



Years 3-5 Question: Design a Target

Your job is to design a target for a coin toss game.

1. Draw a target on an A4 sheet of paper. Players aim to toss a coin onto the target to reach a score of exactly 100 points. They will need to keep tossing the coin until they reach exactly 100. Make sure you have at least five sections that have different scores.
2. Questions:
 - How many different ways could players reach a score of 100 using your target? Give at least three examples.
 - How many tosses do you estimate each will take?
 - Predict the most common number of tosses players will need to make to reach a score of 100? Explain your reasoning.
3. Trial using your target. Count how many tosses it takes to reach 100 for each trial. Complete at least 10 trials. You can ask other people to play.
4. Construct a graph showing the results of your experiment.
5. Write a short paragraph that explains what you found out.
6. **To enter:** Email your entry to gamt@gamt.qld.edu.au (ask your teacher to help you)

Judging criteria:

- Target included 5 sections
 - Answered all questions
 - Accurate graph
 - Level of understanding and reasoning demonstrated in the answers and short paragraph
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