2 Making money for the school fair

- Run at least 100 trials of these two games.
- Collect the results and display them using a suitable chart or table.
- Use the results to estimate the probability of each outcome.
- Estimate how much money the school would raise from each game if it was run at the school fair. You will need to estimate the number of people who would play.
- Assume the cost to enter each game would be $1.

Game 1

- a large sheet of paper or card
- a coin
- a ruler
- a metre ruler

Coin drop

Make a board of squares on A3 paper where the length of the side of each square is two and a half times the diameter of a coin (you can choose which coin).

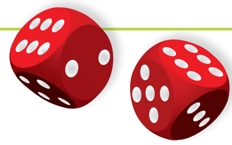
Players then drop the coin onto the board from a height of 50 cm.

If the coin lands so that it is NOT touching any of the lines, the player gets three times their entry fee back.

Game 2

- two dice

Money back



Players choose a number from 1 to 6.

Two dice are rolled.

If their number appears on both dice they get three times the entry fee back.

If their number appears just once, they get two times their entry fee back.

- Which of these two games would you play to give yourself the best chance of winning?
- Would people play either of these games if the actual chance of winning was advertised?