

UNDERS AND OVERS

Materials: two dice for the whole class; \$50 (5 x \$10) of Maths Money per student, plus an initial 'float' for the bank.

The object of the game is to win as much money as possible!

The game consists of ten rounds.

Two dice are thrown, and the sum is found. Before each throw of the dice, students can bet \$10 on Unders (the total is less than 7), Overs (the total is greater than 7) or Sevens (the total is 7).

If the student bets Unders and the total is under 7, the house pays 1:1. This means that on a \$10 bet, they keep their \$10 and win \$10.

If the student bets Overs and the total is over 7, the house pays 1:1. On a \$10 bet, they keep their \$10 and win \$10.

If the student bets Sevens and the total is 7, the house pays 3:1. This means that on a \$10 bet, they keep their \$10 and win \$30!

After 10 rounds, students are asked to reflect on the game, and how they think the game should best be played. Some students are asked to share their writing with the whole class.

After this share and reflection, the game is played for a few more rounds (depending on time available).

Students will now analyze the game, and determine which strategy is best. Students will write a report on their analysis of Unders and Overs.

Scoring Rubric

Criteria	Result
Your report is neatly presented. Your solution is essentially correct. You have fully justified your solution.	4
Your report is neatly presented. Your solution has some errors. You have generally justified your solution.	3
Your report is neatly presented. Your solution has substantial errors or omissions. You have made an attempt to justify your solution.	2
You have not submitted your assignment.	1