Extra class :—

1. Tests of divisibility
2. Factors and Multiples
3. HCF and L.C.M

① When I say

a is divisible by b

When $a \div b$ the remainder is zero.

$11 = 5 \times 2 + 1$

• Is 11 divisible by 2, because no, the remainder 1

A number is divisible by	Test of divisibility	Example
2	• the last digit must be 2, 4, 6, 8, 0 ie it should be an even number	0, 100, 22, etc
3	• sum of digits must be divisibles	3, 9, 6, 27
4	• even number • last two digits must be divisible	

unit place

□ odd number = Not divisible by 2 → 1, 3, 5, 7, 9

↳ 1, 5, 7, 3, 11, 17, 19, 21, 333

⊠ even number = no. divisible by 2

↳ 2, 4, 16, 22, 0, 18, 120 → 2, 4, 6, 8, 0

1 2 3 4 6 0 7 → one's place → unit digit

ten's

hundreds

thousands

0, 1, 2, 3, 4, 5, 6, 7, 8, 9 → digits

Decimal system

64

× 4

256

→ Is 56 divisible by 4

Yes → then 256 is divisible by 4

No → then 256 not divisible by 4

1 1 3 4 2

42 is not divisible by 4

So 11342 is not divisible by

Is

1 1 2 3 4 5 6 7 8 9 6

divisible by 4?

→ 96 is divisible by 4.

Hence 11234567896 is divisible by 4.

Is 182793504527 divisible by 9.

↓

because sum of digits = 54

54 is divisible by 9.

Factors and multiples

Every natural number (except 1) is prime or composite number.

Factor are the numbers which divide the actual number. (leaving no reminders)

144 2 divides 144

↳ 1, 2, 3, 4, 6, 12, . .

14684

Is 4 a factor of 14684?

Yes, because 14684 is divisible by 4

512

Is 3 a factor of 512?

No, because 3 doesn't divide 513

7

Is 7 a factor of 7.

Yes, because 7 divides itself

Multiples.

These are the numbers which are divisible by the actual number.

10 is a multiple of 5 or 2.

Is 120 a multiple of 4?

Yes.

Is 102 a multiple of 9?

No. Sum of the digits = 3. Is 3 divisible by 9?

Q. Is 2 a multiple of 10? (divisible)

→ No, it is a factor of 10.

2 is not divisible by 10.

Q. Is 3 a multiple of 1? (divisible by)

→ Yes, 3 is a multiple because 3 is divisible by 1.

Q. Is 5 a multiple of 2?

→ No, because 5 is not divisible by 2.

Q. Is 2 a factor of 100. (divides, does)

→ Yes, because 2 divides 100

multiple → divisible

factor → divides