



Challenge

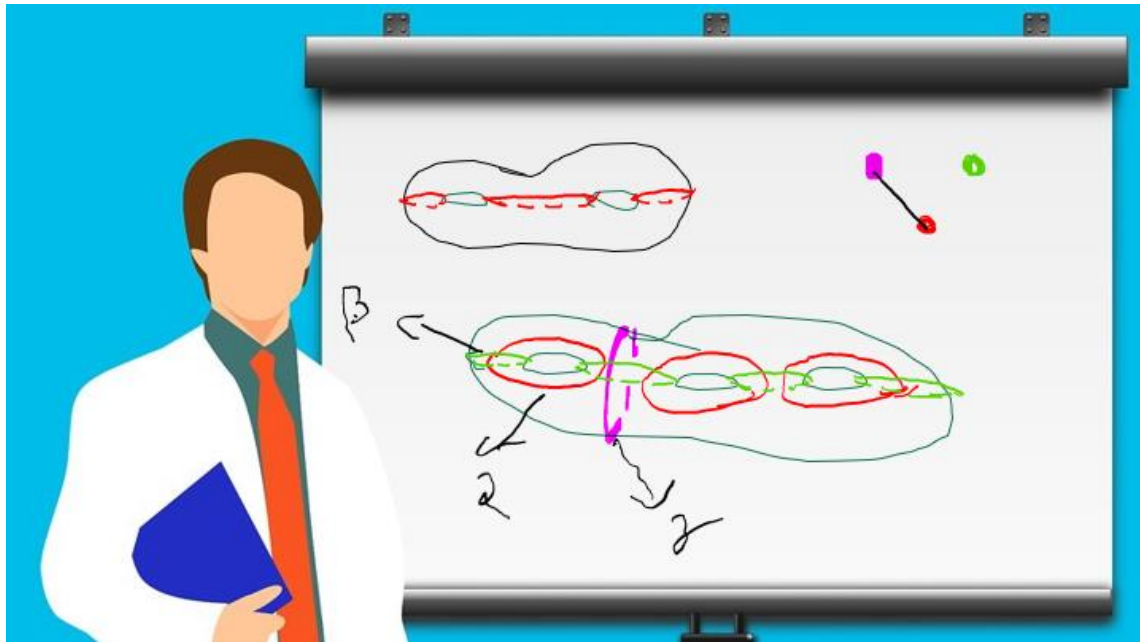
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- Grab a scarf
 - Pick the ends with your hands
 - Tie a knot without letting go of the ends

