

3rd Grade Math Lesson: Multiply by 7

Objective:

- Students will understand and practice multiplying numbers by 7 using strategies such as skip counting, repeated addition, and using known multiplication facts. By the end of the lesson, students will be able to solve multiplication problems involving 7 and apply these skills to real-world situations.

1. Introduction to Multiplying by 7

- **Begin with a discussion:**
 - Ask students, "What does it mean to multiply by 7?"
 - Have them share what they know about multiplication and skip counting.
- **Explain:**
 - Multiplication is repeated addition. For example, 7×3 means adding 7 three times: $7 + 7 + 7 = 21$.
 - Skip counting is another way to think about multiplying by 7: 7, 14, 21, 28, etc.

2. Skip Counting by 7

- **Activity:**
 - Practice skip counting by 7 as a class, starting from 0 up to 70.
 - Write the numbers on the board as students say them: 7, 14, 21, 28, 35, 42, 49, 56, 63, 70.

Tip: Use songs, number lines, or clapping to make skip counting engaging.

3. Multiplying by 7 Using Repeated Addition

- **Explain:**
 - Show students that multiplying by 7 is the same as adding 7 repeatedly.

Example 1:

- $7 \times 2 = 7 + 7 = 14$

Example 2:

- $7 \times 4 = 7 + 7 + 7 + 7 = 28$

- **Activity:**
 - Ask students to solve problems using repeated addition. Write problems like:
 - $7 \times 3 = \underline{\hspace{2cm}}$
 - $7 \times 5 = \underline{\hspace{2cm}}$

4. Multiplication Facts for 7

- **Introduce and practice:**

- The multiplication table for 7. Explain that these are key facts to remember:

$7 \times 1 = 7$ | $7 \times 2 = 14$ | $7 \times 3 = 21$ | $7 \times 4 = 28$ | $7 \times 5 = 35$ | $7 \times 6 = 42$ | $7 \times 7 = 49$ | $7 \times 8 = 56$ |
 $7 \times 9 = 63$ | $7 \times 10 = 70$ |

- **Activity:**
 - Give students flashcards or worksheets to practice these facts.

5. Real-World Application of Multiplying by 7

- **Discuss:**
 - Ask students, "Where can we use multiplying by 7 in real life?"
 - Examples: Days in a week, 7 friends sharing items, 7 groups of items, etc.
- **Example Problem 1:**
 - There are 7 days in a week. How many days are there in 5 weeks?
 - Solution: $7 \times 5 = 35$ days.
- **Example Problem 2:**
 - If each person has 7 cookies, how many cookies do 6 people have in total?
 - Solution: $7 \times 6 = 42$ cookies.

6. Guided Practice

- **Solve together:**
 - Solve problems like these as a class:
 - $7 \times 3 = \underline{\hspace{2cm}}$
 - $7 \times 8 = \underline{\hspace{2cm}}$
 - $7 \times 7 = \underline{\hspace{2cm}}$
- **Use visuals:**
 - Draw arrays or use counters to help students visualize the multiplication facts.

7. Independent Practice

- **Worksheet:**
 - Students will solve problems on their own, like:
 1. $7 \times 4 = \underline{\hspace{2cm}}$
 2. $7 \times 6 = \underline{\hspace{2cm}}$
 3. $7 \times 9 = \underline{\hspace{2cm}}$

8. Multiplication Games

- **Game 1:**
 - Play "Multiplication Bingo" with the class. Students have bingo cards with products of 7. Call out problems like 7×5 , and students mark the answer if it appears on their card.
- **Game 2:**

- Play a timed quiz or flashcard game where students race to answer multiplication facts for 7.

9. Conclusion

- **Recap:**
 - Ask students to explain what they learned about multiplying by 7.
 - Review the key multiplication facts for 7.
- **Exit Ticket:**
 - Have students solve a problem like:
 - $7 \times 6 =$ _____
 - $7 \times 8 =$ _____