

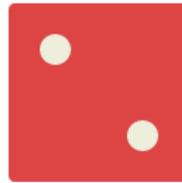
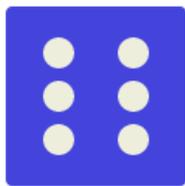
Mathematical Investigation (2)

Investigating is a great way to learn to think mathematically, apply logic, spot patterns and improve our perseverance.

The secret to success

Investigation

- Today you are going to carry out an investigation that might help you to win a game!
- Roll two 1-6 dice (or one dice twice). If you haven't got any dice handy, you can find some online [HERE](#) [click on the purple cog and choose 1-6, dice dots and two dice].
- Add the two numbers.



$$6 + 2 = 8$$

- Draw a tally next to the total in the 'Dice totals' table (see next page).
- This investigation will work best if you find a **lot** of totals, at least 30! These are all totals you should remember quickly... You can do it!

Total	Tallies
2	
3	
4	
5	
6	
7	
8	
9	
10	

Now look at your table...

Which totals came up quite a **lot**? Which totals **rarely** came up?

This is very useful information...!

Dice totals

Total	Tally
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

The game

- Play this game with someone who has **not** seen you filling in the table. Keep the table secret!
- Tell them that you are going to roll two dice (or one dice twice) and say the total score.
- Before you roll, each of you must choose three numbers from 2 to 12. Choose **your** numbers carefully based on what you learnt from the investigation!
- Roll the dice. If the total is someone's number, they score a point.
- Repeat.
- The first person to score 5 wins the game.
- Did **you** choose your numbers well...?

e.g

my numbers



||

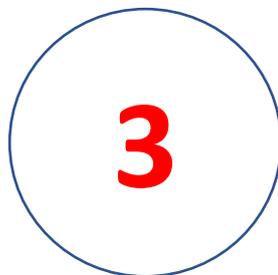
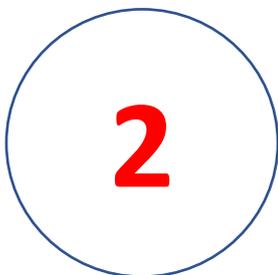


|



||

your numbers



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