



Flip 4 Design

Grade Level/s:
5, 6, 7

Subject/s:
Mathematics, Technologies

Type:
Lesson Plan

Author:
Christopher Siaterlis

Flip 4 Design

This is a lesson linked in with an Investigation on I-Maths. Students are asked to investigate the probability of flipping 4 coins/objects and then creating a fair game to support their results.

This design will be done after they have created their game and discussed the rules. The game must include suitable scoring, rules and materials.

The aim of this task is to create the materials for the game. The spinner must replicate the same probability of the coins i.e. not all outcomes will have the same chance.

Single Lesson Plan

Designing your spinner

Task:
Looking at spinners used in everyday 30 mins

Activity:
Students research different types of spinners used in games of chance. They look at the designs and how each differ in terms of probability and outcomes. They look at a balance and pivot points or options like catchers.

Resources:
Internet access, board games

Design their own spinner

Students choose a design in which they feel will support their game i.e. shape of spinner, how will the user know which option has been spun. They need to recognise how many outcomes they need and work out the chance of getting that outcome.

Books, pencils

Using Makers Empire, create the design and predict how the spinner will respond.

Students will use Makers Empire to make a prototype of their spinner. The spinner needs to show the different options in creative ways.

Ipad, Makers Empire

Downloadable files



spinner_preview_featured.jpg

(/download/lesson_plan_attachments/files/000/000/080/original/spinner_preview_featured.jpg?1493356446)



spinner_2.jpg (/download/lesson_plan_attachments/files/000/000/081/original/spinner_2.jpg?1493356713)

Curriculum

Australian Curriculum:

Expressing Probabilities As Decimals, Fractionals And Percentages (ELBM555)

link (<http://rdf.australiancurriculum.edu.au/elements/2014/09/60dbff26-7df3-4d63-9f80-9fb900e54863>)

Assign probabilities to the outcomes of events and determine probabilities for events (ACMSP168)

link (<http://rdf.australiancurriculum.edu.au/elements/2014/09/7f5b78f9-a465-4246-aff6-9e4600a25376>)
