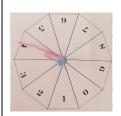


AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES

SCHOOLS ENRICHMENT CENTRE (AIMSSEC)

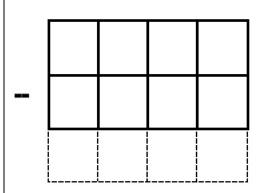
AIMING HIGH

TARGET SUBTRACTION



PLAY FOR FUN - THINK AND WIN - PLAY AND LEARN A GAME FOR ANY NUMBER OF PLAYERS The TARGET is 1000

You will need a set of 10 cards numbered 0 to 9 or a 0-9 spinner like the one in the picture.



Each player draws a grid like the one shown.

Draw a card or spin the spinner and call out the randomly chosen digit. All the players must write the digit in one of the top eight boxes.

Once a number is written it cannot be changed.

Repeat seven more times.

Then the players subtract the 4-digit number below from the number above it and write the difference on the bottom line.

The player (or players) with the difference closest to 1000 wins.

Score 1 point for a win.

ALTERNATIVE VERSION OF THE TARGET SUBTRACTION GAME. The players write down all 8 numbers and then at the end they are given a set time in which to decide where to place them. This is a game of skill that involves mathematical thinking and not luck.

GAME FOR 2 PLAYERS Each player draws a grid like the one shown. Take turns to spin the spinner and each player decides which of their cells to fill in. You can't change the position of the number once it is written in. After 8 spins each player subtracts their 4-digit number below from the number above it and writes the answer on the bottom line.

The players check each other's answers and agree on who has won that round. They need to understand that they must each find the difference (positive or negative) between their answer and 1000 and compare their difference with the other player's difference.

HELP

To win this game you need to estimate the answer to the final subtraction sum to make it as close to 1000 as possible. So you could round the 4-digit numbers to the nearest thousand and, if possible, place digits to make the numbers differ by one thousand, then make the other digits close to get a difference for the final answer as close to 1000 as possible.

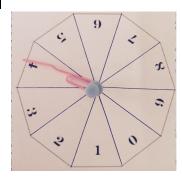
You might play these games first: Target 100 https://aiminghigh.aimssec.ac.za/years-4-5-target-100/ and Target 1000 https://aiminghigh.aimssec.ac.za/years-4-5-target-1000/

NEXT

Change the target, for example make a target of 1500. Does this change your playing strategy?

Organise a knockout competition where everyone in the class plays another learner in Round 1. Then the losers drop out and the winners of Round 1 compete in pairs in Round 2, the winners of Round 2 compete in Round 3 and so on until the Final is played between the last 2 players.

MAKE A 0 – 9 SPINNER

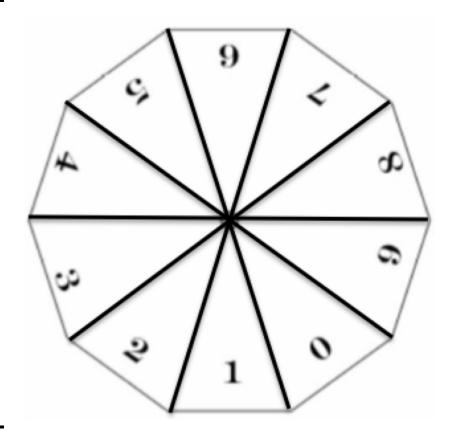


To make your own spinner you will need a paper clip, a pin and some card.

Prick through the template to mark the 10 outer vertices and the centre on the card. Then draw the spinner as in the diagram and cut it out.

Open up the paper clip and pin the paper clip and the template down on a flat surface so that the paper clip spins easily.

If you want to make a spinner without using a pin you can hold down the template and the paper clip with the point of a pencil.



Alternatively make 10 cards so that you can draw one randomly from a box.

