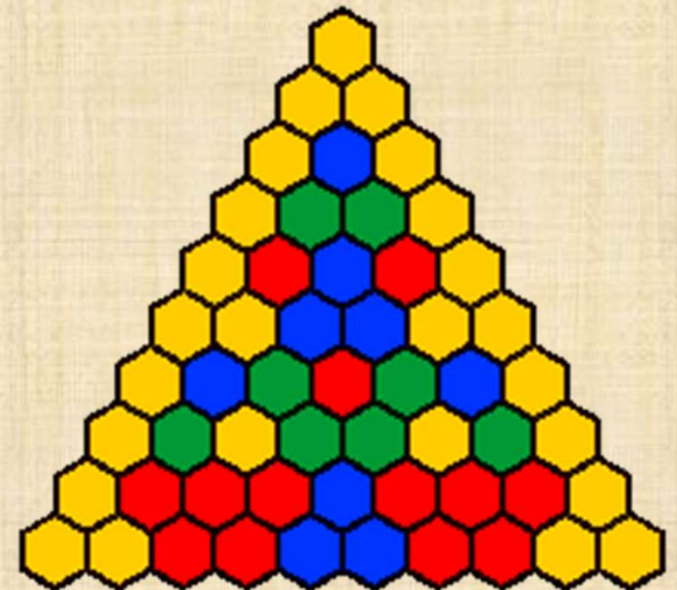
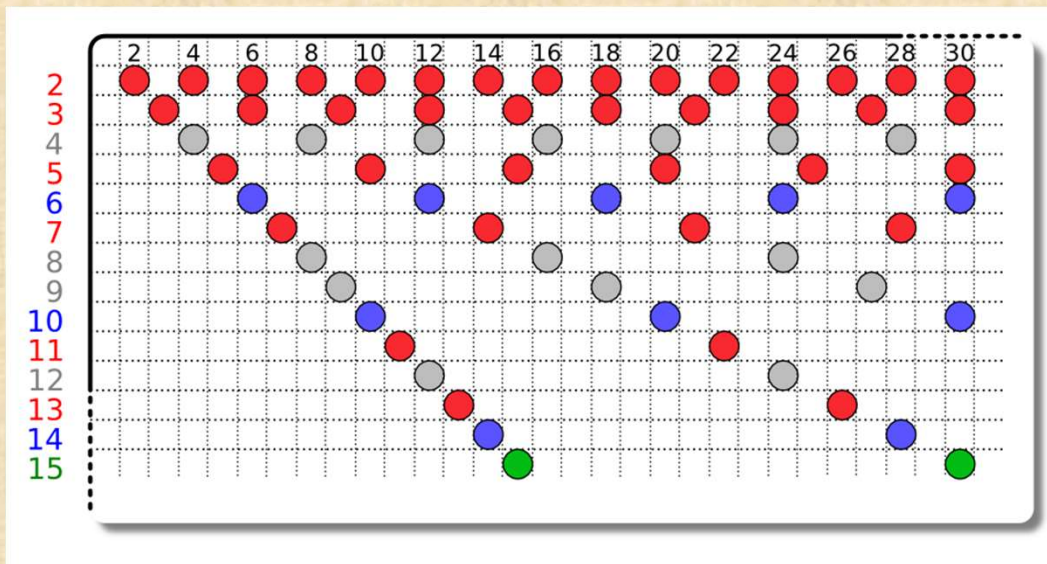


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



# Multiples Investigation





# What is a multiple?

**Multiples are really just extended times tables.**

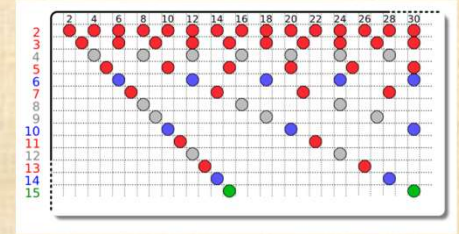
The multiples of 2 are all the numbers in the 2 times table, such as 2, 4, 6, 8, 10 and so on.

Multiples of 2 always end with a 2, 4, 6, 8 or 0. You can tell 2286, for example, is a multiple of 2 because it ends with a 6.

The multiples of 5 are all the numbers in the 5 times table, such as 5, 10, 15, 20, 25 and so on.

Multiples of 5 always end with a 5 or a 0. You can tell 465, for example, is a multiple of 5 because it ends with a 5.

# Starter



For each number in the table, put a tick if it is divisible by 2, 3, 4, 5, or 6. How can you work these out without actually working out the division?

Number	Divisible by 2?	Divisible by 3?	Divisible by 4?	Divisible by 5?	Divisible by 6?
26	✓				
120	✓	✓	✓	✓	✓
975		✓		✓	
12,528	✓	✓	✓		✓



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

# Multiples Investigation

Do you know any of the rules for checking divisibility?

Number	Divisible by 2?	Divisible by 3?	Divisible by 4?	Divisible by 5?	Divisible by 6?
26	✓				
120	✓	✓	✓	✓	✓
975		✓		✓	
12,528	✓	✓	✓		✓

A number can be divided by 2 if: It ends in a 0, 2, 4, 6 or 8

A number can be divided by 3 if: The sum of its digits is a multiple of 3

A number can be divided by 4 if: The number made by the last 2 digits is a multiple of 4

A number can be divided by 5 if: It ends in a 0 or 5

A number can be divided by 6 if: It can be divided by both 2 and 3



# Summary

- We have looked at a few tests of divisibility
- You have solved problems relating to multiples
- You have also seen how to think logically!