Some mathematical/logical puzzles for summer fun (really!)

-Recommended by Susan Milner, Department of Mathematics & Statistics, University of the Fraser Valley
Some can be printed, some can be played on-line.

- <u>Brainbashers</u>, <u>Simon Tatham's Portable Puzzles</u>, and <u>MathinEnglish</u> all have many more great puzzles for free.

puzzle	a website source	comments	approximate grade level			
			K-3	4-6	7-9	10-12
Futoshiki	http://www.brainbashers.com/futoshiki.asp	This involves greater than/less than.		✓	✓	✓
Hidato	http://www.mathinenglish.com/Hidato.php	All you need to know is your numbers, forwards and backwards.	✓	✓		
	http://www.hidato.com/				✓	✓
Kakuro	http://www.mathinenglish.com/Kakuro.php	Involves addition & subtraction. Booklets of Kakuro puzzles are sometimes available in bookstores.		✓		
	http://www.brainbashers.com/kakuro.asp				✓	✓
Kenken Mathdoku Calcudoku	http://www.brainbashers.com/calcudoku.asp or http://www.kenken.com/#	Way better than Sudoku! Involves basic arithmetic: adding, subtracting, multiplying, dividing. Very popular around the world, Kenken appears in a number of daily newspapers. You may find booklets of Kenken in bookstores.			√	✓
Мар	http://www.chiark.greenend.org.uk/~sgtatham/puzzles/js/map.html	Not a single number to be seen! This is all about colouring maps.	✓	✓	✓	✓
Neighbours	http://www.brainbashers.com/neighbours.asp	Again, all you need to know is the numbers in order. 4 and 2 are neighbours of 3, but not of each other		✓	✓	✓
Rectangles Shikaku	http://www.mathinenglish.com/Shikaku.php	This is good way to visualise multiplication as repeated addition (lower grades) and is good factoring practice (higher grades); it connects arithmetic to geometry.	✓	✓		
	http://www.brainbashers.com/rectangles.asp				✓	✓
SET	http://www.setgame.com/set/daily_puzzle	You can buy SET for the family (approx. \$15) at Chapters/Indigo,Toys 'R' Us, and some local toy stores. Many variations are possible. For cooperative play, try making a crossword puzzle, where each "word" is a SET.	~	✓	√	✓
Skyscrapers Towers	http://www.brainbashers.com/skyscrapers.asp or http://www.chiark.greenend.org.uk/~sgtatham /puzzles/js/towers.html	This involves visualising the puzzle in three dimensions. You may want to start by actually making a set of towers from Lego or something similar		✓	✓	✓