# Multiplying by 6

### **1. Introduction to Multiplying by 6**

- Start with a Simple Question:
  - "If we have 6 groups of something, how do we find out how many we have in total?"
- Explain the Concept:
  - Multiplication is Repeated Addition:
    - When we multiply by 6, we're adding the number 6 several times.
    - For example,  $4 \times 6$  means we are adding 6 four times: 6 + 6 + 6 + 6.

## 2. Visualize Multiplying by 6

- Use Objects:
  - **Example:** If you have 6 boxes, and each box contains 5 toys, how many toys are there in all?
  - Demonstrate with Counters or Blocks:
    - Group the counters into sets of 6.
    - Count the total number of counters.

## 3. Skip Counting by 6

- Practice Skip Counting Together:
  - Count by 6s:
    - Start at 6 and count up by 6: 6, 12, 18, 24, 30, 36, 42, 48, 54, 60.
    - Engage the Class: Ask students to join in or use a rhythm to make it fun.
- Use a Number Line:
  - Draw a number line and mark the multiples of 6 to visualize the skip counting.

#### 4. Learn the Multiplication Facts for 6

- Multiplication Table for 6:
  - Show the multiplication facts for 6:
    - 6 × 1 = 6
    - $6 \times 2 = 12$
    - $6 \times 3 = 18$
    - $6 \times 4 = 24$
    - $6 \times 5 = 30$
    - 6 × 6 = 36
    - $6 \times 7 = 42$
    - $6 \times 8 = 48$
    - $6 \times 9 = 54$
    - $6 \times 10 = 60$

#### 5. Real-World Examples

- Example Problem 1:
  - **Problem:** You have 6 bags of marbles, and each bag has 7 marbles. How many marbles are there in total?
  - **Solution:**  $6 \times 7 = 42$  marbles.
- Example Problem 2:
  - **Problem:** There are 6 pages in each book. If you have 8 books, how many pages are there in total?
  - **Solution:**  $6 \times 8 = 48$  pages.

#### **6. Practice Problems**

- Solve Together:
  - Examples:
    - 6 × 3 = \_\_\_\_\_
    - 6 × 5 = \_\_\_\_\_
    - 6 × 9 = \_\_\_\_\_

#### 7. Review and Conclusion

- Recap:
  - Summarize how multiplying by 6 means adding 6 several times and how we use patterns to solve these problems.