they are in the class, however they are just not at school today. It is suggested that their name is placed back into the 'coming soon' cup and a redraw occurs, or for the purpose of the table above it is imagined that they are at school.
- Following this lesson make use of the random name generator for turn taking in your classroom. Ask ākonga
 - To identify how many names are in each cup and the likelihood of a name being chosen using the vocabulary impossible, possible or certain.
  - Following the draw, work out how many names are in each cup now.

Possible extension activities

You may like to express chance as a fraction and support ākonga to recognise that as each draw occurs the fraction or chance of being drawn next time increases for those left in the 'coming up soon cup'.

You may try starting to explore combinations, e.g., pick two ākonga at a time rather than one. What are the different combinations of ākonga that we could get? Maybe start with a simpler problem, selecting two ākonga from six. An important aspect to consider is that if I select A and then B, is this same as selecting B then A? Or is it different even though I still get the same two ākonga?
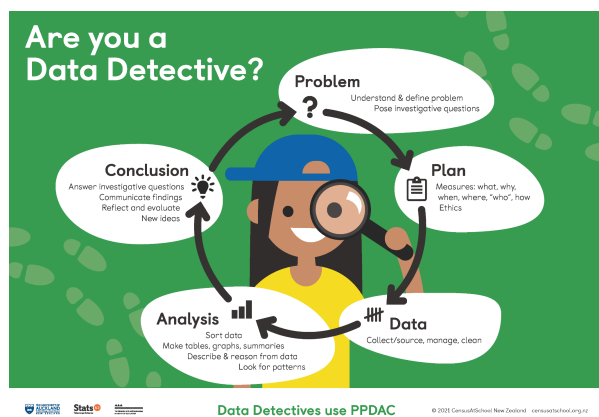
Random name generator student materials

Resource list with preparation

Resource	Preparation required	Approx numbers
Recording sheet	Print one copy for each group	Depending on group size, 10-15.

Recording sheet

Draw Number	Name of ākonga chosen	Number of names left in the 'coming up soon' cup after the draw.	Number of names left in the 'have had a go' cup' after the draw.
1			
2			
3			
4			
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