Student Name: _____

Class: _____

Due Date: _____

Introduction to Addition by Partitioning

Introduction:

Addition by partitioning is a fundamental skill in mathematics that involves breaking down two-digit numbers into tens and ones, adding them separately, and then combining the results to find the total. This skill is essential for more complex arithmetic operations.

Instructions:

1. Read each question carefully and make sure you understand what is being asked.
2. Use a pencil and eraser for your work.
3. For each addition problem, partition the two-digit numbers into tens and ones.
4. Add the tens and ones separately, and then combine your answers to get the final result.
5. Check your work by adding the numbers in a different way, such as counting on or using a number line.

Complete the following addition problems by partitioning the two-digit numbers:

1. 14 + 25 =
    - Partition 14 into __ tens and __ ones.
    - Partition 25 into __ tens and __ ones.
    - Add the tens: __ + __ = __
    - Add the ones: __ + __ = __
    - Combine the results: __ tens and __ ones = __

2. 46 + 17 =
    - Partition 46 into __ tens and __ ones.
    - Partition 17 into __ tens and __ ones.
    - Add the tens: __ + __ = __
    - Add the ones: __ + __ = __
    - Combine the results: __ tens and __ ones = __

Now, try these on your own:

1. 23 + 19 =
    - Partition 23 into __ tens and __ ones.
    - Partition 19 into __ tens and __ ones.
    - Add the tens: __ + __ = __
    - Add the ones: __ + __ = __
    - Combine the results: __ tens and __ ones = __

2. 56 + 22 =
    - Partition 56 into __ tens and __ ones.
    - Partition 22 into __ tens and __ ones.
    - Add the tens: __ + __ = __
    - Add the ones: __ + __ = __
    - Combine the results: __ tens and __ ones = __

3. 75 + 36 =
    - Partition 75 into __ tens and __ ones.
    - Partition 36 into __ tens and __ ones.
    - Add the tens: __ + __ = __
    - Add the ones: __ + __ = __
    - Combine the results: __ tens and __ ones = __

Apply your partitioning skills to real-life scenarios:

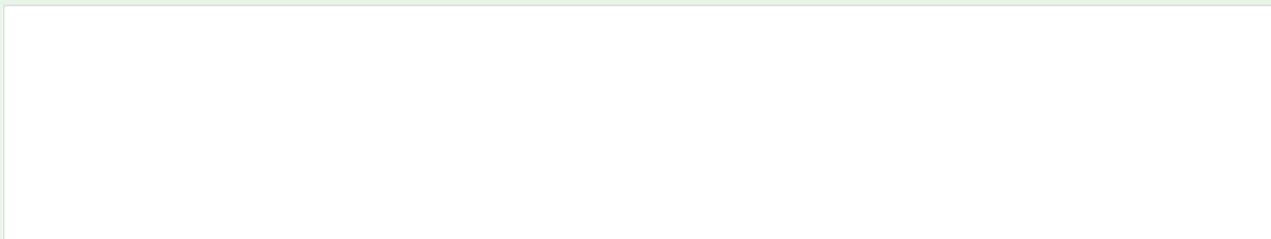1. Tom has 14 pencils in his pencil case and his friend gives him 25 more. How many pencils does Tom have now?
   - Partition 14 into __ tens and __ ones.
   - Partition 25 into __ tens and __ ones.
   - Add the tens: __ + __ = __
   - Add the ones: __ + __ = __
   - Combine the results: __ tens and __ ones = __

2. A bookshelf has 46 books on it, and 17 more books are added. How many books are on the bookshelf now?
   - Partition 46 into __ tens and __ ones.
   - Partition 17 into __ tens and __ ones.
   - Add the tens: __ + __ = __
   - Add the ones: __ + __ = __
   - Combine the results: __ tens and __ ones = __

Extension Activities

For those who want a challenge:

1. Create your own word problems involving addition of two-digit numbers using partitioning.
2. Solve the problems you created and trade with a friend to check each other's work.
3. Can you think of a real-life situation where partitioning numbers would be helpful? Draw a picture or write a short story about it.

Success Criteria

Your work will be considered complete and successful if:

- You have attempted all the problems in the guided and independent practice sections.
- Your work is neat, and you have shown your partitioning method for each problem.
- You have correctly solved the word problems and shown your reasoning.
- If you attempted the extension activities, you have shown creativity and understanding of the concept in a real-world context.

Parent/Guardian Notes

To support your child's learning:

- Encourage them to explain their thinking as they work through the problems.
- Ask questions like "How did you get that answer?" or "Can you show me another way to solve this problem?"
- Provide feedback that is positive and constructive. If your child is struggling, you might say, "I can see you're trying hard. Let's look at this problem together."
- Help your child manage their time. This assignment should take about 20-25 minutes to complete. Encourage your child to take breaks if needed.

Additional practice problems:

1. 34 + 27 =
   - Partition 34 into __ tens and __ ones.
   - Partition 27 into __ tens and __ ones.
   - Add the tens: __ + __ = __
   - Add the ones: __ + __ = __
   - Combine the results: __ tens and __ ones = __

2. 48 + 19 =
   - Partition 48 into __ tens and __ ones.
   - Partition 19 into __ tens and __ ones.
   - Add the tens: __ + __ = __
   - Add the ones: __ + __ = __
   - Combine the results: __ tens and __ ones = __

Challenge Problems

Challenge problems:

1. Create a word problem that involves adding three two-digit numbers using partitioning.
2. Solve the problem you created and explain your reasoning.
3. Can you think of a way to use partitioning to solve a real-world problem? Write a short story or draw a picture about it.

Conclusion

Conclusion:

Addition by partitioning is an important skill in mathematics that can help you solve complex arithmetic operations. By practicing and applying this skill, you can become more confident and proficient in your math abilities.