

Try It! 25 minutes | Groups of 3

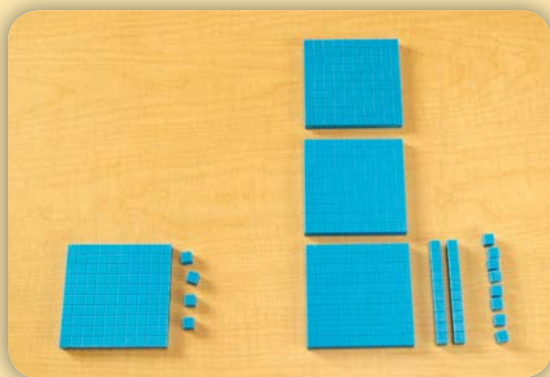
Here is a problem about estimating a sum.

Mrs. Vasquez's class is collecting box top labels for a new computer. The class collects 104 labels in September and 328 labels in October. They need 500 labels for a new computer. Can the students find out if they have enough labels without counting them or adding $104 + 328$?

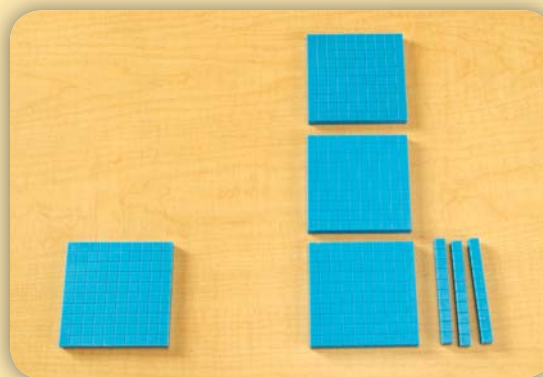
Introduce the problem. Then have students do the activity to solve the problem. Distribute Base Ten Blocks to students. Introduce the concept of rounding to students, and explain how they can use rounding to estimate sums and differences. With students, practice rounding one-, two-, three-, and four-digit numbers using 5 as the benchmark. Write the addition problem $104 + 328$ on the board.

Materials

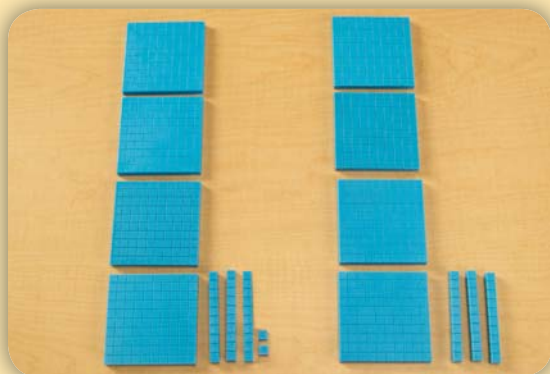
- Base Ten Blocks (5 flats, 10 rods, and 10 units per group)
- paper (1 sheet per group)
- pencils (1 per group)



1. Have students model the numbers 104 and 328 using blocks. Have students use these models to assist them in rounding to the tens place.



2. Students should then model the rounded numbers using blocks. Ask students to add the rounded numbers to find the sum. Have students write down the rounded sum.



3. Now ask students to find the exact answer using blocks. Have students write down their exact answer and compare it to their estimated answer.

⚠ Look Out!

Students may feel compelled to find an exact answer every time. Brainstorm with students to identify situations in which they need an estimate rather than an exact answer. Also, for students who are confused about when to round up or down, you may wish to draw a blank ten-frame on paper and use counters to illustrate the rule that numbers under 5 are rounded down, while numbers 5 and above are rounded up.