RICH MATHEMATICAL TASK BOOKLET

PROBABILITY

YEAR O

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 4 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 + 5 =

6 + 7 =

9 + 8 =

Decide how likely it is that you will see these things on your journey home from kura today:

- 1. A dragon
- 2. A tree
- 3. A red car
- 4. A cat
- 5. A traffic light
- 6. A snowman
- 7. A rainbow

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

Unlikely

Possible

Likely

Certain

Task 2 (sentences for the continuum).

| 1. A dragon |
|--------------------|
| 2. A tree |
| 3. A red car |
| 4. A cat |
| 5. A traffic light |
| 6. A snowman |
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Task 2 (independent)

Think about your journey home from kura today. Put the pictures on your continuum in regards to the likelihood you will see them:



Melvin is making a sandwich for his lunch. Mum said he can have cheese and then one other filling to put in his sandwich. The options are:

- 1. Ham
- 2. Tomato
- 3. Lettuce
- 4. Marmite

Can you show the different filling combinations that Melvin might choose?

How many different filling combinations are there?

Task 3 (images)



Task 3 (independent)

Tiffany is making a sandwich for her lunch. Mum said she can have butter and then one spread put on her sandwich. The options are:

- 1. Marmite
- 2. Jam
- 3. Peanut butter
- 4. Honey



Can you show the different combinations that Tiffany might choose?

How many different combinations are there?

What is the chance that Tiffany will have cheese?

What is the chance that Tiffany will have butter and jam?

When you toss a coin, what is the chance that you will land on heads? What is the chance that you will land on tails?



What do you think will happen if you toss a coin ten times? Make a prediction with your buddy.

Toss your coin ten times and record what happens.

What do you think will happen if you toss the coin another ten times? Record what you find.

Task 4 (connect)

Task 4 (independent)

John and Mia are playing a game where they flip the counter ten times. John wins the game if it lands on blue and Mia wins if it lands on red.

Is John or Mia more likely to win the game?

Flip the counter ten times and record the results.

Flip the counter ten more times and record the results.

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.

Task 5 (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.

Lucia has made this spinner for a game.



She says:

- 1. The spinner will land on green or orange.
- 2. There is a $\frac{1}{2}$ chance of the spinner landing on green.
- 3. The spinner might land on blue.
- 4. Green and orange have an equal chance.
- 5. It will land on orange the most.

Decide if you agree with Lucia's statements and justify your thinking.



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

Can you make a spinner that has a half 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?

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.