



Using Base Ten Blocks to Represent and Solve Two-Digit Addition Problems with Partitioning for Developing Learners

Introduction to Base Ten Blocks

Read the following introduction and answer the questions:

This worksheet is designed for 7-year-old developing learners to practice using base ten blocks to represent and solve two-digit addition problems with partitioning. The activities and questions are tailored to cater to mixed-ability groups, ensuring each student is challenged and supported appropriately.

1. What are base ten blocks, and how are they used in mathematics?

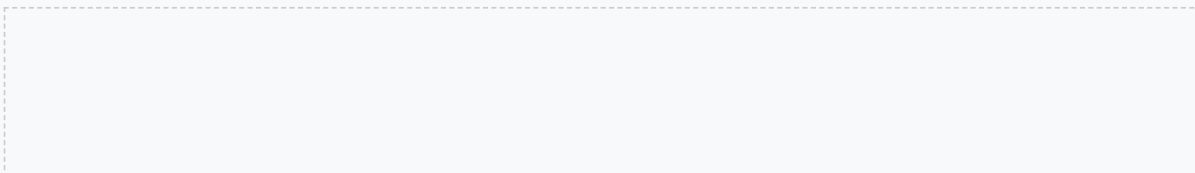
2. Draw a picture of a base ten block set, labeling each block with its value (ones, tens, hundreds).

3. Use base ten blocks to represent the number 45. Draw a picture and write the numerical value.

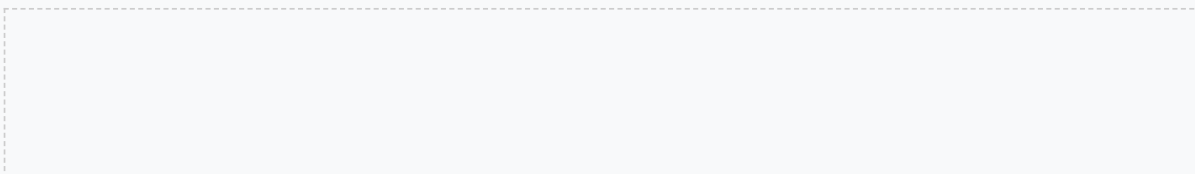
Representing Two-Digit Numbers

Use base ten blocks to represent the following numbers:

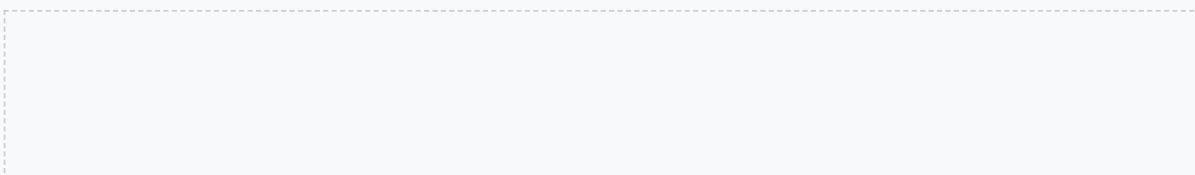
1. 23:



2. 56:



3. 19:



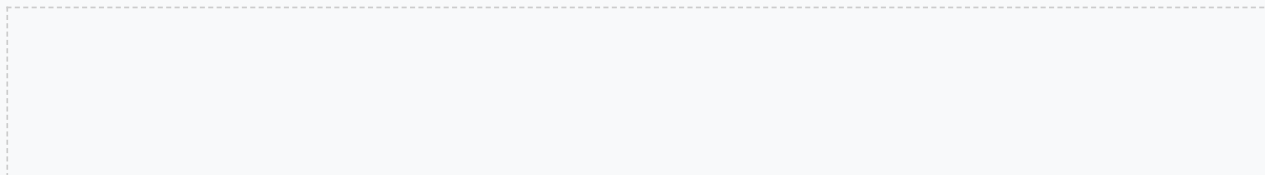
Write the numerical value of each number represented by the base ten blocks.

1. 23: _____

2. 56: _____

3. 19: _____

Can you think of a real-life scenario where you would use two-digit numbers? Describe it.



Partitioning and Addition

What is partitioning in mathematics, and how is it used in addition?

Use base ten blocks to solve the following addition problems:

1. $14 + 25$:

2. $36 + 17$:

3. $48 + 22$:

Explain how you used partitioning to solve each problem.

Word Problems

Solve the following word problems using base ten blocks:

1. Tom has 14 pencils in his pencil case. His friend gives him 25 more. How many pencils does Tom have now?

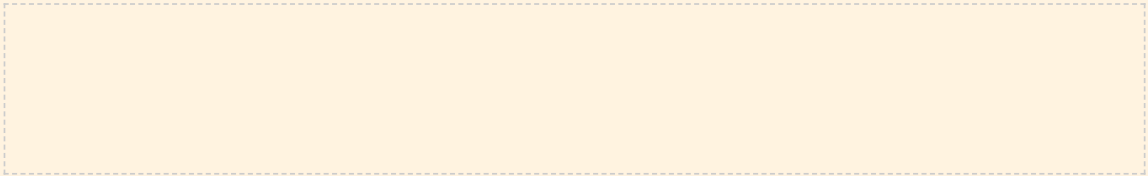
2. A bookshelf has 36 books on it. If 17 more books are added, how many books are on the bookshelf now?

