1st Grade Math: Adding Two-Digit Numbers and One-Digit Numbers With Regrouping

Objective: Students will learn how to add a two-digit number and a one-digit number, as well as add two-digit numbers together, when regrouping is necessary.

Introduction

In this lesson, we will explore how to add two-digit numbers and one-digit numbers using regrouping. Regrouping is important when the sum of the digits in a place value exceeds 9, requiring us to carry over to the next place value.

Adding a Two-Digit Number and a One-Digit Number With Regrouping

1. **Understanding the Problem:**
   - A two-digit number has a tens place and a ones place.
   - For example, in the number **27**, **2** is in the tens place, and **7** is in the ones place.
2. **Example Problem:**
   - **Problem:** 27 + 5
   - **Step 1:** Write the numbers in a column:

```lua
  27
+  5
------
```

- **Step 2:** Add the ones place:
  - 7 (from 27) + 5 = 12
  - Since 12 is greater than 9, we need to regroup.
  - Write down **2** (the ones place of 12) below the line and carry over **1** to the tens place.
- **Step 3:** Add the tens place:
  - 2 (from 27) + 1 (the carried over 1) = 3
- **Step 4:** Combine the results:

```lua
  27
+  5
------
  32
```

- **Answer:** 27 + 5 = 32

3. **Practice Problems:**
   - Provide students with similar problems to solve:
     - 34 + 9
     - 56 + 5
     - 48 + 3

Adding Two-Digit Numbers With Regrouping

1. **Example Problem:**
   - **Problem:** 47 + 36
   - **Step 1:** Write the numbers in a column:

```lua
  47
+ 36
------
```

   - **Step 2:** Add the ones place:
     - 7 (from 47) + 6 (from 36) = 13
     - Since 13 is greater than 9, we need to regroup.
     - Write down **3** below the line and carry over **1** to the tens place.
   - **Step 3:** Add the tens place:
     - 4 (from 47) + 3 (from 36) + 1 (the carried over 1) = 8
   - **Step 4:** Combine the results:

```lua
  47
+ 36
------
  83
```

- **Answer:** 47 + 36 = 83

2. **Practice Problems:**
   - Provide students with similar problems to solve:
     - 29 + 14
     - 53 + 27
     - 65 + 28

Hands-On Activity

- **Using Manipulatives:**
  - Provide students with base-ten blocks to represent the numbers. For example, they can use 2 tens blocks and 7 ones blocks for 27 and then add the necessary blocks for the one-digit number.
  - Allow them to physically group the blocks and count the total, practicing regrouping when the sum exceeds 10.

Real-Life Applications

- Discuss how adding numbers with regrouping is useful in everyday situations, like adding prices when shopping, combining scores in games, or tallying votes.

Conclusion

By practicing how to add two-digit numbers with one-digit numbers and adding two-digit numbers together using regrouping, students will strengthen their addition skills. Encourage them to use hands-on activities and practice problems to ensure they understand the concept of regrouping.