

Adding with Base-10 Blocks



NAME _____

DATE _____

Family Note

Today children used base-10 blocks to help them add numbers. Three types of base-10 blocks were used: A cube represents 1. A long (a rod that is 10 cubes long) represents 10. A flat (a square that is 10 cubes long and 10 cubes wide) represents 100.

To solve $24 + 32$ with base-10 blocks, children first represent each number with blocks or base-10 shorthand:

$$\begin{array}{r} 24 \quad || \quad \dots \\ + 32 \quad ||| \quad \dots \\ \hline \end{array}$$

Then children combine the blocks according to type (longs with longs; cubes with cubes) and count each type of block: 5 longs show 5 tens, or 50; 6 cubes show 6 ones, or 6. The 50 and the 6 are called *partial sums* because they are parts of the final sum. Finally, children add the partial sums to find the total: $50 + 6 = 56$.

Children also use base-10 blocks to add 3-digit numbers by adding the 100s, 10s, and 1s separately and then combining the partial sums to find the total.

Please return this Home Link to school tomorrow.

Use base-10 shorthand to show each number. Then write the partial sums and find the total sum.

Unit



①
$$\begin{array}{r} 34 \\ + 41 \\ \hline \end{array}$$

②
$$\begin{array}{r} 27 \\ + 25 \\ \hline \end{array}$$

_____ + _____ = _____ _____ + _____ = _____

Explain to someone at home how you use base-10 blocks to add.

Practice

Complete each number sentence to show the expanded form of a number.

③ _____ = $500 + 30 + 2$ ④ $340 =$ _____ + _____

⑤ $400 + 5 =$ _____ ⑥ $609 =$ _____ + _____