Factors

Multiplication and division

Solving mathematical problems

Challenge

Investigate which numbers less than 100 have proper factors that are only even numbers.

Investigate which numbers less than 100 have proper factors that are only odd numbers.

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

Think about ...

A **factor** is a whole number that divides exactly into another whole number without a remainder.

A **prime number** is a whole number greater than 1 that can't be divided by another whole number, except for itself and 1.

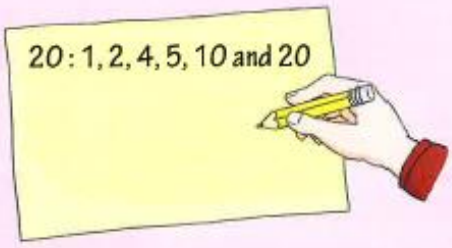
Proper factors of a number are all its factors except 1 and the number itself.

A factor of a whole number that is also a prime number is called a **prime factor**.

What if?

20 has two prime factors: 2 and 5.

Investigate other numbers less than 100 that have two prime factors.



When completed, consider:

Could you have calculated the answers in a different way?

Was your method the most efficient?