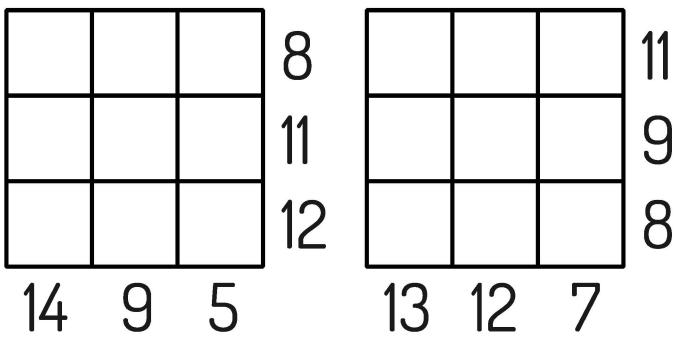
MathsJam Shout

September 2022
Guildford MathsJam

Puzzle Big & Small



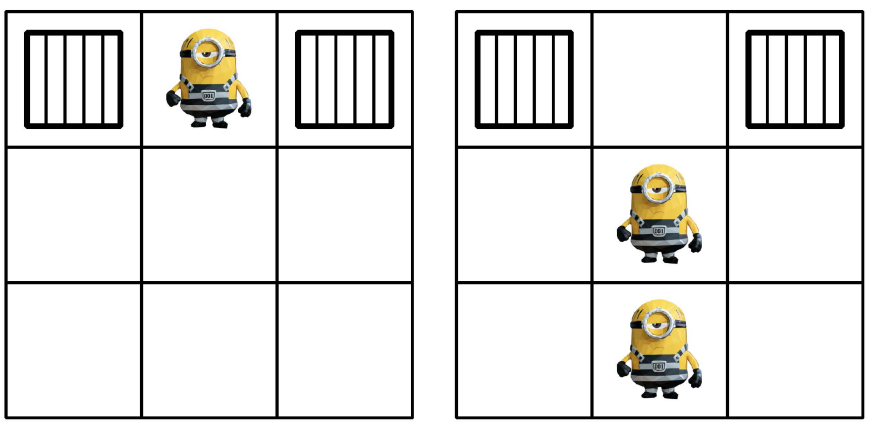
These squares have totals at the end of each row and column, which are obtained by adding only **two** of the numbers in the row or column.

The empty cells contain the numbers 1-9 only, and each is used only once in the square. The two numbers added to give these totals are the **biggest** and the **smallest** in each row or column, so the middle-size number is not used.

N.B. While a number may not be used in a row sum, it may be needed for the column sum.

Puzzles here and below right taken from **Arithmetical, Geometrical and Combinatorial Puzzles from Japan**, by Tadao Kitazawa

Make Jail Break



'Prisoner' Image by Linoyy from Pixabay

Print the sheet linked below double-sided, or print on two sheets and stick them back-to-back (or copy the design by hand). Fold this sheet of paper along the crease lines so that all the rascals become prisoners in jail. (The two images shown are the front and back of the single sheet.) You may want to cut a hole in the bars so you can check on the prisoners!

Printable version: bit.ly/print-prisoners

From **The Paper Puzzle Book: All You Need Is Paper!**, by Ilan Garibi, David Hillel Goodman and Yossi Elran

Puzzle Number Pairs

The first 60 positive integers are to be partitioned into 30 pairs such that the difference between the numbers in each pair is either 1 or 10. Given that two of the pairs are (10,11) and (20,30), which number is paired with 41?

MathsJam Shout is a monthly sheet of ideas for activities to do at a MathsJam night. It's created using suggestions from a different MathsJam each month, and if you'd like to submit suggestions for a month in the future, email **katie@mathsjam.com** for details.

MathsJam is a monthly opportunity for like-minded self-confessed maths enthusiasts to get together in a pub and share stuff they like. Puzzles, games, problems, or just anything they think is cool or interesting. Monthly MathsJam nights happen in over 70 locations around the world, on the second-to-last Tuesday of each month. To find your nearest MathsJam, visit the website at **www.mathsjam.com**.