1st Grade Math: Mental Addition

Objective: Students will learn to quickly add numbers in their heads without using fingers, paper, or calculators.

What is Mental Addition?

Mental addition is the ability to add numbers in your head without writing them down or using physical objects. It's a useful skill that helps you solve problems faster in everyday situations, like counting money, adding items, or keeping track of scores.

Tips for Mental Addition

1. **Start with small numbers.**

   Practice adding small numbers like 1 through 10 to get comfortable with basic sums.

2. **Look for number pairs.**

   Some number pairs are easy to add because they make round numbers (like 5 + 5 = 10 or 3 + 7 = 10). These pairs can help speed up your addition.

3. **Break up bigger numbers.**

   If you're adding bigger numbers, break them into smaller parts. For example, to add 8 + 6, you can first add 8 + 2 to make 10, and then add the remaining 4:

   $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14.$

4. **Add in steps.**

   When adding two numbers, you can add one number in parts. For example, to add 9 + 5, you could first add 9 + 1 to make 10, then add the remaining 4:

   $9 + 5 = 9 + 1 + 4 = 10 + 4 = 14.$

Strategies for Mental Addition

1. **Counting On:**

   Start with the larger number and count on the smaller number.

   - Example: For 7 + 3, start at 7 and count three more: 8, 9, 10. The answer is 10.

2. **Doubles Facts:**

   Memorize doubles (numbers added to themselves).

   - Example: 5 + 5 = 10, 3 + 3 = 6. These are easy to remember and can help with other sums.

3. **Near Doubles:**

   When two numbers are close to each other, use doubles to help.

   - Example: 6 + 7 is close to 6 + 6, which is 12. Just add 1 more to get 13.

4. **Making 10:**

   Try to make 10 first, then add the rest.

   - Example: For 9 + 4, think of it as 9 + 1 (which makes 10), then add the remaining 3:
   $$9 + 4 = 9 + 1 + 3 = 10 + 3 = 13.$$

Practice Problems

Try solving these problems using the strategies above:

1. **Counting On:**
   $6 + 2 = ?$
   $9 + 3 = ?$
2. **Doubles Facts:**
   $4 + 4 = ?$
   $7 + 7 = ?$
3. **Near Doubles:**
   $5 + 6 = ?$
   $8 + 9 = ?$
4. **Making 10:**
   $8 + 5 = ?$
   $7 + 4 = ?$

Real-World Application

Mental addition helps in many daily tasks, like:

- Counting how much money you have.
- Adding up points during a game.

- Figuring out how many more items you need to reach a goal (like collecting 10 stickers).

Summary

Mental addition is a great skill to have, allowing you to quickly and easily solve math problems in your head. By practicing different strategies like counting on, making 10, and using doubles, you'll get faster and more confident at adding numbers!