

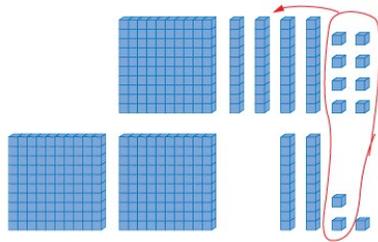
Activity 8 Assessment

Fluency with Addition and Subtraction Consolidation

Conceptual Meaning of Whole Number Addition and Subtraction

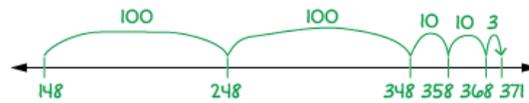
Recognizes addition and subtraction situations and models concretely to add or subtract to 1000

$$148 + 223 = ?$$



Models and symbolizes ways to solve problems to 1000

$$148 + 223 = ?$$



Uses an understanding of place value to decompose both numbers to solve problems to 10 000

$$896 - 345 = ?$$

$$800 - 300 = 500$$

$$90 - 40 = 50$$

$$6 - 5 = 1$$

$$500 + 50 + 1 = 551$$

"I subtracted the hundreds, the tens, and then the ones."

Observations/Documentation

Activity 8 Assessment

Fluency with Addition and Subtraction Consolidation

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

Uses an understanding of place value to add and subtract to 10 000 using the standard algorithm

$$\begin{array}{r} 3348 \\ + 6548 \\ \hline 9896 \end{array}$$

"I had 16 ones. So I traded 10 ones for 1 ten."

Estimates to determine if answer to problem is reasonable

$$896 - 345 = ?$$

"896 is close to 900. 345 is close to 350.
 $900 - 350 = 550$. 550 is close to 551, the answer I calculated, so my answer is reasonable."

Creates and solves addition and subtraction problems flexibly using a variety of strategies

1874 raffle tickets were sold in advance. 227 more tickets were sold at the door. How many tickets were sold altogether?

$$\begin{array}{r} 111 \\ 1874 \\ + 227 \\ \hline 2101 \end{array}$$

Observations/Documentation

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Estimating Sums and Differences

Uses front-end estimation

$$\begin{aligned} \text{Estimate: } & 28 + 46 + 177 + 158 \\ & 20 + 40 + 100 + 100 = 260 \end{aligned}$$

"I estimate about 260."

Uses rounding to write each number to the nearest ten

$$\begin{aligned} \text{Estimate: } & 28 + 46 + 177 + 158 \\ & 30 + 50 + 180 + 160 = 420 \end{aligned}$$

"I estimate about 420."

Uses rounding and compensation

$$\begin{aligned} \text{Estimate: } & 28 + 46 + 177 + 158 \\ \text{I'll round two up and two down.} \\ & 30 + 40 + 170 + 160 = 400 \end{aligned}$$

"I estimate about 420."

Estimates flexibly to check reasonableness of solutions

$$3123 + 1248 + 4169 + 1150 = 9690$$

Estimate to check:
 $123 + 169$ is about 300,
 so $3123 + 4169$ is about 7300.
 $248 + 150$ is about 400,
 so $1248 + 1150$ is about 2400.
 $7300 + 2400$ is 9700.

Since 9690 is close to 9700,
 the solution seems reasonable.

Observations/Documentation