

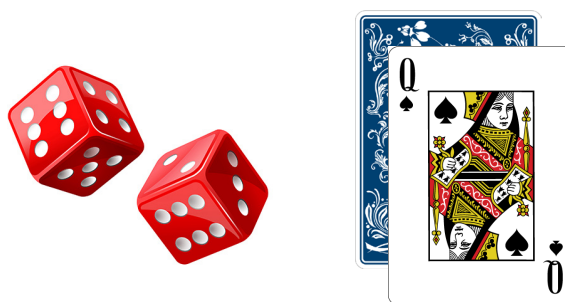
➤ Notes for parents. Activity next page.

**The purpose of this task is to have your child:**

- Design and carry out two short experiments to test their theory about a probable outcome in simple games of chance

**Think about this:**

- Uncertainty and probability are part of our daily lives.  
What is the probability that it will rain? What's the chance of meeting someone you know at the supermarket?
- In the first task, as your child collects and collates the results of their dice rolls, talk about the number of rolls they need to convince you of their findings. Essentially, the more rolls (the greater the sample/the more data) the more convincing their findings are.
- In their second experiment, your child is collecting data to test the theory that they will not get a heart card 2/5 of the time.  
Once again, the more tests they do, the closer their findings will be to the theoretical probability.
- Together you might come up with another experiment they could do with dice or cards.



**He taurira kōrero Māori:**

<b>1. Te whakamātau i te pīrori mataono tau</b>	
Pīroria te mataono tau. He aha te putanga?	Roll the dice. What do you get? (What is the outcome?)
Hangaia he tūtohi hei tuhi i ngā putanga o ngā pīroritanga mataono tau.	Create a table to record the outcomes of dice rolls.
E hia katoa ngā pīroritanga kua oti i a koe i tō whakamātau?	How many rolls did you do in your experiment/trial?
O roto i ngā pīroritanga katoa, e hia ngā putanga o te 6?	Out of all of the dice rolls, how many times did you get a 6?
He aha te hautanga o ngā ono?	What is the fraction of sixes?
E hāngai ana te hautanga o ngā ono ki te tūponotanga tātai? Kāore rānei?	Is the fraction of sixes consistent with the theoretical probability? Or not?

<b>2. Te whakamātau i te tangohanga kāri</b>	
Kaua e tirotiro i te kāri e tango ana koe. Kia matapōkere tō tango kāri.	Don't look at the card you are taking. It should be a random taking of the card.
Hangaia he tūtohi hei tuhi i ngā putanga o ngā tangohanga kāri.	Create a table to record the outcomes of taking a card.
E hia katoa ngā tangohanga kāri kua oti i a koe i tō whakamātau?	How many cards did you take in your experiment/trial?
O roto i ngā tangohanga kāri katoa, e hia ngā putanga o ngā kāri ehara i te manawa?	Out of all of the cards, how many times did you get a card which isn't a heart?
He aha te hautanga o ngā kāri ehara i te manawa?	What is the fraction of cards which are not a heart?
E hāngai ana te hautanga o ngā kāri ehara i te manawa ki te tūponotanga tātai? Kāore rānei?	Is the fraction of cards which are not hearts consistent with the theoretical probability? Or not?



**He tūhuratanga tūponotanga ēnei.**

**1. He tūhuratanga pīrori mataono tau:**



E rua ngā hoa e tautohe ana.

- Ko tā Ari, “he ōrite te tūponotanga puta o ia tau (1 ki te 6) ina pīroria he mataono tau.”
- Ko tā Marie, “he waimarie ake te 6 – he nui ake te tūponotanga ka puta he 6 i te tūponotanga o ērā atu o ngā tau.”

Ko wai o rāua e tika ana? Māu e whakamātau te pīrori mataono tau, ka whakatau ai i tā rāua tautohe. Hei whakaaroaro māu:

- Me pēhea te tuhi i ngā hua ka puta i tō whakamātau?
- Kia hia ngā pīroritanga mataono tau hei whakatau i te tautohe a te tokorua nei?
- Me pēhea te whakamārama i tō whakamātau me ngā hua ka puta?

**2. He tūhuratanga tango kāri:**



E toru o ēnei kāri e rima, he manawa. Mēnā he matapōkere tō tango i tētahi kāri, e hia te tūponotanga o tētahi kāri ehara i te manawa?

I te pātai o runga nei, ka whiriwhiria e koe te tūponotanga tātai. Ko tāu mahi ināianei, he whakamātau i tēnei tūponotanga. Hei whakaaroaro māu:

- Me pēhea te tuhi i ngā hua ka puta i tō whakamātau?
- Kia hia ngā tangohanga kāri hei whakatau te tūponotanga tātai nei?
- Me pēhea te whakamārama i tō whakamātau me ngā hua ka puta?

