

What's the chance - II

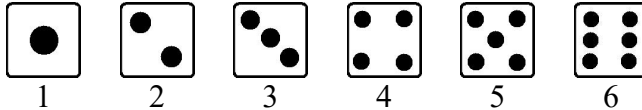
Instructions

- **Work in pairs**
- Follow the questions carefully. Read all instructions, including how to score marks.
- All solutions are to be written on this paper.

1 You are to throw a die 200 times and record the results on the table below. Use the 'gate post' method for recording the tally. (**Note:** A die is singular [one] and dice is plural [more than one]). One person should throw the die while the other person records the results. **You are required to complete the table below.**

This **sample** frequency distribution table shows the results of throwing a coin 20 times.

Result	Tally	Frequency
Head		9
Tail		11
Total		20



Throwing of a die		
Result	Tally	Frequency
1		
2		
3		
4		
5		
6		
Total		

Score the maximum of **5 marks** if you complete the table correctly. You lose a mark for each error. You may not lose as many marks if there is a repeated error. If you do not answer complete the table, **0 marks**.

2 Use your answers for question 1 to **answer the questions below.**

- a) Are all the results approximately equal? (Cross out one) YES/NO
- b) Explain briefly why this result occurred?
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Score the maximum of **5 marks** if you answer each of the questions correctly, according to your data. You lose a mark for each error. If you do not answer any of the questions, **0 marks**.

For questions 3, 4, 5, 6 and 7

You are to throw two different coins 200 times each and record the results separately on the two tables below.

- Take turns with one person throwing the coin while the other person records the results.
- The questions in part 4 refer to the results of throwing the first coin (part 3) and
- The question in part 6 refer to the results of throwing the second coin (part 5)
- Compare the two sets of results in question 7.

3 You are to throw the first coin 200 times each and record the results table below. Use the ‘gate post’ method for recording the tally. One person should throw the coin while the other person records the results. **You are required to complete the table below.** *You must describe the coin, including year and denomination.*

First Coin – 200 Throws		
Description	Denomination:	Date:
Result	Tally	Frequency
Head		
Tail		
	Total	

Score the maximum of **5 marks** if you complete the table correctly. You lose a mark for each error. You may not lose as many marks if there is a repeated error. If you do not answer complete the table, **0 marks**.

4 Use your answers for question 3 to **answer the questions below.**

a) Are the results for heads and tails for the first coin approximately equal? (Cross out one) **YES/NO**

b) Explain briefly why this result occurred?

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Score the maximum of **5 marks** if you answer each of the questions correctly, according to your data. You lose a mark for each error. If you do not answer any of the questions, **0 marks**.

5 You are to throw the second coin 200 times each and record the results table below. Use the ‘gate post’ method for recording the tally. One person should throw the coin while the other person records the results. **You are required to complete the table below.** *You must describe the coin, including year and denomination.*

Second Coin– 200 Throws			
Description	Denomination:		Date:
Result	Tally		Frequency
Head			
Tail			
Total			

Score the maximum of **5 marks** if you complete the table correctly. You lose a mark for each error. You may not lose as many marks if there is a repeated error. If you do not answer complete the table, **0 marks**.

6 Use your answers for question 5 to **answer the questions below.**

a) Are the results for heads and tails for the second coin approximately equal? (Cross out one) **YES/NO**

b) Explain briefly why this result occurred?

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Score the maximum of **5 marks** if you answer each of the questions correctly, according to your data. You lose a mark for each error. If you do not answer any of the questions, **0 marks**.

6	Use your answers <u>for questions 3, 4, 5, 6 and 7</u> to answer the questions below.	
a)	Are the results for heads and tails for the second coin approximately equal? (Cross out one) YES/NO	Score the maximum of 5 marks if you answer each of the questions correctly, according to your data. You lose a mark for each error. If you do not answer any of the questions, 0 marks.
b)	Explain briefly why this result occurred?	