3. Can you think of a word problem that involves adding two-digit numbers? Write it and solve it using base ten blocks.

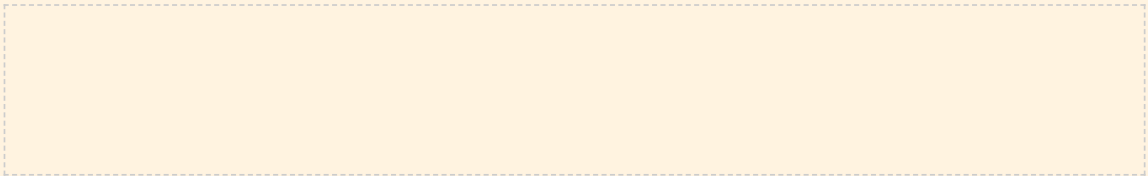
Mixed-Ability Activities

For Beginner Learners

1. Use base ten blocks to represent the number 10. Draw a picture and write the numerical value.

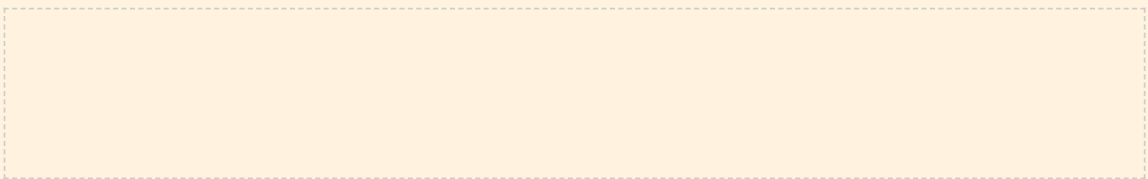


2. Solve the addition problem $5 + 3$ using base ten blocks.

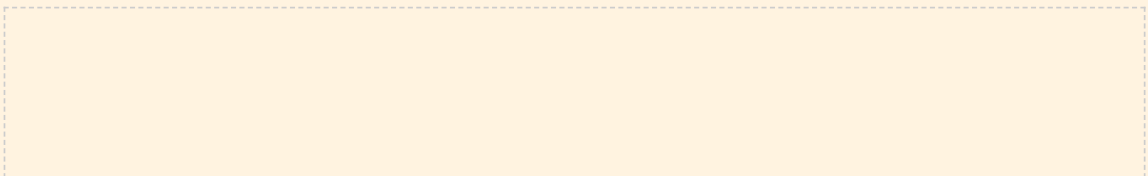


For Intermediate Learners

1. Use base ten blocks to solve the addition problem $24 + 19$.

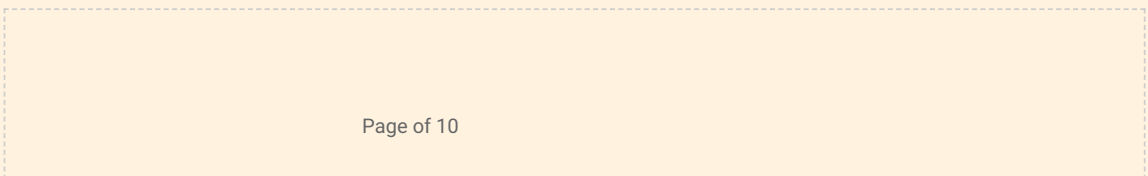


2. Write a word problem that involves adding two-digit numbers and solve it using base ten blocks.



For Advanced Learners

1. Use base ten blocks to solve the addition problem $45 + 27$.



2. Can you think of a real-life scenario where you would use base ten blocks to solve a multi-digit addition problem? Describe it.



Error Analysis

Look at the following addition problem: $34 + 17 = 51$. Is this answer correct? Why or why not?

Use base ten blocks to solve the problem and explain your reasoning.

Can you think of a common error that students might make when using base ten blocks to solve addition problems? How would you correct it?

Real-World Applications

How are base ten blocks used in real-life scenarios, such as shopping or measuring?

Can you think of a situation where you would use base ten blocks to solve a problem? Describe it.

Use base ten blocks to solve a real-world problem, such as calculating the total cost of items.

Reflection and Feedback

Individual Reflection:

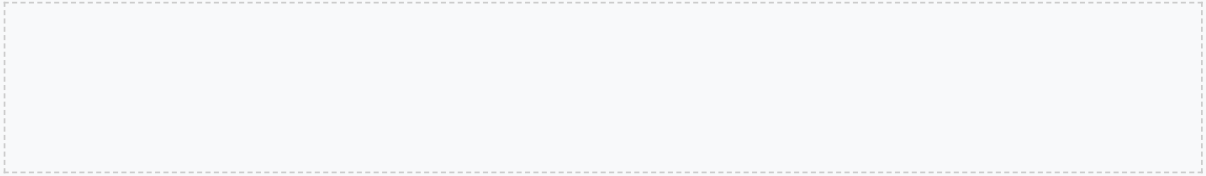
1. What did you learn about using base ten blocks to represent and solve two-digit addition problems with partitioning?

