

Session 31: The Least Common Multiple (LCM)

Session Title	The Multiple Mysteries
Objective	<p>By the end of this session, students will</p> <ol style="list-style-type: none">1. Understand the concept of the Least Common Multiple (LCM)2. Find the LCM of the given numbers using various methods.3. Develop problem-solving and teamwork skills.
Topics	<p>The Least Common Multiple (LCM) is the smallest multiple that two or more numbers share.</p> <p>It is useful in real-life applications, such as scheduling events, solving fraction problems, and understanding patterns.</p>
Material Required	<p>Board & Chalk</p> <p>Before starting the class, draw a number line (0 to 30) on the floor</p>
Methodology	<p>Activity-based Learning: Physical activity and group work.</p> <p>Experiential Learning: Relating LCM to real-world situations.</p>
Session Duration	90 Minutes

Introduction Activity(10 Minutes)

Pass pass

In "Pass Pass," children form a circle. Choose any number, for example 5. Then each child starts counting from one. When they reach 5 or multiples of five, they have to say pass. If they don't say pass, that child is out. The game continues until only one child remains.(NB: Change the number after each round)

Main Activity(70 minutes)

Tell a short story:- (20 minutes)

Two friends, Arya and Rahul, love visiting a park. Arya visits every 3 days, and Rahul visits every 4 days. If both visit the park today, when will they meet again?

Ask students to think and predict: "Will they meet again in a week? In 10 days?"

Guide them to count the days until both are at the park together (on the 12th day).

Explain that the Least Common Multiple (LCM) of 3 and 4 is 12—the smallest number that both 3 and 4 can divide into evenly.

Game Time (25 minutes)

1. Draw a number grid on the floor (1–50)
2. Call out two numbers (e.g., 4 and 6)
3. Students take turns hopping on the multiples (4, 8, 12... and 6, 12, 18...)
4. The first common number they step on is the LCM (NB: Repeat the activity with different number)

Time to solve (20 Minutes)

Give simple examples: (Divide students into small groups)

- LCM of 2 and 5

→ Multiples: (2, 4, 6, 8, 10, 12...) and (5, 10, 15...) → LCM is 10.

- LCM of 6 and 8

→ Multiples: (6, 12, 18, 24...) and (8, 16, 24...) → LCM is 24.

- A bell rings every 6 minutes, and another bell rings every 8 minutes. After how many minutes will both bells ring together?
- A school organizes a sports day every 5 years, and a cultural fest every 7 years. How many years later will both events happen together again?

Review Questions(5 minutes)

Ask: What strategies helped you solve the problems quickly?

Encourage peer teaching—students explain their solutions to classmates.

Follow up Task (10minutes)

Home work

1. Two farmers plant crops—one plants every 9 days, and the other every 12 days. In how many days will they plant on the same day again?

2. Two buses leave a station at the same time—one after 12 minutes, the other after 15 minutes. When will they leave together again?

Expected Learning Outcome:

Knowledge building-

- Concept of LCM
- Method to find LCM

Skill Building-

- Logical thinking

- Strengthens speed and accuracy
- Team work

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