InsightMath

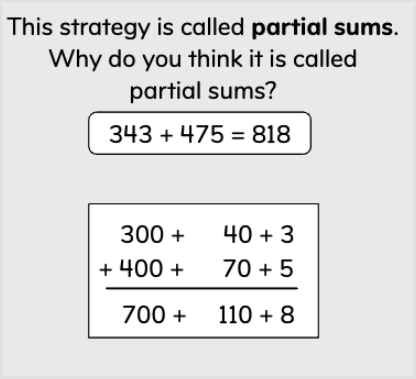
Using Place Value to Add and Subtract

Family Guide | Grade 3 | Unit 6

Your student is exploring how the place value system is based on patterns, which makes expressing and working with numbers efficient.

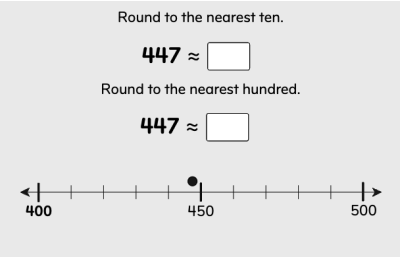
Key Math Ideas

In previous grades, your student explored estimation by describing what number a given number is close to or about how many objects there are in a group. In this unit, they will estimate in a new way as they formally learn how to round a number to the nearest 10 or 100 – 536 can be rounded to the nearest 10 (540) or the nearest 100 (500). Your student will also build on their addition and subtraction strategies from 2nd grade by exploring how they can break apart numbers to solve efficiently. They will use their work with rounding to help them determine whether or not an answer to an addition or subtraction equation is reasonable or unreasonable.



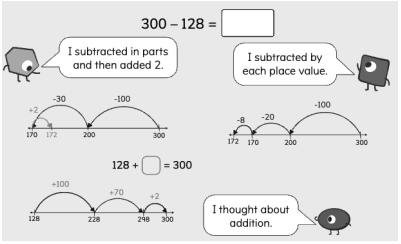
→ In the beginning of the unit, your student will learn to

- distinguish the difference between an estimate and an exact answer;
- distinguish between reasonable and unreasonable estimates;
- round whole numbers within 1000 to the nearest 10 or 100;
- estimate totals by rounding addends.



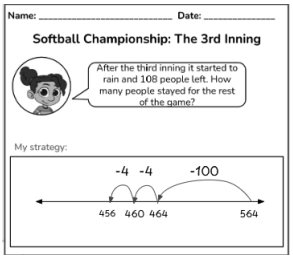
→ By the end of the unit, your student will learn to

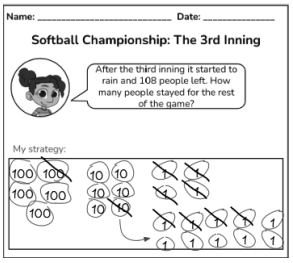
- estimate reasonable sums and differences of three-digit numbers by rounding. For example, 247 – 112 is close to 250 – 110, so the answer should be close to 140;
- use a variety of strategies to add and subtract, such as partial sums/differences or breaking apart numbers on a number line;
- solve one- and two-step word problems involving addition and subtraction of three-digit numbers.



Helpful Hint

Many of the addition and subtraction problems that your student will see in this unit can be solved in multiple ways. Ask your student questions about why they chose the solve a certain way or if they know other ways to solve the problem to check their answer. This helps them understand that mathematics is a subject about problem solving and that it is okay to try and use multiple methods.



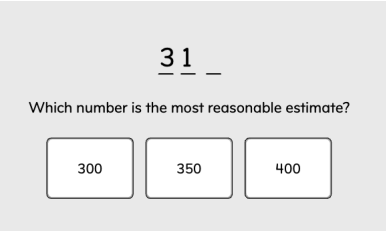


Tips for Supporting Your Student at Home

Questions to Ask Your Student

→ Throughout the unit:

- How did you know what number to round to?
- How did you use the digits in the number to help you round?
- How can rounding help you estimate when you are adding two numbers?
- (When solving an equation) How do you know your answer is reasonable? What would an unreasonable answer be?
- Can you tell me about your strategy?
- Why did you choose to use that strategy to solve?
- Is there another way to solve the problem?



If...	Try...
your student has made a counting mistake when solving an addition or subtraction equation . . .	asking them to explain their strategy to you. Often, students will recognize their mistake on their own when explaining their thinking out loud. You might also ask them to show you another way to solve the problem as a way to double check their work.

Student Strengths Spotlight

I explain my thinking.	Students justify, explain, and communicate their thinking and reasoning to others to comprehend ideas.
I use math tools and strategies to help me learn.	Students learn to use the appropriate measuring tools and strategies to solve problems.
I choose representations to help me solve problems and show my thinking.	Students learn to use appropriate models and equations to represent and communicate their thinking.

Try This Together!

- **Play Store!** Have your student gather two items at home they would like to buy. Give each item a price and tell your student that they have a certain amount of money. Then ask them to estimate to see if they have enough money to buy the items. You can then switch roles and play the game again. For example, your student finds a book and a doll. Tell them the book is $230 and the doll is $76, and they have $300 to spend. Is this enough to buy the items? How do you know?
- **Let's Round!** Find a book, magazine, newspaper or online article that contains numbers. Ask your student to find all of the numbers they see in the article. Next, ask them to round them to the nearest 10 or nearest 100. Note: numbers should be less than 1000.