The Benefits of Playing ‘Maths Games’.

Benefits of Maths Games

Identifying Strategy
Decision Making
Problem Solving
Communication Skills
Flexibility of Thinking
Using Appropriate Mathematical Vocabulary
Positive Attitudes toward Maths

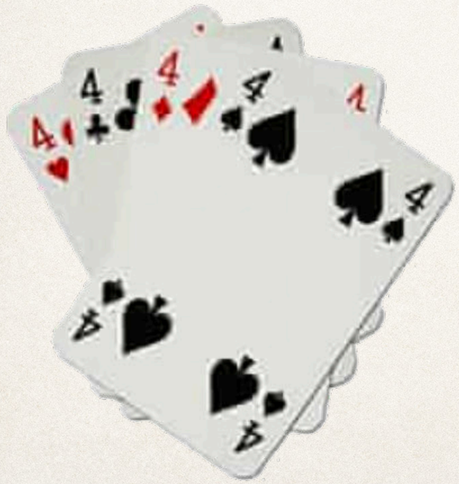
Encouraging Higher Order Thinking Skills

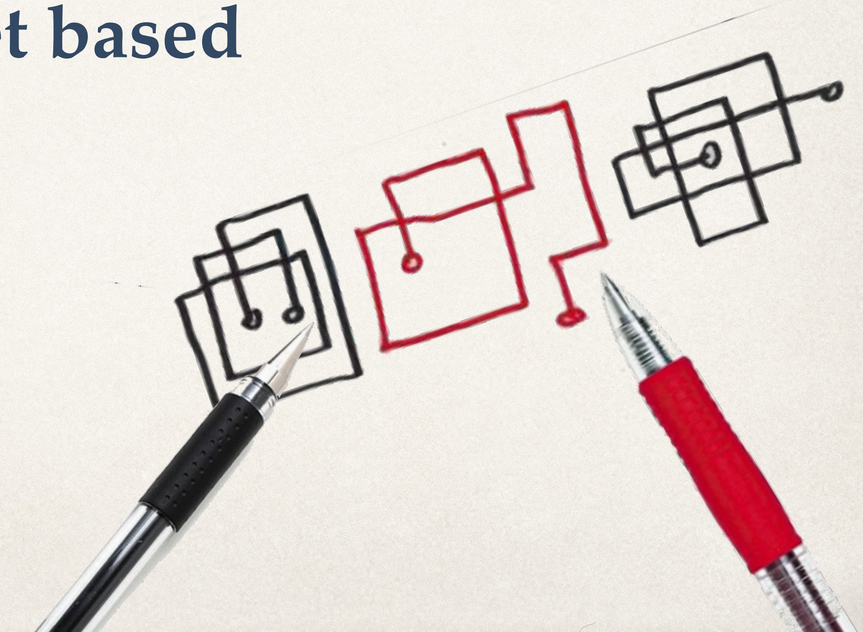
Applying and Problem Solving
Integrating and Connecting
Communicating and Expressing
Reasoning

“Problem-solving skills can be developed in various ways, for example, through constructive play, games, puzzles, role-play, classroom situations, robotics, coding, etc. In response, the new primary mathematics curriculum could provide a repository of mathematics problems to encourage teachers to move away from textbooks and to engage in richer problem-solving activities …”

Background Paper and Brief for the Development of a New Primary Mathematics Curriculum, NCCA, 2016

