RICH MATHEMATICAL TASK BOOKLET

PROBABILITY

YEAR 1

Teacher Booklet

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Decide how likely it is that you will have these things for dinner tonight.

- 1. Weetabix
- 2. Chicken
- 3. Potatoes
- 4. Ice cream
- 5. Fish and Chips
- 6. Carrots

Put them on your continuum and be ready to justify why you have put them there.

Can you add two more things to your continuum and justify why you have put them there?

Impossible

Possible

Certain

Task 1 (Images)



Icecream



Potatoes



Weet-Bix



Fish and Chips



Carrots



Chicken

Task 1 (independent)

Solve the following problems:

Leti's netball team scored 14 goals in one game and 3 goals in another game. How many goals did her team score altogether?

Sienna's netball team scored 6 goals in one game and 5 goals in another game. How many goals did her team score altogether?

4 + 15 =

6 + 7 =

9 + 8 =

Decide the probability of these things happening at kura today.

- 1. We will eat some kai.
- 2. It will snow.
- 3. We will watch a movie.
- 4. We will go to Kapa haka practice.
- 5. Our teacher will read us a story.
- 6. We will play outside.
- 7. We will fly.
- 8. We will sing a song.

Put them on your continuum and be ready to justify why you have put them there.

Can you add two more things to your continuum and justify why you have put them there?

	Impossible		Possible		Certain
Imposs	sible	Unlikely	Possible	Likely	Certain

Task 2 (resource – print these for students to put on continuum).

1. We will eat some kai		
2. It will snow		
3. We will watch a movie		
4. We will go to Kapa haka practice		
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Task 2 (independent)

Think of what you will do after-school today. On your continuum draw a picture of something that is:

- certain to happen.
- impossible.
- possible.

Add other pictures to your continuum and choose where you place them.

Impossible

Possible

Certain

Tui's whanau are having ice cream sundaes for dessert. Tui is allowed to choose her ice cream flavour and one topping for her sundae.



Can you show the different combinations that Tui might choose?

How many different combinations are there?

Task 3 (independent)

Maia is choosing her lunch. She is allowed to choose either a sandwich, hamburger, pizza or a pie, and a piece of fruit.



Can you show the different combinations that Maia might choose?

How many different combinations are there?

What is the chance that Maia will have an apple with her lunch?

What is the chance that Maia will have a pie with her lunch?

Archana has made this spinner for a game.



What is the chance that it will land on pink? What is the chance that it will land on yellow?

What do you think will happen if you spin the spinner ten times? Make a prediction with your buddy.

Spin the spinner ten times and record what happens.

What do you think will happen if you spin another ten times? Record what you find.

Represent your findings using a tally chart or picture graph.

What do you notice?

Task 4 (independent)

Make some spinners for a game of chance.



Make one spinner that has an equal chance for both colours.

Make other spinners that have an unequal chance. Label which colour is more likely to be spun.

Lola has made this spinner for a game.



She says:

- 1. The spinner will either land on yellow, pink or orange.
- 2. There is an equal chance the spinner will land on pink or orange.
- 3. The spinner is most likely to land on orange.
- 4. The spinner might land on purple.
- 5. The spinner is least likely to land on pink.
- 6. There is $\frac{1}{2}$ chance of the spinner landing on orange.

Decide which statements that you agree or disagree with and provide reasons.

Make your own statements about the spinner.



Can you make a spinner that has a half chance of landing on blue?

Can you make a spinner that has a quarter chance of landing on yellow?

Can you make a spinner that has an equal chance of landing on red or green?

Can you make a spinner that has the most chance of landing on blue?

Can you make a spinner that has the least chance of landing on yellow?

Ali and Nesta are playing a game where they draw three balls out of a bag. The balls are blue, blue, and red: ••••

They draw out the balls one at a time and put them in a row. If the blue ball is in the middle, then Nesta wins.

Is this a fair game?

Who do you think will win?

Undertake some trials and record the results.

Task 6 (independent)

Nina and Tasi are playing beanz. This is what they have in the bag:



Tasi wins if a blue bean and is drawn from the bag. Nina wins if a red bean is drawn from the bag.

Who do you think is more likely to win?

Play beanz by putting all the beans in a bag and drawing one out. Record the result and put the bean back in. Repeat this 10 times and record the results.

What do you notice?

Continue playing beanz for another 10 times and record the results.

What do you notice?

Taika thinks that he is really lucky and says "When I roll a dice, I always roll a six".

Do you think this is likely?

What do you think would happen if you rolled a dice?

Make a prediction with your buddy.

Roll the dice ten times and record if you get a six or not.

What do you notice?

What do you think will happen if you roll your dice another ten times?

Record what you find.

Represent your findings using a tally chart or picture graph.

What do you notice?