# Theoretical Probability and Relative Frequency Downloadable Resource 

Mr Langton

## Theoretical Probabilities and Relative Frequency

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Cala decides to throw a coin 50 times. She says "I will get 25 heads and 25 tails". Explain why she could be wrong.
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I roll a dice 30 times and get these results:

## 636366362664361

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| Number | 1 | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Relative <br> Frequency |  |  |  |  |  |  |

a) Complete the relative frequency table.
b) Do you think the dice is biased?

I toss a coin 200 times and I get 120 heads.
a) What is the relative frequency of getting a head?
b) What is the relative frequency of getting a tail?

I roll a dice 60 times. The number 4 comes up 8 times. Is the relative frequency higher or lower than the theoretical probability?