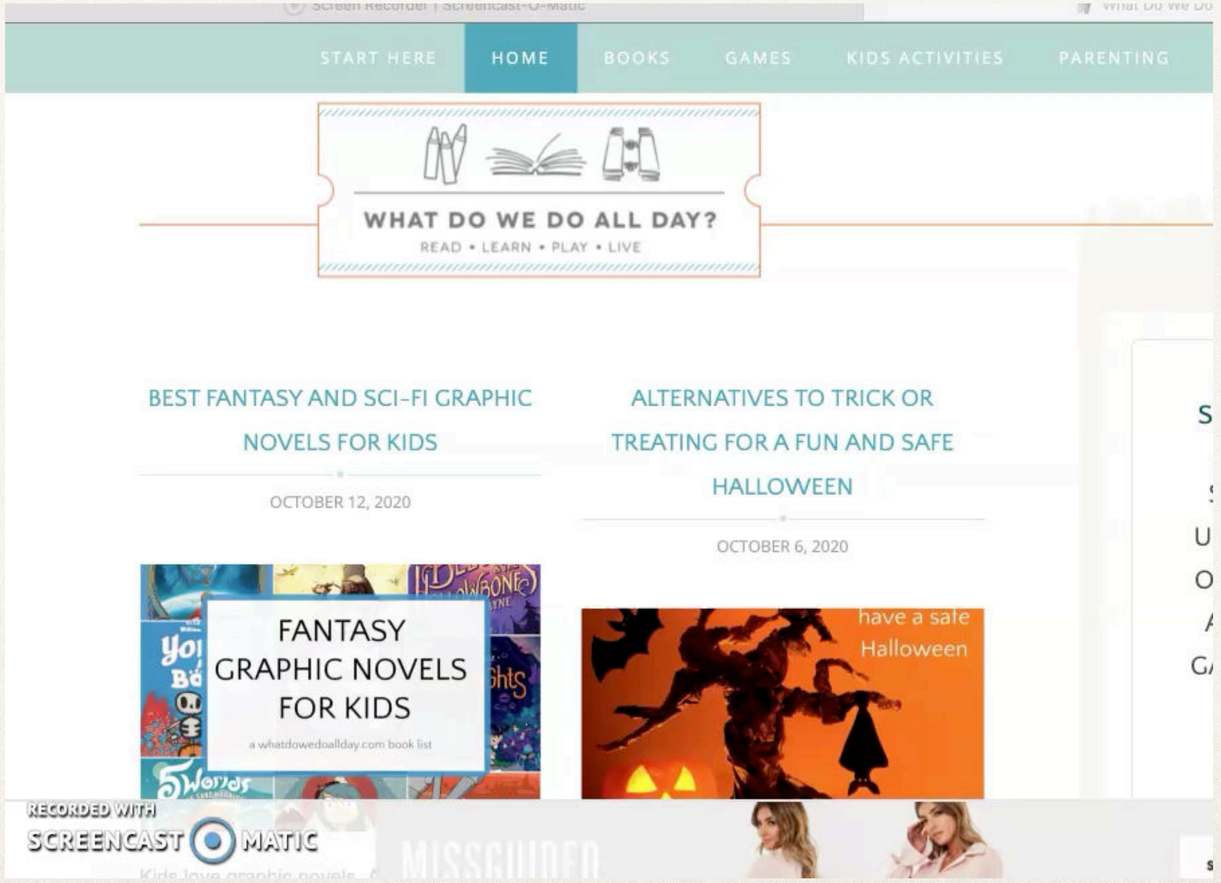
1. Pen and Paper Strategy games from www.whatwedoallday.com
2. Pen and Paper Strategy games from www.nrich.maths.org
3. Strimko puzzles - Some can be downloaded at http://strimko.com/download/StrimkoPack1_4x4.pdf
4. Two examples from www.0hn0.com and www.0hh1.com - internet based