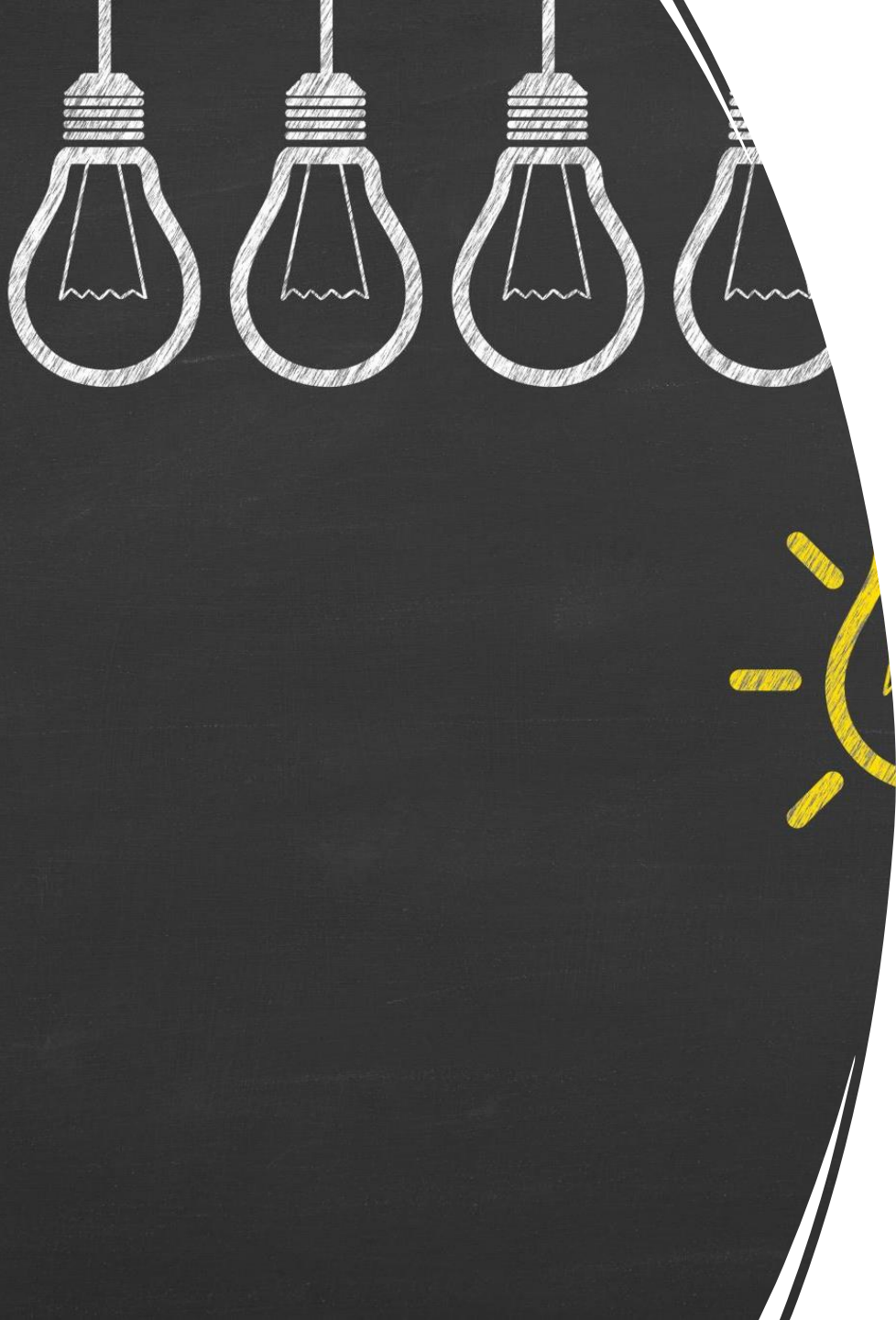


THE UNIVERSITY *of* EDINBURGH
School of Mathematics

Public Engagement and Outreach

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Public Engagement? Why?



What do you get in return?

- Communication skills
- Organisation skills
- Increased passion and enthusiasm
- Fun

Different ways to do Public Engagement

- Communicate your research
- Involve the community in your research (e.g. citizen science-artists/scientists collaborations)
- Communicate research methods and research processes

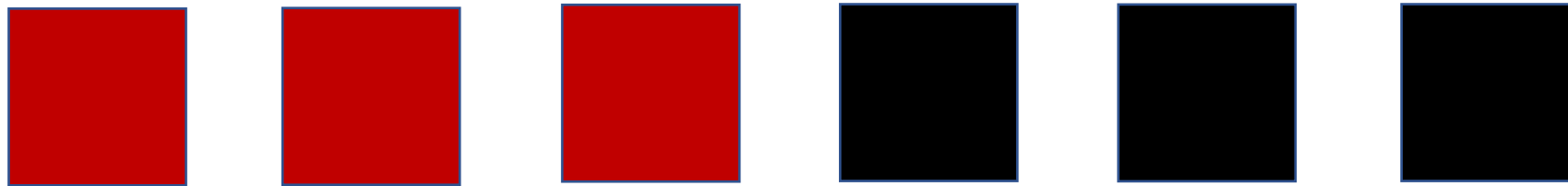


Challenge

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Game

- You have £128 and 6 cards: three red, three black
- In every round you bet half of the money you have, and you have to play one of the cards
- If you play a red card you gain your bet
- If you play a black card you loose your bet
- You need to play all the cards



What is the best strategy?

Activity from Rob Eastaway: <https://robeastaway.com/>

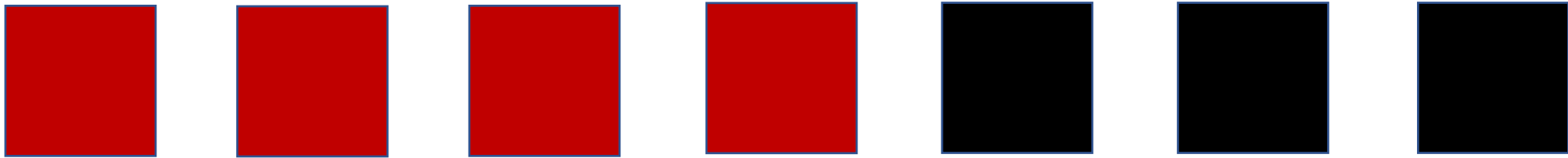


Mathematical learning

- Conjecturing
- Proving
- Generalising

Extension Questions

- What if I had one more red card?



- How many red cards do you need to make the game profitable?
- How many red cards do you need to undo the effect of a black card?

Top Tips

- It is a dialogue, not a monologue
- Know your audience
- Less is more

Get Inspired

- Rob Eastaway: <https://robeastaway.com/>
- Numberphile youtube channel
- Vihart: <https://www.youtube.com/user/Vihart/videos>
- Mat Parker: <https://www.youtube.com/user/standupmaths>
- nRich: <https://nrich.maths.org/>
- Youcubed: <https://www.youcubed.org/>
- UoE Outreach Webpage: <https://www.maths.ed.ac.uk/school-of-mathematics/outreach>

Thank You

Communicating Maths to the community is part of your development as a researcher

It is always a two way communication

Contact me at Francesca.iezzi@ed.ac.uk