2. What challenges did you face, and how did you overcome them?

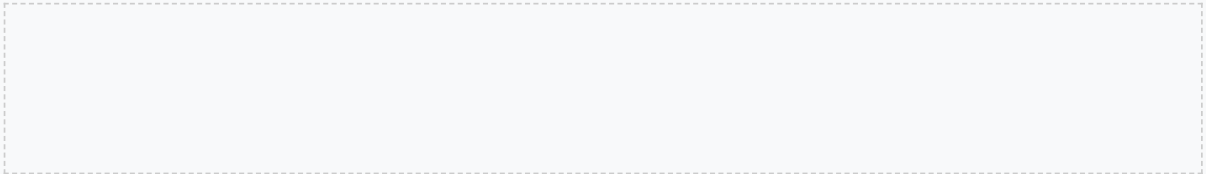
3. Can you think of a way to improve your understanding of base ten blocks and partitioning? Describe it.

Extension Activities

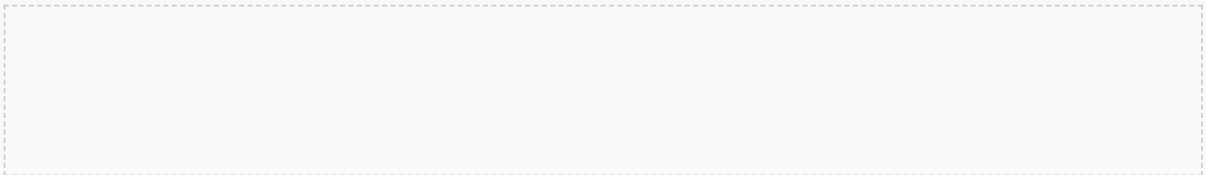
1. Use base ten blocks to solve a three-digit addition problem.



2. Create a word problem that involves adding two-digit numbers and solve it using base ten blocks.



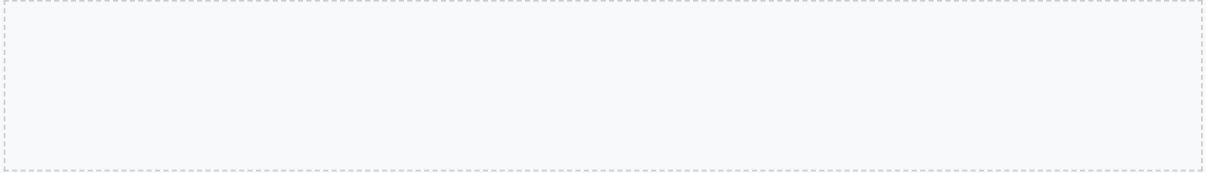
3. Can you think of a game or activity that involves using base ten blocks to practice addition skills? Describe it.



Assessment and Conclusion

Use base ten blocks to solve the following addition problems:

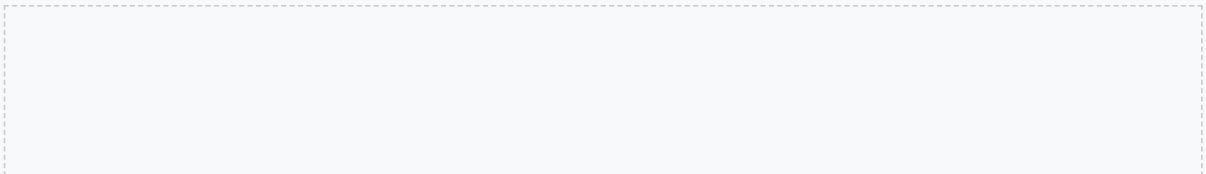
1. $23 + 19$:



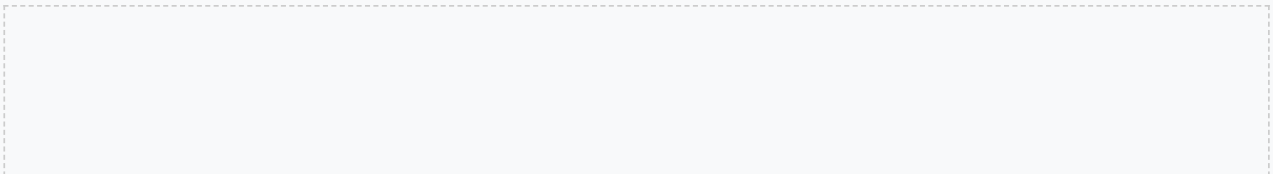
2. $46 + 25$:



3. $58 + 22$:



Reflect on what you have learned about using base ten blocks to represent and solve two-digit addition problems with partitioning.



What do you think is the most important concept you learned in this worksheet? Why?

