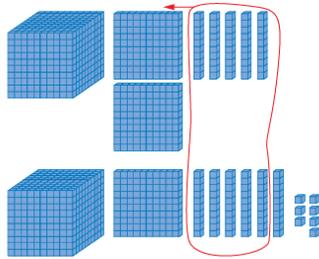


Activity 7B Assessment

Adding and Subtracting Larger Numbers (ON)

Conceptual Meaning of Whole Number Addition and Subtraction

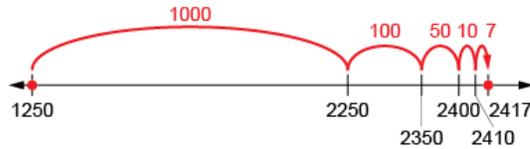
Recognizes addition and subtraction situations and sketches a picture to add or subtract to 10 000.



$$1250 + 1167 = 2417$$

Models and symbolizes ways to solve problems to 10 000.

$$1250 + 1167 = 2417$$



Uses an understanding of place value to decompose both numbers to solve problems to 100 000.

$$\begin{aligned} 1250 &= 1000 + 200 + 50 \\ 1167 &= 1000 + 100 + 60 + 7 \\ 1250 + 1167 &= 2000 + 300 + 110 + 7 \\ &= 2000 + 400 + 10 + 7 \\ &= 2417 \end{aligned}$$

$$\begin{array}{r} 1250 \\ + 1167 \\ \hline 2000 \\ 300 \\ 110 \\ + 7 \\ \hline 2417 \end{array}$$

"I added the thousands, the hundreds, the tens, and then the ones."

Observations/Documentation

Activity 7B Assessment

Adding and Subtracting Larger Numbers (ON)

Conceptual Meaning of Whole Number Addition and Subtraction (cont'd)

Uses an understanding of place value to decompose one number to solve problems to 100 000.

$$\begin{aligned} 59\,366 - 8052 &= 59\,366 - 8000 - 50 - 2 \\ &= 51\,366 - 50 - 2 \\ &= 51\,316 - 2 \\ &= 51\,314 \end{aligned}$$

Estimates to determine if answer to problem is reasonable.

$$59\,366 - 8052 = 51\,314$$

"I estimate 51 000 because 59 366 is close to 59 000, 8052 is close to 8000, and $59\,000 - 8000 = 51\,000$.

51 000 is close to 51 314, so, my answer is reasonable."

Creates and solves multi-step addition and subtraction problems flexibly using a variety of strategies.

Two large charities held bottle drives. Charity A collected 28 134 bottles and Charity B collected 14 612 bottles. 1645 were not accepted at the recycling depot. How many bottles were recycled?

"I added $28\,134 + 14\,612 = 42\,746$. Then, $42\,746 - 1645 = 41\,101$. 41 101 bottles were recycled."

Observations/Documentation