Multiplying Without Regrouping to 3rd Grade Math

1. Introduction to Multiplying Without Regrouping

- **Start with a Simple Question:**
  - "Have you ever had to add the same number many times? Multiplying is like that, but quicker!"
- **Explain the Concept:**
  - **Multiplication:** It's a shortcut for adding the same number over and over again. When we multiply without regrouping, we don't need to carry over extra numbers to the next column.

2. Understanding Multiplication Without Regrouping

- **What is Regrouping?**
  - Regrouping (or carrying over) happens when the result of a multiplication is a number greater than 9 in any place value column, but for now, we'll focus on problems where that doesn't happen.
- **Example:** Multiply 3×4:
  - Think of it as adding 3 four times: $3 + 3 + 3 + 3 = 12$.
  - Here, 12 is less than 20, so we don't need to carry over anything.

3. Visualize Multiplying Without Regrouping

- **Use Objects:**
  - **Example:** You have 2 bags, and each bag contains 5 apples. To find out the total number of apples:
    - Draw 2 groups with 5 apples each.
    - Count all the apples: $5 + 5 = 10$.
- **Draw a Picture:**
  - Draw 2 rows with 5 dots in each row. Count the total dots to show $2 \times 5 = 10$.

4. Step-by-Step Example

- **Example Problem:**
  - Multiply 23×4 without regrouping.

Step 1: Multiply the Ones Place:

- Multiply 3 (ones place) by 4.
- $3 \times 4 = 12$. Write down 2 and carry over 1 to the next column.

Step 2: Multiply the Tens Place:

- Multiply 2 (tens place) by 4.
- $2 \times 4 = 8$. Add the carried-over 1 to get 9.

Step 3: Combine Results:

- Combine the results to get 92.

Note: Since we are focusing on problems without regrouping, ensure students practice simpler problems where carrying over is not required.

5. Practice Multiplying Without Regrouping

- **Simple Problems:**
  - 2 × 3 = ___ (Think: 2 + 2 + 2)
  - 4 × 5 = ___ (Think: 4 + 4 + 4 + 4 + 4)
- **Practice Together:**
  - Solve together on the board:
    - 1 × 6 = ___
    - 7 × 2 = ___
    - 8 × 3 = ___

6. Review and Conclusion

- **Recap:**
  - Summarize how multiplying without regrouping means solving problems where the result is simple and doesn't require carrying over numbers.
- **Practice Problem:**
  - Have students solve one final problem:
    - 5 × 4 = ___