SESSION	**: 7**
CLASS	**: IV**
SUBJECT	**: MATHEMATICS**
CHAPTER NUMBER	**: 10**
CHAPTER NAME	**: FACTORS AND MULTIPLES**
SUBTOPIC	**: PRIME AND COMPOSITE NUMBERS, EX-10 B**

LEARNING OBJECTIVE

- **Enable the students to understand about the concept of prime and composite numbers.**

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FACTORS AND MULTIPLES

Composite Numbers

Composite numbers are the numbers having more than two factors i.e. other than **1** and the **number itself**.

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FACTORS AND MULTIPLES

Prime Numbers

A **prime number** is a number which has only two factors, namely **1** and the **number itself**.

These numbers are not completely divisible by any other number, except **1** and the **number itself**.

Note : > 1 is not a prime number since it has only one factor, that it itself.

> 2 is the only even prime number.

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FACTORS AND MULTIPLES

Example: Separate the prime numbers and composite numbers from the following numbers : 7, 15, 2, 24, 19.

7 = 1 x 7	Factors of **7** are **1** and **7**.
15 = 1 x 7 and 3 x 5	Factors of **15** are **1**, **3**, **5**, and **15**.
2 = 1 x 2	Factors of **2** are **1** and **2**.
19 = 1 x 19	Factors of **19** are **1** and **19**.
24 = 1 x 24; 2 x 12; 3 x 8 and 4 x 6	Factors of **24** are **1**, **2**, **3**, **4**, **6**, **8**, **12**, and **24**.

Therefore, the prime numbers are **7**, **2** and **19** (have only two factors).

The composite numbers are **15** and **24** (having more than two factors).

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FACTORS AND MULTIPLES

EXERCISE – 10(B)

1) Classify the following numbers as prime or composite numbers.

(a) 18 Composite number (1, 2, 3, 6, 9, 18,).

(b) 19 Prime number (1, 19).

(c) 59 Prime number (1, 59).

(d) 60 Composite number (1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60).

(e) 23 Prime number (1, 23).

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FACTORS AND MULTIPLES

EXERCISE – 10(B)

1) Classify the following numbers as prime or composite numbers.

(f) 25 **Composite number (1, 5, 25)**.

(g) 47 **Prime number (1, 47)**.

(h) 35 **Composite number (1 , 5 , 7 , 35)**.

(i) 63 **Composite number (1, 3, 7, 9, 21, 63)**.

(j) 31 **Prime number (1, 31)**.

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EXERCISE – 10(B)

3) Tick (✓) the prime number.

(a) 21 ✗ **(b)** 32 ✗ **(c)** 29 ✓ **(d)** 72 ✗

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EXERCISE – 10(B)

4) Tick (✓) the composite number.

(a) 9 ✓ **(b)** 4 ✓ **(c)** 2 ✗ **(d)** 5 ✗

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EXERCISE – 10(B)

5) Tick (✓) the greatest prime number.

(a) 87 ✗ **(b)** 29 ✗ **(c)** 67 ✓ **(d)** 51 ✗

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EXERCISE – 10(B)

6) Tick (✓) the smallest composite number.

(a) 6 ✓ **(b)** 15 ✗ **(c)** 8 ✗ **(d)** 27 ✗

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EXERCISE – 10(B)

7) Which of the following numbers is not a prime number?

(a) 63 — **Not a prime number**

(b) 17 — **a prime number**

(c) 29 — **a prime number**

(d) 47 — **a prime number**

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FACTORS AND MULTIPLES

EXERCISE – 10(B)

8) Which of the following numbers is an even prime number?

(a) 14 — **Not an even prime number**

(b) 7 — **Not an even prime number**

(c) 5 — **Not an even prime number**

(d) 2 — **An even prime number**

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FACTORS AND MULTIPLES

EXERCISE – 10(B)

9) Which of the following numbers is a composite number?

(a) 23 — **Not a composite number**

(b) 13 — **Not a composite number**

(c) 15 — **A composite number**

(d) 19 — **Not a composite number**

FACTORS AND MULTIPLES

EXERCISE – 10(B)

10) Which of the following numbers is a prime number?

(a) 63 — **Not a prime number**

(b) 72 — **Not a prime number**

(c) 74 — **Not a prime number**

(d) 37 — **A prime number**

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LEARNING OUTCOME:

Students are able to understand the concept of prime and composite numbers.

THANKING YOU

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