**UNIT 1 · STANDARD 6.NS.4**

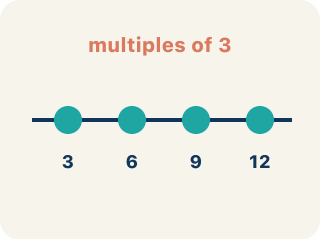
# Least Common Multiple

Lesson 1-3

**Name:** Type your name **Date:** Today's date **Class:** Class period

## Key Vocabulary Level 2 Standard

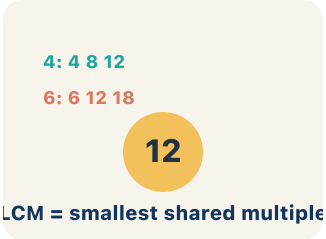
Picture first, then the word, then a plain-language meaning. Say each word out loud.




*Multiples of 4: 4, 8, 12, 16, 20 — found by multiplying 4 × 1, 4 × 2, 4 × 3, …*

### Multiple

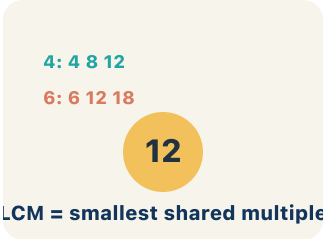
**Write the definition:**




*Multiples of 4: 4, 8, 12, 16, 20, 24. Multiples of 6: 6, 12, 18, 24. First match: 12 → LCM = 12*

### Least common multiple

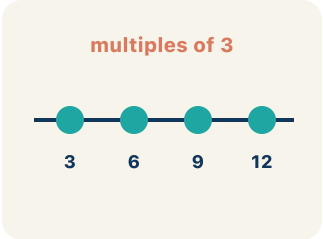
**Write the definition:**




*12, 24, and 36 are all common multiples of both 3 and 4*

### Common multiple

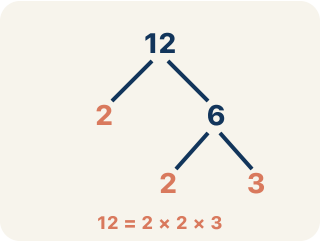
**Write the definition:**




*Skip count by 6: 6, 12, 18, 24, 30 — each jump adds 6*

### Skip counting

**Write the definition:**




*4 = 2 × 2, 6 = 2 × 3. LCM uses the highest power of each prime: $2^2 \times 3 = 12$*

## Prime factorization

**Write the definition:**

## Guided Notes Level 2 Standard

🎯 **WHAT WE'RE LEARNING TODAY**

**I can find the least common multiple (LCM) of two numbers by listing or comparing their multiples.**

✏️ **Fill in each blank as we go. Use the Word Bank to help you.**

📚 **WORD BANK — FILL EACH BLANK WITH THE BEST WORD**

Multiple | Least common multiple | Common multiple | Skip counting | Prime factorization

☝️ *Tap any word to see what it means and a picture.*

1. The product of a number and any whole number is a _____ of that number.

2. _____ — The smallest number that two or more numbers both go into.

3. A multiple that two or more numbers share is a _____ multiple.

4. Counting forward by a number other than 1, like 6, 12, 18, is called _____.

5. _____ — Writing a number as prime numbers multiplied together. It helps you find the LCM.

### 🧱 Watch & Try — Worked Examples

*See the notes in action: watch one worked all the way through, then try the next with the same steps.*

**👀 I do — watch**

Follow each step as your teacher solves it.

**Problem:** What is the LCM of 3 and 5?

A. 15

B. 3

C. 5

D. 30

**Step 1** Multiples of 3: 3, 6, 9, 12, 15, …

**Step 2** Multiples of 5: 5, 10, 15, …

**Step 3** The smallest common multiple is 15.

✅ **Answer:** A. 15

**🧩 Try — put the steps in order**

Drag the cards (or use the ▲▼ buttons) to put the solution steps in the right order, then press **Check**.

The smallest common multiple is 15.

Multiples of 3: 3, 6, 9, 12, 15, …

Multiples of 5: 5, 10, 15, …

🤝 **We do — together**

Solve this one with your class using the same steps.

**Problem:** What is the LCM of 6 and 8?

A. 24

B. 48

C. 14

D. 6

**Step 1** _____

**Step 2** _____

**Step 3** _____

**Answer:** _____

✏️ **You do — your turn**

Now try one on your own. Show every step.

**Problem:** What is the LCM of 4 and 10?

A. 20

B. 40

C. 10

D. 2

Show your work:

## Try It

Solve on your own. Check the answer key when you are done.

**1. Stop 1 — Oxygen Bay: The oxygen scrubber cycles every 4 minutes and the air filter cycles every 6 minutes. They both just ran together. After how many minutes do they next run together?**

A. 12

B. 10

C. 24

D. 6

Show your work:

**2. Stop 2 — Docking Ring: A supply pod arrives every 8 minutes and a cargo shuttle arrives every 12 minutes. They just docked together. After how many minutes do they next dock together?**

A. 24

B. 20

C. 48

D. 16

Show your work:

### Stretch Your Thinking

Level 2 enrichment

Challenge task — explain your reasoning in full sentences.

**Hot dogs come in packs of 8 and buns come in packs of 6. What is the fewest of each you can buy so you have the same number of hot dogs and buns with none left over? Explain how the LCM solves this problem.**

*Sentence starter: The LCM of 8 and 6 is ____. I need to buy ____ packs of hot dogs and ____ packs of buns to get ____ of each. This works because ____.*

Show your work:

## Reflect — Exit Ticket

**What is the LCM of 9 and 12?**

A. 36

B. 108

C. 3

D. 72

Your answer: