

Family Support Materials

Adding and Subtracting within 100

In this unit, students add and subtract within 100 using strategies based on place value, properties of operations, and the relationship between addition and subtraction. They then use what they know to solve story problems.

Section A: Add and Subtract

This section allows students to use methods that make sense to them to help them solve addition and subtraction problems. They can draw diagrams and use connecting cubes to show their thinking. For example, students would be exposed to the following situation:

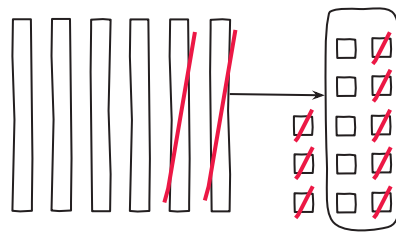


- Make trains with cubes.
- Find the total number of cubes you and your partner used. Show your thinking.
- Find the difference between the number of cubes you and your partner used. Show your thinking.

As the lessons progress, students analyze the structure of base-ten blocks and use them to support place-value reasoning. Unlike connecting cubes, base-ten blocks cannot be pulled apart. Students begin to think about two-digit numbers in terms of tens and ones. To add using base-ten blocks, they group the tens and the ones, and then count to find the sum.

Section B: Decompose to Subtract

In this section, students subtract one- and two-digit numbers from two-digit numbers within 100. They use strategies based on place value and the properties of operations to evaluate expressions that involve decomposing a ten. For example, to evaluate expressions such as $63 - 18$, students use connecting cubes or base-ten blocks as they learn to trade in a ten for 10 ones before grouping by place value. In this case they can trade one of the tens in 63 for 10 ones, making it 5 tens and 13 ones. They can then subtract 1 ten from 5 tens and 8 ones from 13 ones, resulting in 4 tens and 5 ones, or 45.



Section C: Represent and Solve Story Problems

This section focuses on solving one-step story problems that involve addition and subtraction within 100. The story problems are all types—Add To, Take From, Put Together, Take Apart, and Compare—and have unknowns in all positions. A question that your student might be exposed to is:

Diego gathered 42 orange seeds.

Jada gathered 16 apple seeds.

How many more seeds did Diego gather than Jada?

Show your thinking.

Try it at home!

Near the end of the unit ask your student to solve the following word problem:

Diego gathered 37 orange seeds.

Jada gathered 25 more apple seeds than Diego.

How many seeds did Jada gather?

Show your thinking.

Questions that may be helpful as they work:

- Can you explain to me how you solved the problem?
- What pieces of information were helpful?
- How does your representation show the answer to the problem?