www.whatwedoallday.com

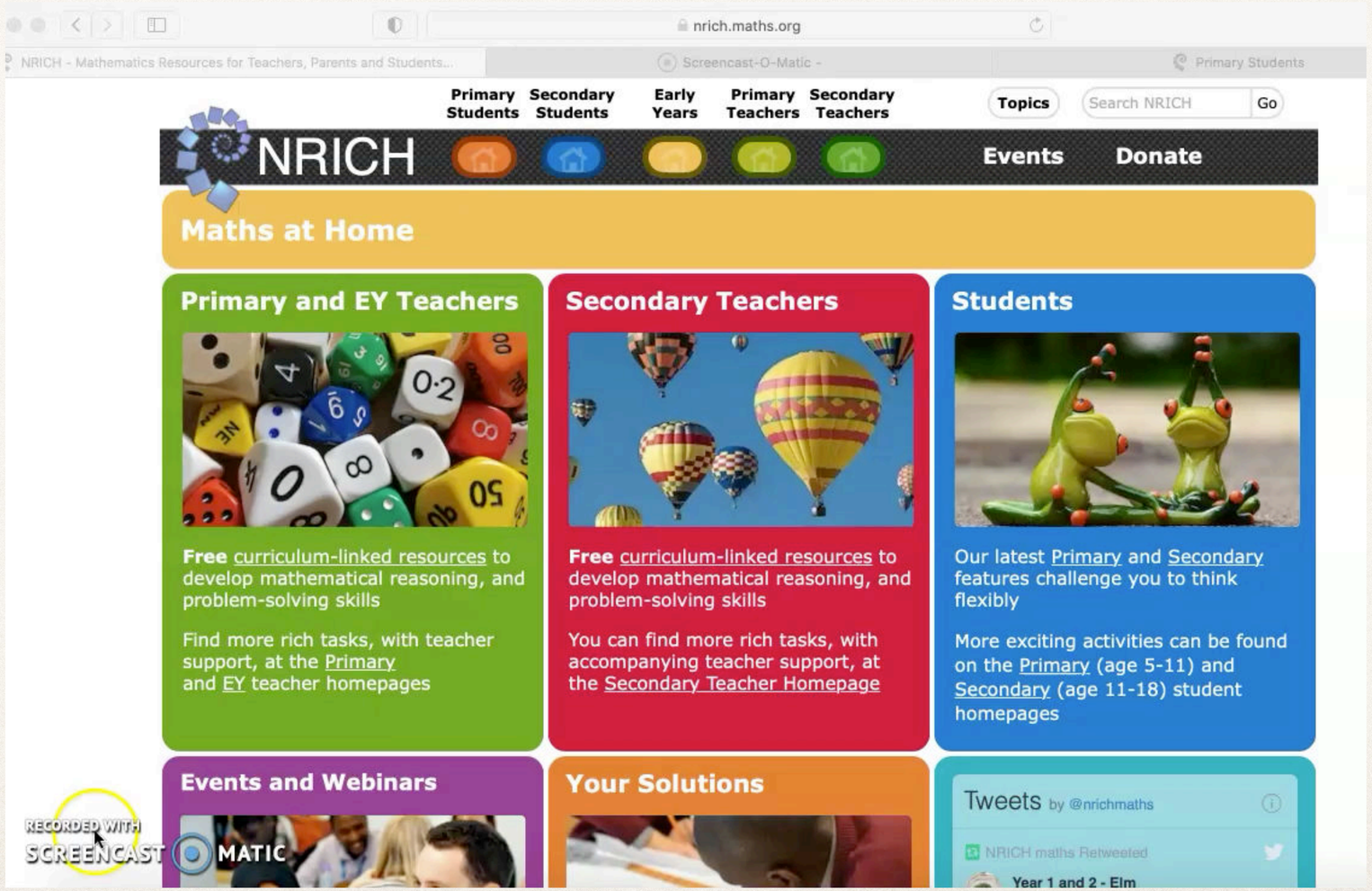
- Click on ‘Games’
- Click on ‘Traditional Games’



…..Another example - ‘Tapatan’ a ‘3 in a row’ game from The Philippines.

www.nrich.maths.org

- Primary Students
- Games



- ‘Counters’

Counters

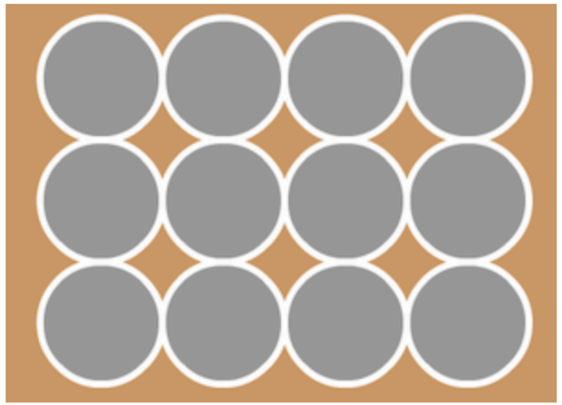
Age 7 to 11 ★★★

To play this game, you'll need a friend and twelve counters.

