

Grade 2 Module 5

Tips for Families

Key Concepts Overview

Focus TEKS: **2.4B, 2.4C, 2.4D, 2.7B**

In Module 5 students continue renaming place value units and extend their work with addition and subtraction algorithms to numbers within 1,000. Your student will:

- ☐ Model addition and subtraction with materials and drawings.
- ☐ Relate *100 more* and *100 less* to addition and subtraction of 100.
- ☐ Use simplifying strategies for addition and subtraction.
- ☐ Extend the *make a ten* strategy to make a hundred.
- ☐ Use **compensation** to subtract from three-digit numbers.
- ☐ Use place value language to explain why strategies work.
- ☐ Add two- and three-digit numbers up to 1,000 by bundling, or composing, units to make a new ten or a new hundred.
- ☐ Subtract two- and three-digit numbers up to 1,000 by decomposing (i.e. unbundling) tens and hundreds.
- ☐ Solve and create one- and two-step word problems involving addition and subtraction.
- ☐ Choose which strategy is most efficient for a given problem, understanding that the strategies they used with one-step problems also work with multi-step word problems.

You can use the checklist above to help monitor your student's progress of the knowledge and skills in this module. Daily sample problems with solutions and thought bubbles are found in the Homework Helper pages in the Succeed Student Edition to help you support your student as they work at home.

Additional Ways to Help at Home

- Encourage your student to use place value language to explain how adding in the tens place is like adding in the ones place. "When I have a group of 10 ones, I can make a group of 1 ten. When I have a group of 10 tens, I can make a group of 1 hundred."
- Before your student adds or subtracts, ask her to look closely at the numbers and think aloud about which strategy will be most efficient and why. For example, she might choose to use the arrow way, number bonds, counting on, or vertical form to solve.
- Invite your student to explain his simplifying strategy step-by-step. For example, when he uses the arrow way, ask your student questions such as, "How many more do you need to make the next hundred? The next ten?" and "Which did you add first: hundreds, tens, or ones? Why?"
- Ask your student the following questions as she completes her homework: "Do you have enough ones or tens to bundle?" "Where do you record the new ten or hundred in the chip model?" "How do we show this change when using vertical form?" As your student becomes more confident, invite her to show and explain the two models.



- Encourage your student to think carefully about the numbers in a given problem before choosing a strategy. Ask him to look for numbers that are close to the next hundred or numbers from which it would be more efficient to count on. For example, he might notice that counting on is another way to solve the problem $(802 - 698)$: $698 + 2 = 700$; $700 + 100 = 800$; $800 + 2 = 802$. By counting on 104 $(2 + 100 + 2)$, your student is using addition to solve the subtraction problem.
- If your student has not yet mastered certain strategies, encourage her to solve a problem by using a familiar strategy first. Then, present the challenge of solving the same problem by using a strategy she is working to master.

Terms

Compensation (*Compensación*): a simplifying strategy where students add or subtract the same amount to or from both numbers to create an equivalent, but simpler, problem

+1	321
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+1	199
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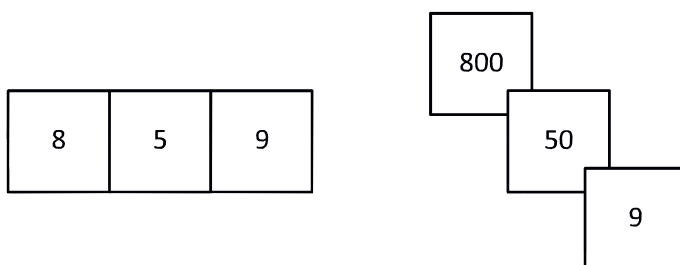
}
 ?

$$321 - 199 = 322 - 200 = 122$$

New groups below: a representation that shows newly composed units on the line below the appropriate place in the addition algorithm

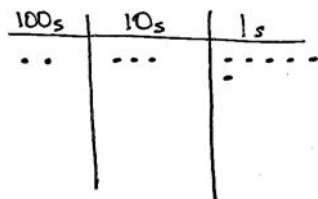
$$\begin{array}{r}
 427 \\
 + 385 \\
 \hline
 812
 \end{array}$$

Place value (*Valor de posición*): the value of a digit based on where it is located in a number



Models

Chip Model



Place Value Chart

Place Value Chart Without Headings
(use with place value disks)

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Place Value Chart with Headings
(use with numbers and chips)

hundreds	tens	ones
7	2	6

Place Value Disk Drawing

