

FAMILY MATH

Division of Tens and Ones by One-Digit Numbers

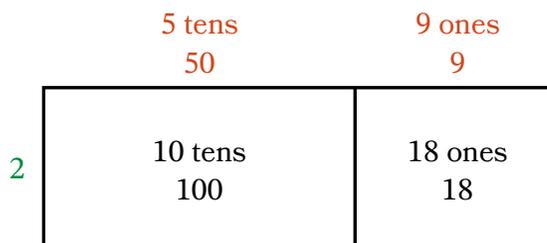
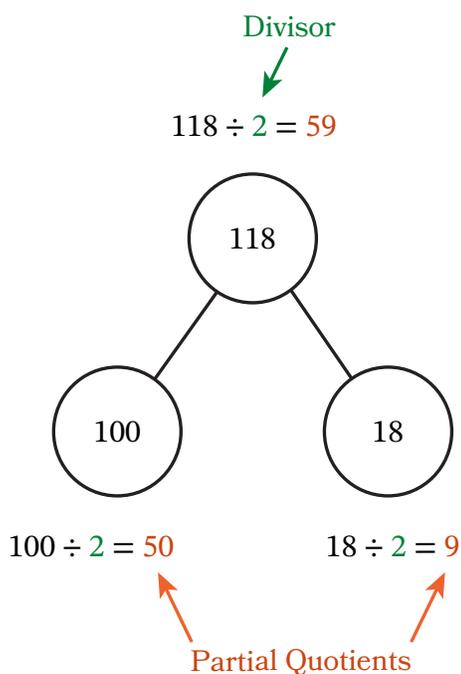
Dear Family,

Your student is learning to divide with larger numbers. To divide, they break apart, or decompose, the total into tens and ones. They divide each part and then add to find the quotient. Breaking the total into 2 smaller parts makes simpler problems that are easier to divide, allowing them to use their division facts from grade 3. They represent their thinking by using several familiar models including number bonds, area models, and place value charts. The place value chart is a flexible model because it can be used to represent all four operations: addition, subtraction, multiplication and division. The models that your student uses now will support a strong understanding of the division standard algorithm.

Key Terms

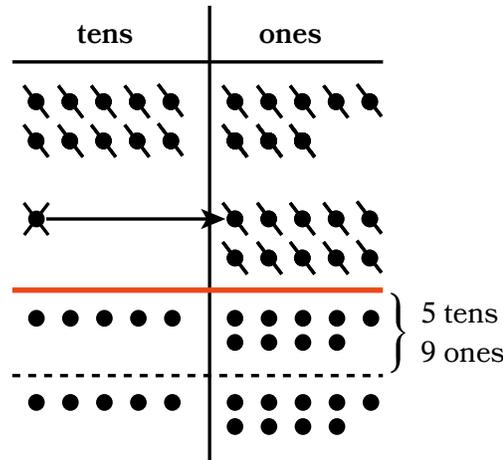
divisor

partial quotient



Breaking apart 118 into 100 and 18 is helpful because 100 and 18 are both easily divisible by 2.

In an area model, 118 is broken into tens and ones. 1 side length is labeled with the divisor, 2. Each part is divided, and the partial quotients are written along the top side length.



In a place value chart, 118 is broken into 11 tens and 8 ones. Each part is divided into 2 equal groups. 1 ten must be broken into 10 ones to make the 2 equal groups.

At-Home Activity

Fair Sharing with 84

With your student, gather 84 small objects such as 84 beads, cereal pieces, crackers, fruit snacks, or toy bricks. Ask your student to share the 84 objects between the 2 of you so that you each have the same amount. Give your student time to work. Then ask them to write a division equation to represent the situation: $84 \div 2 = 42$. Encourage your student to use one of the strategies learned in class. Ask your student to explain where 84, 2, and 42 are shown in the collection of objects.

Repeat this process with 84 objects shared among the following numbers of people.

- 3 people and write $84 \div 3 = 28$.
- 4 people and write $84 \div 4 = 21$.
- 6 people and write $84 \div 6 = 14$.

Then consider asking your student to explain why the quotient gets smaller when the divisor gets bigger.