The aim of the game is to be the player who takes the last counter or counters.

How to play:

Lay out the counters in an array like this:



The first player chooses a counter and removes it from the array, and also removes all the counters that touch it.

The second player also chooses a counter and removes it from the array, and also removes all the counters that touch it.

Play continues like this with players taking it in turns, until one of the players removes the last counter (or counters). That player is the winner!

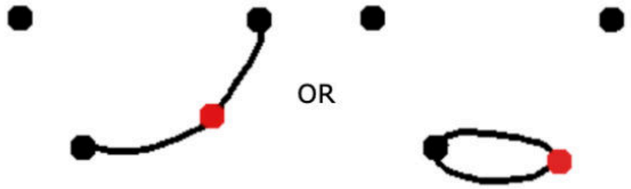
Another Example - ‘Sprouts’

Sprouts

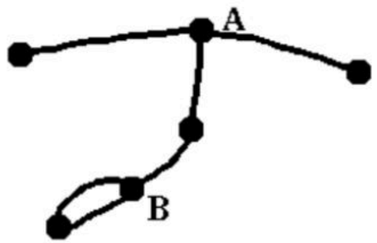
Age 7 to 18 ★★

This is a game for two players. All you need is paper and a pencil. The game starts by drawing three dots.

The first player has a turn by joining two of the dots and marking a new dot in the middle of the line. Or the line may start and end on the same dot.

