

Probability & Luck

10 hours (approx.)

Overview: 2.9

Are some forms of gambling better or worse than others with regard to the chances of winning or losing? Research into the worst types of odds and produce a detailed research paper to show your findings. This lesson plan relates to challenge 2.9.

Learning Objectives: To compare examples of probability & luck

- To identify different kinds of gambling and betting.
- To apply the rules of probability to different kinds of gambling and betting.
- To compare different odds for different areas of gambling and betting.
- To identify and analyse the least rewarding odds.

Learning Outcomes

1. I can identify different kinds of gambling and betting products.
2. I can apply the main rules of probability to different forms of gambling and betting.
3. I can compare the odds associated with at least two different forms of gambling.
4. I can identify useful data and present it appropriately.

Resources

1. Power-point presentation on 'Probability & Luck'.
2. Infographics on 'Probability & Luck'.
3. Downloadable information sheets with facts and figures.
4. 'Probability & Luck' guidance notes and downloadable support materials.

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Starter

(30 minutes)

Are some gambling and betting products worse than others/ better than others? Students should suggest answers to these questions as well as support them with reasons or ideas. Do students agree or disagree on this? How will research on these questions help our understanding of gambling and betting products? Hold a discussion to debate some or all of these questions.

Main Activity

(Up to 9 hours)

Win or Lose

Following on from the discussion, students should establish an hypothesis with regard to a particular form of gambling and whether it favours the player or not over a space of time. This should then be compared to another form of gambling to establish the truth of the proposition. Source material should be used from a variety of sources alongside data and mathematical theory, all of which should be tested and analysed. Students should produce a written report as well as give a verbal report on their findings.

Findings from the discussion should be recorded in an appropriate format and shared. Students can use the skills sheet for 'Research & Presentation', as appropriate. Students should use the appropriate skills sheet and complete the preparation and review sections to support this activity fully.

Plenary

(30 minutes)

What have we learned?

Discuss what you have learned with regard to the most probable chances of winning and the least probable chance of winning among gambling products.

Extension Task

Establish a 'league table' of gambling and betting products with advice on each. Present this in an appropriate way.