

• Ch: 6 Be My Multiple , I'll be your Factor

Notes:

Factors :

- **Factors** are what we can multiply to get the number.

Example: Factors of 12

- $3 \times 4 = 12$, so 3 and 4 are **factors** of 12.
- $2 \times 6 = 12$, so 2 and 6 are also **factors** of 12,
- $1 \times 12 = 12$, so 1 and 12 are **factors** of 12 as well.
So, 1, 2, 3, 4, 6 and 12 are the factors of 12

Multiples:

- **Multiples** are what we get after multiplying the number .
- **multiple** is the product (result) of one number multiplied by another number.
- A multiple is a number that can be divided by another number a certain number of times without a remainder.
- Eg: Multiples of 6 are :
6 , 12, 18, 24, 30 , 36,.....

☀ **Prime Number** – a number that has only two factors, itself and 1.

- 7 is prime because the only numbers that will divide into it evenly are 1 and 7.
- 2 is the only even prime number
- The prime numbers are endless, as well as the composite numbers
- 1 is not a prime number; it is called a **UNIQUE** number (only have 1 factor)

- **Composite number** – a number that has more than two factors.

Example: The number 8.

The factors of 8 are 1, 2, 4, 8.

Divisibility Test

- **2** - A number is divisible by 2 if the last digit is 2, 4, 6, 8, and 0 eg. 22, 24, 30
- **3** - A number is divisible by 3 if the sum of digit is divisible by 3 eg. $78 = 7 + 8 = 15$, 15 is divisible by 3 so 78 is divisible by 3
- **5** - A number is divisible by 5 if the last digit is 0 or 5. eg. 55, 10, 540
- **10** - A number is divisible by 10 if the last digit is 0 eg. 10, 100, 30

All **prime numbers** from 1 to 120 have been highlighted in the chart below.

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
101	102	103	104	105	106	107	108	109	110
111	112	113	114	115	116	117	118	119	120

A **prime number** has only two factors: 1 and itself.
The number 1 is neither prime nor composite.

Complete it in Maths Notebook.



Prime and Composite



write the factors for each number. Then, decide if it is prime or composite.



Number	Factors	Prime or Composite?
1) 8	_____	_____
2) 25	_____	_____
3) 21	_____	_____
4) 30	_____	_____
5) 5	_____	_____
6) 48	_____	_____
7) 19	_____	_____
8) 12	_____	_____

