

## Five more Nrich Key Stage 1 maths games to explore

Just put the name of the game in the search bar on the Nrich home page. This should take you straight to the game

# Twinkle Twinkle

Age 7 to 14 ★

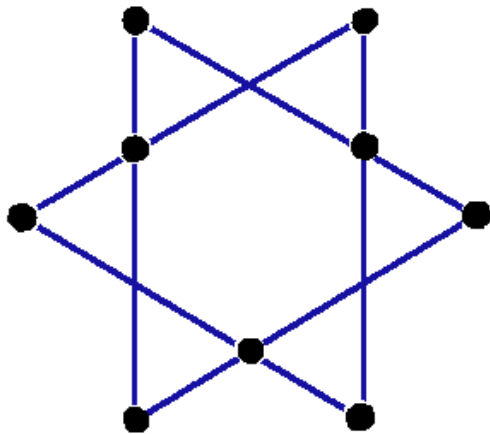
This is a game for two players.

You need a one star game board and a set of four counters each.

To win, a player must place three of his/her own counters in a straight line.

To begin, each player takes turns to place one counter on an empty black spot.

Then, if no-one has yet made a line of three, play continues by taking turns to pick one counter and move it to an empty black spot.



What moves will increase your chance of winning?

Does it matter who goes first?

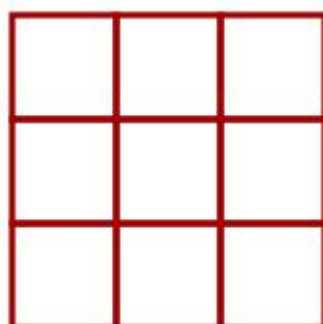
Is it possible to play an 'endless' game?

# Dotty Six

Age 5 to 11 ★

Watch this video to see the game being played.  
Can you work out the rules?

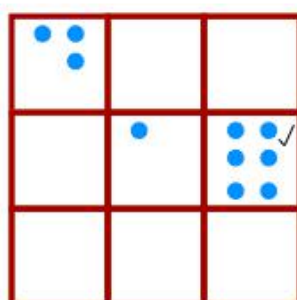
You need a partner, a 1-6 dice and a grid like this;



Take turns to throw the dice and draw that number of dots in one of the boxes on the grid.

Put *all* of your dots in one of the boxes. You can't split them up and you can't have more than six dots in a box.

When a box is full, you could put a tick in the corner like this:



Keep going until there are three ticks in a row or column or diagonal. The winner is the person who puts the last tick.

Now, can you change the game to make your own version?

# Two-digit Targets

Age 5 to 7 ★

You have a set of the digits from 0 - 9.

0	1	2	3	4	5	6	7	8	9
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Can you arrange these digits in the five boxes below to make two-digit numbers as close to the targets as possible? You may use each digit once only.

largest even number	<input type="text"/>	<input type="text"/>
largest odd number	<input type="text"/>	<input type="text"/>
smallest odd number	<input type="text"/>	<input type="text"/>
largest multiple of 5	<input type="text"/>	<input type="text"/>
number closest to 50	<input type="text"/>	<input type="text"/>

Play against an opponent. Arrange your numbers from 0-9 in the ten spaces. Reveal your choices to your opponent. Whoever wins each round gets 5 points? If it's a draw, then award 5 points to both players. Whoever has the largest total after all 6 round wins.

Can you put the 10 digits into the 5 boxes to make the 2-figure numbers as close to each target as possible?

1	2	largest even number	<input type="text"/>	<input type="text"/>
3	4	largest odd number	<input type="text"/>	<input type="text"/>
5	6	smallest odd number	<input type="text"/>	<input type="text"/>
7	8	largest multiple of 5	<input type="text"/>	<input type="text"/>
9	0	number closest to 50	<input type="text"/>	<input type="text"/>

Can you find other ways of doing it?

# Tug of War

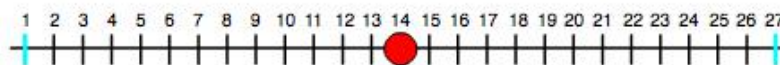
Age 5 to 7 ★



Here is a game for **two** players.  
You will need a counter (or something similar), paper and two 1-6 dice.

## How to play:

Draw a number line on paper like this and place the counter on the number 14 (the red circle in the picture represents the counter):



One player is called 'Plus' and the other is called 'Minus'. Decide who is who. Plus moves the counter from left to right and Minus moves the counter from right to left.

Take it in turns to throw the two dice and add up the two numbers.

Move the counter that number of places in your direction.

If the counter reaches 1, Minus has won and so, of course if the counter reaches 27, Plus has won.

**You might think about** whether you have to land exactly at 1 or 27 or if you're allowed to end up beyond those points. What difference will it make if you are allowed to go beyond rather than landing exactly on the end numbers?

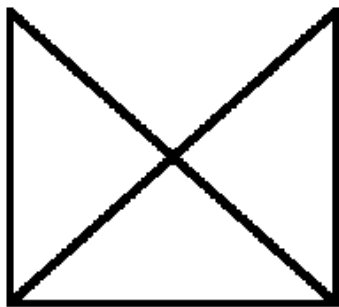
Once you have got used to the game, you might like to make some changes. You can decide. Perhaps you might have one counter each and see who gets to their end first; perhaps you might find the difference between the two numbers on the dice; perhaps you might use three dice; perhaps you might use one dice and a shorter line...

When you've changed the rules you can talk about whether or not your change makes the game better to play.

# Two Stones

Age 5 to 18

In China this game is known as Pong hau k'i and in Korea it is called Ou-moul-ko-no.



A game for two players.

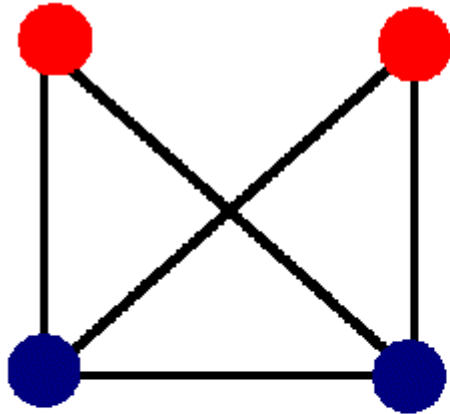
**Resources:**

A game board like the one above.

Each player needs two distinctive pieces such as two pebbles.

**To play:**

Place the two pebbles at the top and two at the bottom as shown below .



Take turns to slide one pebble along a line to an empty spot.  
The first move will be to the middle.

**To win:** block your opponent so that they cannot move.

Next time you play swap start positions on the board with your opponent.