Tricky Trickster

NEW June 2025

Year level: 2

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

- Two chairs, placed one in front of the other
- Two matching large tubs or buckets
- Two lots of two different items that fit into the tub together
- Two extra singular items that fit into the tub
  Suggestions for items: A rubber chicken, squeaky pig dog toy, a large mixing spoon, a soft toy, a tennis ball, a sock
- A **short video** of a human slot machine - kaiako to use own discretion as to whether this is appropriate for ākonga to view. This video involves three players, it is different from this lesson but may still help to provoke excitement.

Activity

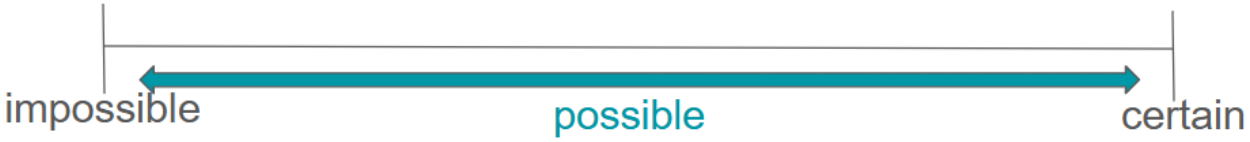
Introduction

This chance based game is based on the idea of a two factor slot machine, with the end point being either that the factors match or do not match. This game is enhanced with sound effects. Prepare to have fun with your class.

?PROBLEM:

Class Setup

- A continuum is drawn on the whiteboard, or modelling book. There are three points on this scale, impossible, possible, certain.



- Two ākonga are seated, one behind the other on chairs, both with a bucket or tub in their lap. Each bucket will contain three items. Two items will be the same in each bucket, one item will be different. The class creates a whirring noise followed by a “bing!” at which time the ākonga seated at the back draws an item out of their bucket and raises it above their head. The item is able to be seen by the class but not by the ākonga seated on the front chair.

Class discussion:

- The kaiako explains that the ākonga are about to make another whirring sound and a bing!, so that the second ākonga can draw out an item. The kaiako asks the class “What is the chance the items will match?”
- Ākonga have three options, ‘impossible’, ‘possible’, or ‘certain’. The kaiako makes use of the scale here to directly discuss the vocabulary displayed before re-presenting the question.

PLAN:

- Ākonga are asked to share their thoughts and if ready, reasons. Think, pair, share can be used here. Ākonga may ask to see what is in the second child’s bucket to affirm their decision.
- You may wish to keep items secret for now to make the game more exciting, or you may wish for ākonga to see what is inside the bucket to predict whether a match will occur or not.
- The decision is recorded alongside the scale.
- Ākonga create a whirring sound, and a bing! And the second child draws out an item.
- Kaiako support ākonga to identify whether it is a match or not.

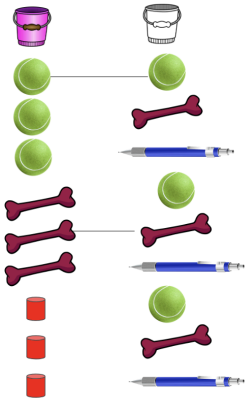
DATA:

- Multiple games are played.
- The result can be captured in a table.

Match	Not a match

ANALYSIS:

- Kaiako support ākonga to identify whether their anticipated outcome was correct.
- Kaiako pose the questions:
    - Is it possible, or impossible that we might get the same outcome next time we play?
    - Explore the question - Is it more likely that we get a match or that we do not get a match when we play this game.
      - Identify and list possible outcomes.
      - Use the physical items to support listing the outcomes.



DATA:

- Play the game a few more times noting the outcomes. After playing a few times ask the two questions again:
    - Is it possible, or impossible that we might get the same outcome next time we play?
    - Is it more likely that we get a match or that we do not get a match when we play this game.
- Repeat for 15-20 games. Different ākonga could be swapped in to be the ones selecting a factor from the tub.

