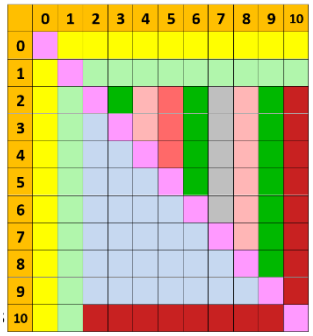
Times tables: Looking for patterns

Our number system is full of patterns!

Discovering patterns:

1. Allows us to see beauty in numbers!

2. It helps us take shortcuts and be better at manipulating numbers (solving problems)



Activity

Use the 15×15 grid

We will look for patterns in the grid therefore it is ***VERY important that you fill in the grid in the following order***

Tick as you go

Part 1

1. Fill in the 2's column and Row
2. Leave the 3's for now
3. DOUBLE each 2's answer to fill in the 4's column
4. Double each 2's answer to fill in the 4's row
5. Leave the 5,6,7 for now
6. DOUBLE the 4's column filled in (step 3) and fill in the 8's column
7. Double the 4's row filled in (step 4) and fill in the 8's row

Question: Why can we do this? Is this an easier way to think about our 8 times tables?

Part 2

1. Fill in the 3 times table row/column
2. DOUBLE the row/column and fill in across and down the 6 times table row/column

Question: Why can we do this? Is this an easier way to think about our 6 times tables? Can we now double again for the 9 times table row/column? Why or why not?

Part 3

1. Fill in the 9 times table row/column
2. Fill in the 1; 5 and 10 times row/column (most people find this very easy to do)

What is left? Why do you think this number is left?

Highlight the numbers diagonally down the middle - these are special numbers - what are they called?

From the grid, what are examples of factors and what are examples of multiples?

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1															
2															
3															
4															
5															
6															
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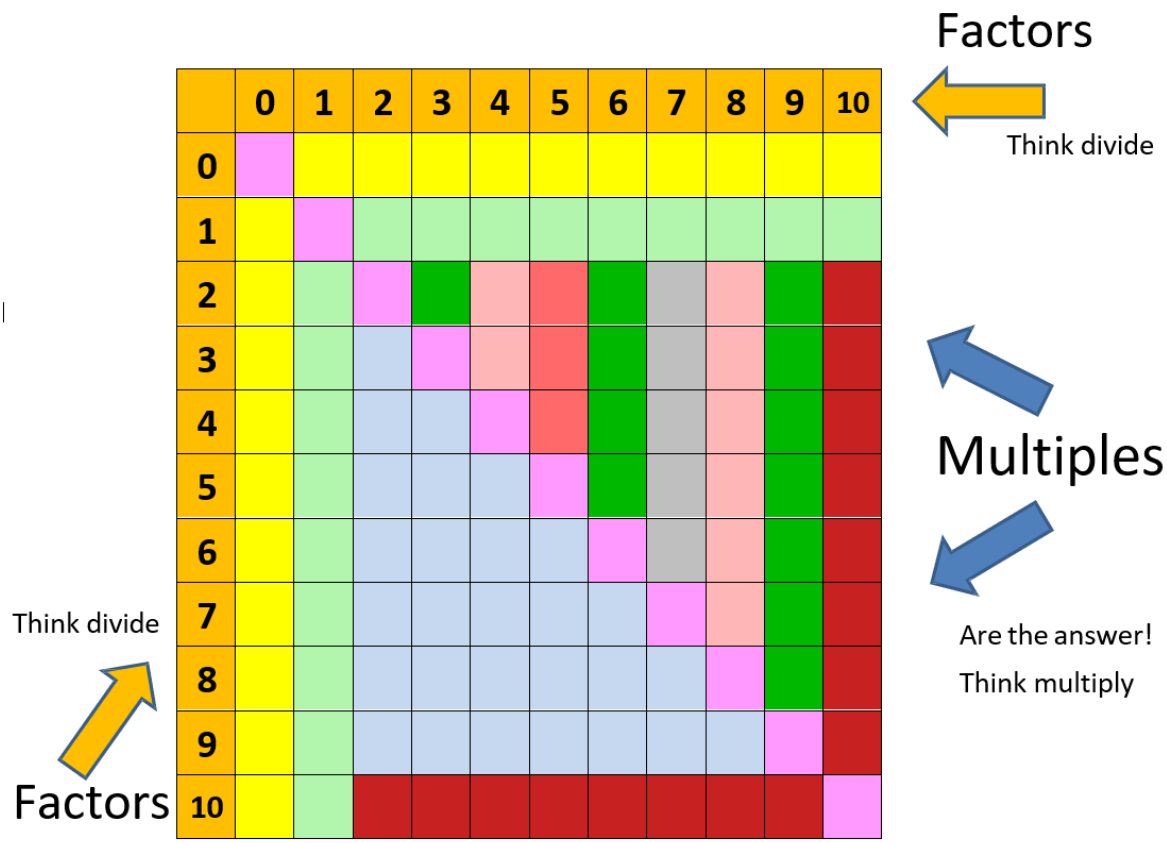

	0	1	2	3	4	5	6	7	8	9	10
0											
1											
2											
3											
4											
5											
6											
7											
8											
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