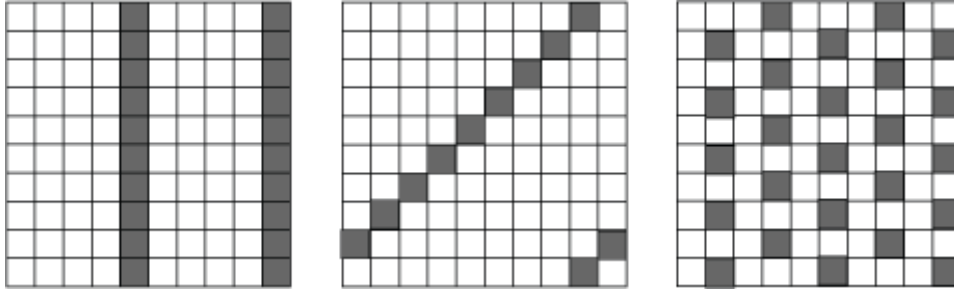


Table Patterns Go Wild!

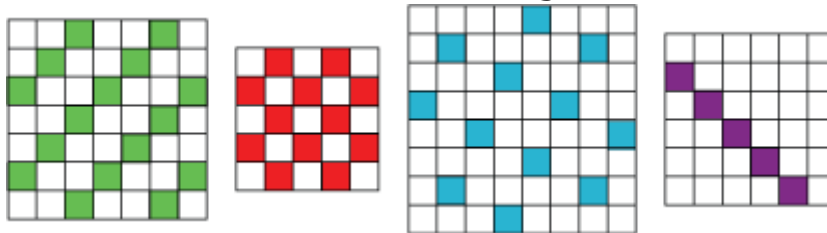
Nearly all of us have made table patterns on hundred squares, that is 10 by 10 grids. Some tables made vertical lines, some made diagonal lines and some patterns ranging across the whole space. Hundred squares are 10 by 10 grids. In this problem we will call these "10 grids".



What numbers made which sort of patterns and why?

This problem looks at the patterns on differently sized square grids. These are from 4 grids (that is a 4 by 4 grid) to 9 grids.

These are patterns on a 7, a 5, an 8 and on a 6 grid:



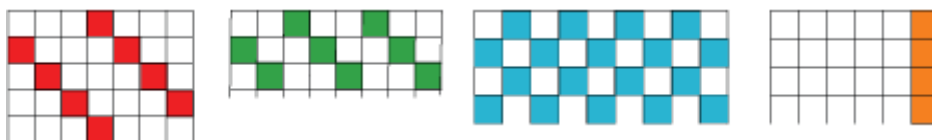
What tables made these patterns? Can you think why they made them like that?

Perhaps this is the time to experiment for yourself. You can use grids drawn on squared paper.

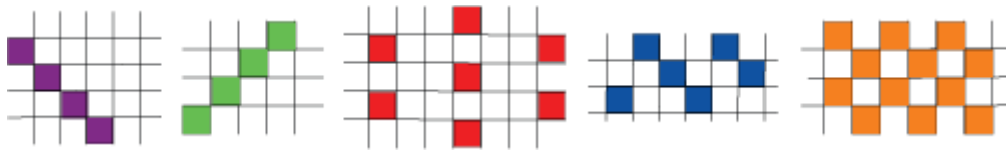
Can you discover what makes vertical and diagonal lines on the different grids and what makes the various patterns. Can you make the checked pattern? What table do you need to use on what kind of grid?

Here are the top parts of some grids.

Can you identify what table on what grid have been used to make them?



Here are some parts of various grids. This time we have not shown the edges of the grids. Can you identify what tables on what grids could have been used to make these patterns?



There may be more than one answer.

10-grids