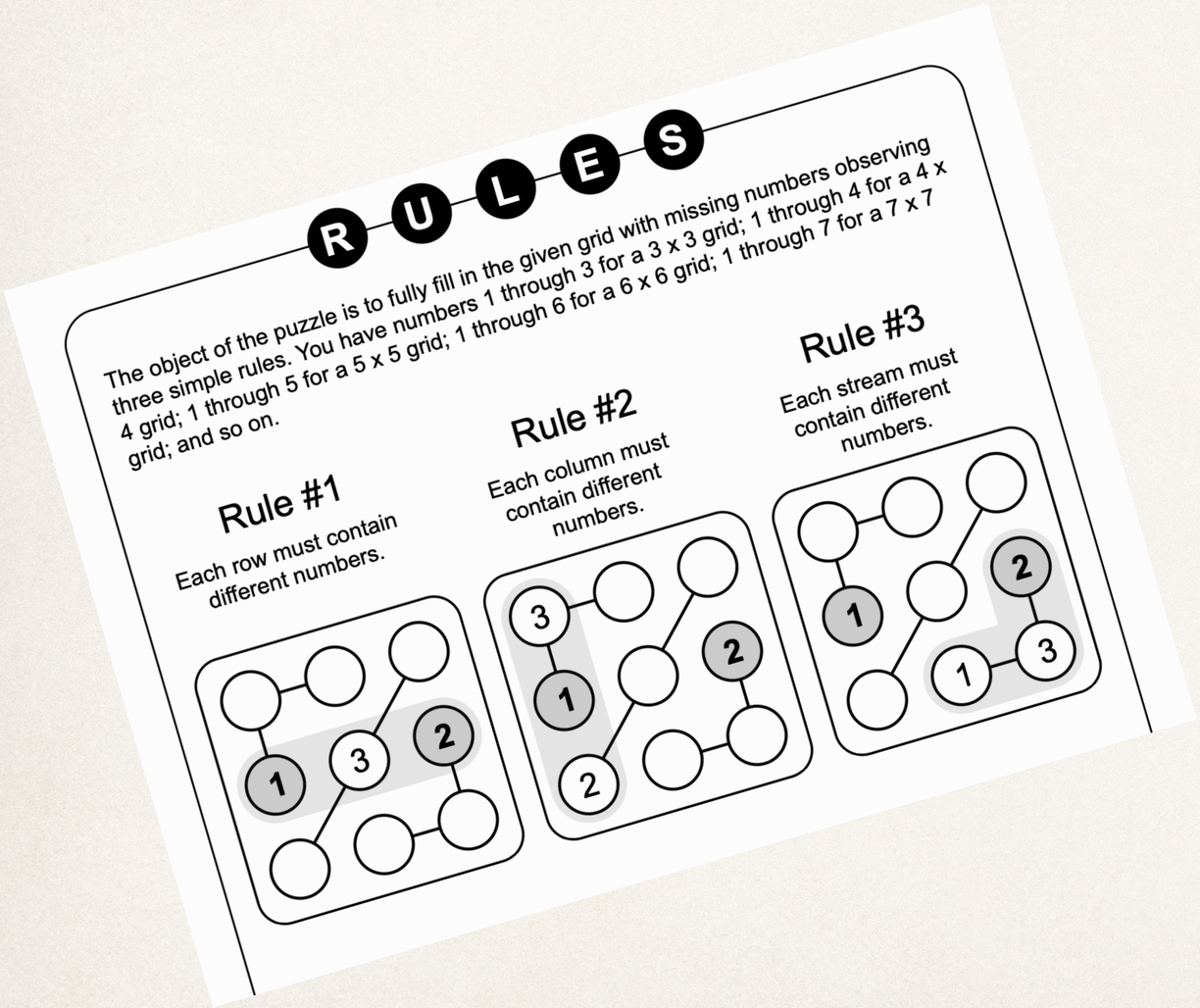


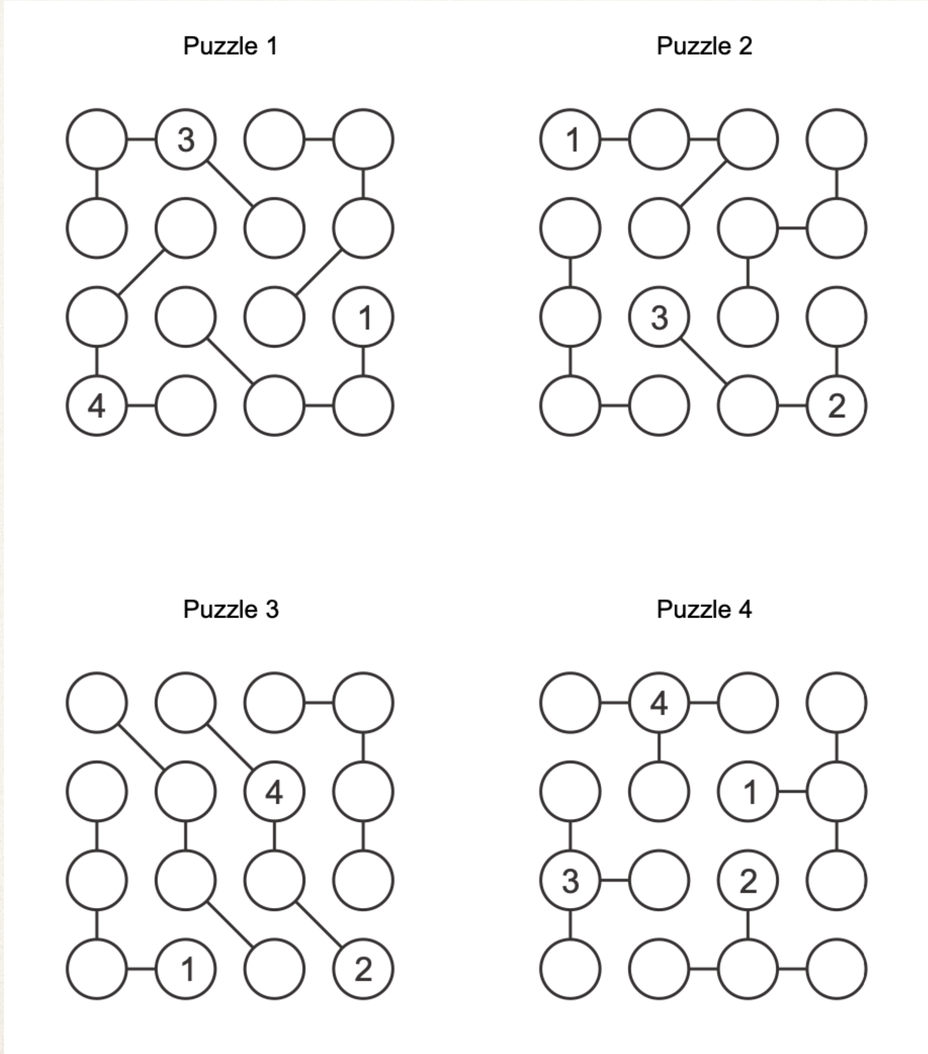
When drawing a line, it cannot cross another line. (This is important to remember!)
A dot cannot have more than three lines branching to or from it. For example, in the game below, dots A and B cannot be used any more because they already have three lines.



