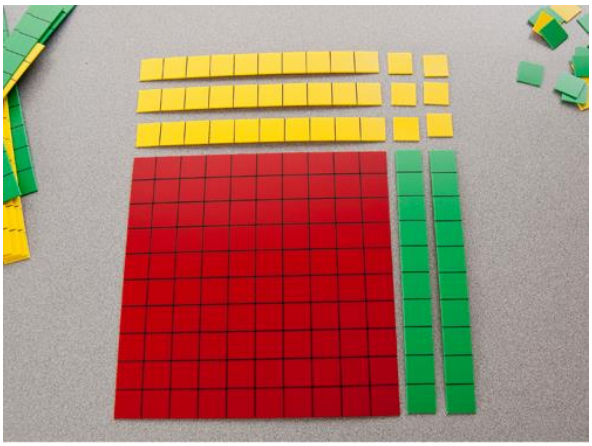
Base Ten Area Pieces (2nd grade)

Base Ten Pieces helps students develop a deeper understanding of place value while building their computation skills with multi-digit numbers.

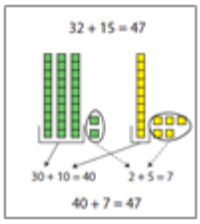
Students can use the Base Ten Area Pieces to:

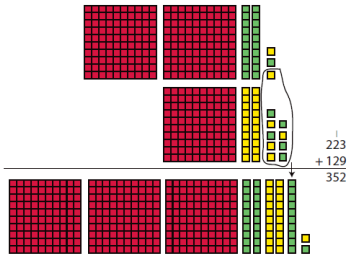
- represent multi-digit numbers
- regroup
- add
- subtract
- multiply
- divide



Using Base Ten Area Pieces

Students use base ten area pieces that are pre-grouped into 1, 10 and 100, to represent and compute with multi-digit numbers. Because the pieces are pre-grouped, students will need to trade a tens piece for 10 ones or a hundreds pieces for 10 tens. This grouping, ungrouping and trading pieces is critical for developing place value understanding. Using base ten pieces to add and subtract multi-digit numbers helps students to develop strategies that rely upon regrouping, including the traditional method.





Activities to do with Base Ten Area Pieces

Representing 1, 2, and 3 Digit Numbers with Base Ten Area Pieces

1. Choose any four base ten pieces (mats, strips, or units) and use them to represent an amount.
2. Record the number of each kind of block and the amount you represented in a four column table with the headings: Number of Mats, Number of Strips, and Number of Units, and Amounts.
3. Repeat steps 1-2 using a different combination of four base ten pieces.
4. Continue to repeat steps 1-2 until you have found all possible combinations for four base 10 pieces.
5. How many different numbers did you represent? What was the least/greatest amount you represented?

Make it Four Ways

Example: 62

six tens and 2 ones	60 + 2 = 62
five tens and 12 ones	50 + 12 = 62
four tens and 22 ones	40 + 22 = 62
three tens and 32 ones	30 + 32 = 62

1. Choose a 2-digit number that is greater than 40 and less than 100.
2. Use base ten pieces to represent the number you chose in four different ways.
3. Record each representation you make using words, numbers and an equation.
4. Repeat with another number that is greater than 40 and less than 100.

The Free App

Number Pieces Basic

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Open Web App

Download Number Pieces Basic App: http://catalog.mathlearningcenter.org/apps/number-pieces

Watch video on how to use the Number Pieces Basic App:
https://www.youtube.com/watch?feature=player_embedded&v=o2bqnGNCxgg