

# FAMILY MATH

## Addition of Tenths and Hundredths

Dear Family,

Your student is learning to add decimal numbers. They apply familiar models and strategies they have used when adding fractions and whole numbers. Your student adds decimal numbers in fraction form to strengthen their understanding of fraction addition. Adding in fraction form also helps them build an understanding of how to add the place value units that are to the right of the decimal point. They solve word problems and use estimation to decide whether their answers are reasonable.

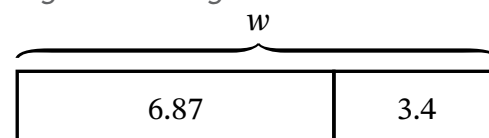
$$\begin{aligned}\frac{8}{10} + \frac{25}{100} &= 1\frac{5}{100} = 1.05 \\ \frac{80}{100} + \frac{25}{100} &= 1\frac{5}{100} \\ &\swarrow \searrow \\ &\frac{20}{100} \quad \frac{5}{100}\end{aligned}$$

Before they add, students may need to make common units by renaming the tenths as hundredths. They use familiar models such as number bonds to help them add efficiently.

$$\begin{aligned}0.4 + 1.12 &= 1.52 \\ \frac{4}{10} + 1\frac{12}{100} &= \frac{40}{100} + 1\frac{12}{100} = 1\frac{52}{100}\end{aligned}$$

Writing decimal numbers in fraction form helps students focus on the value of each number and examine which numbers need to be renamed to add like units.

A dog weighs 6.87 kilograms. A cat weighs 3.4 kilograms. What is the total weight of the dog and the cat?



$$\begin{aligned}6.87 + 3.4 &= w \\ 6\frac{87}{100} + 3\frac{40}{100} &= 6 + 3 + \frac{87}{100} + \frac{40}{100} \\ &= 9 + \frac{127}{100} \\ &= 9\frac{127}{100} \\ &\swarrow \searrow \\ &\frac{100}{100} \quad \frac{27}{100} \\ &= 10\frac{27}{100} \\ w &= 10.27\end{aligned}$$

The total weight of the dog and cat is 10.27 kilograms.

A tape diagram supports students with understanding a word problem. Students can use various solution strategies to solve, such as adding ones to ones and hundredths to hundredths.

## At-Home Activity

### Ordering Dinner

Invite your student to help you find the cost of a meal from a grocery store or restaurant. For example, you might find the cost for two sandwiches and two drinks. Ask your student to add the cost of two items and you add the cost of the other two items. Then find the total by adding both of your totals. Invite your student to discuss their strategy for adding, such as adding the dollars and then the cents or by adding up to make the next dollar.