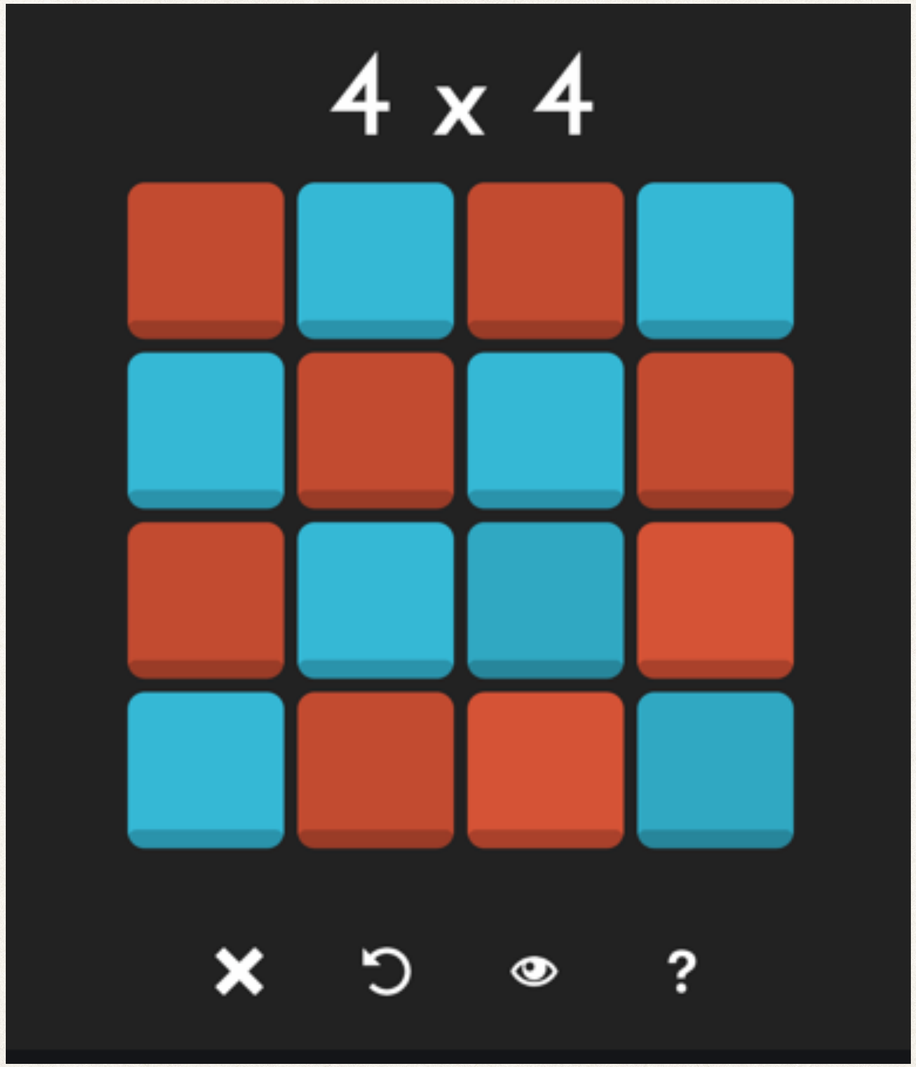
Strimko

http://strimko.com/download/StrimkoPack1_4x4.pdf





0hh1.com - an interactive ‘logic’ game



….and it’s companion .. 0hn0.com