

## Special Numbers

### Factors and prime numbers

If a number divides another exactly the dividing number is called the factor of the divided number.

Example:

5 divide 30 exactly without a remainder, So 5 is a factor of 30.

The factors of 30 are: 1 2 3 5 6 10 15 30

Some numbers only have **two** factors. They are called **prime numbers**. Their factors are the number itself and 1.

19 is a prime number. It can only be divided by 1 and 19.

### Multiples

The first few multiples of 4 are: 4, 8, 12, 16, 20...

But multiples don't stop there! They can be much bigger numbers.

### Prime numbers between 1 and 100

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

**Cross out all the multiples 2 except 2. Cross out all the multiples of 3 except 3. Cross out all the multiples of 5 except 5. Cross out all the multiples of 7 except 7. Cross out 1. By doing so, you end up with the prime numbers between 1 and 100.**