ANALYSIS:

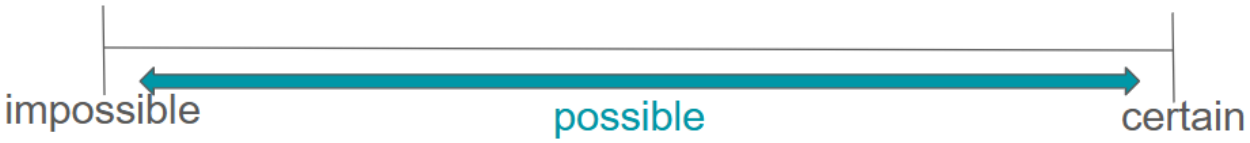
- Kaiako support ākonga to total the tally marks for match and not a match.
- Ask the questions again:
    - Is it possible, or impossible that we might get the same outcome next time we play?
    - Is it more likely that we get a match or that we do not get a match when we play this game.
    - Some of the items in the buckets are the same and some are different. How are outcomes affected by this?

- Is it possible to be certain when predicting which item will be drawn out next??

CONCLUSION:

- Kaiako support ākonga to complete the statements:
  - We played the Lucky Dip game _____ times.
  - We got _____ matches and _____ not a match.
  - The outcome _____ happened more often than the outcome _____ because _____ .
  - We think based on our results that _____ is more likely when this game is played because _____ ..
- Kaiako draw links between the possible outcomes and the idea of 'possibility''.
- Kaiako offer opportunities for impossibilities to be shared, or events that definitely are 'impossible'.
- Is there a way to play this game where getting a match is certain? Would this be a fun game to play?

Notes for teachers



- The scale provides a visual representation. Ākonga may introduce other vocabulary that you could add to this display. It is important that ākonga have a firm grasp of the understanding behind **impossible, possible and certain,** but also that they recognise that we have a range of vocabulary articulating these ideas.
- Please note that this image is not a Likert Scale. This image shows that the chance is either impossible (end point), certain (other end point) and everything else in between is possible.
- If ākonga are hesitant to share their thinking they may need support with structuring an oral sentence using the new vocabulary. Talk frames and sentence starters work well here. For example, "I think a match might happen because…." or "I think a match won't happen because…"
- Once taught this game has the potential to become a firm favourite in junior classrooms. Ongoing games provide ākonga with their own turn which is important, but also ongoing iterations and experiences to make use of key vocabulary in scaffolded full sentences.
- This game would also serve as a fabulous chance based warm up for staff hui.

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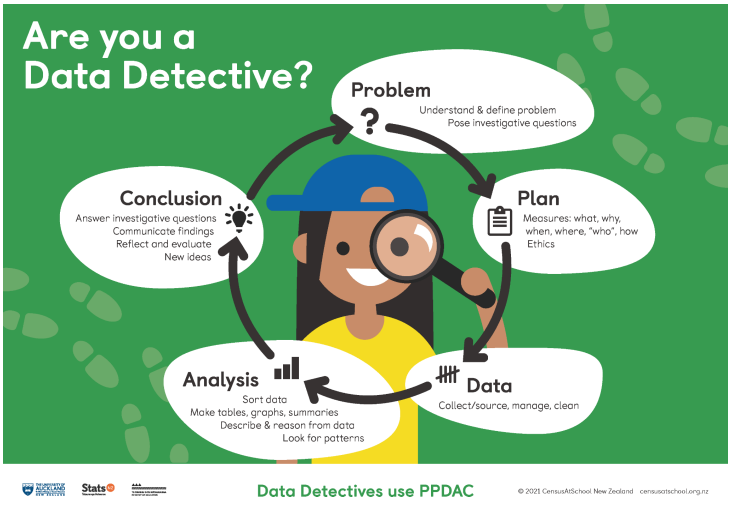

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