

Concept Guide | Add Decimals to the Hundredths

Materials and Preparation

Teacher Materials	Student Materials	Suggested Preparation
<ul style="list-style-type: none"> • Progress Check Teacher Guide 	<ul style="list-style-type: none"> • Progress Check Tool • Pause and Monitor Tool 	<ul style="list-style-type: none"> • Print copies of the Progress Check Tool and the Pause and Monitor Tool.
<ul style="list-style-type: none"> • Concept Mini Lessons Teacher Guide 	<ul style="list-style-type: none"> • Objectives 1–4 Student Pages 	<ul style="list-style-type: none"> • Print copies of the Objectives 1–4 Student Pages.
<ul style="list-style-type: none"> • Practice Teacher Guide 	<ul style="list-style-type: none"> • Practice Pages • Practice Helpers 	<ul style="list-style-type: none"> • Print copies of the Practice Pages and the corresponding Practice Helpers.
<ul style="list-style-type: none"> • Application Teacher Guide 	<ul style="list-style-type: none"> • Personal whiteboard • Application Word Problem Cards • Solve a Problem Recording Page (optional) • <i>Eureka Math</i>² cards or a standard deck of playing cards • Game Instruction Card • Play a Game Recording Page • Solve a Task Student Page • Place value chart (optional) 	<ul style="list-style-type: none"> • Ready the following materials: <ul style="list-style-type: none"> - Application Word Problem Cards - <i>Eureka Math</i>² cards or a standard deck of playing cards - Place value chart (optional) • Print copies of the following: <ul style="list-style-type: none"> - Solve a Problem Recording Page (optional) - Game Instruction Card - Play a Game Recording Page - Solve a Task Student Page • Gather personal whiteboards.

Addressing Student Misconceptions

Student Misconception	How to Address Misconception
<p>When given addends with different numbers of digits, students think they should align the addends by the first nonzero digits, instead of considering place value units.</p> $\begin{array}{r} 0.6 \\ + 1.8 \\ \hline \end{array}$	<p>Consider using the following sequence to support students in aligning place value units when they record addition in vertical form.</p> <ul style="list-style-type: none"> • What is the largest unit in the first addend? • Write the first addend in vertical form. • What is the largest unit in the second addend? • How can you use the place value units in the first addend to help you record the second addend in vertical form? • Write the second addend in vertical form. Make sure to line up the digits in each place value unit of the addends.

Language Support

To support emergent bilingual students in making cross-linguistic connections through oral discourse, consider using strategic, flexible grouping.

- Pair students who have different levels of mathematical proficiency.
- Pair students who have different levels of English language proficiency.
- Join pairs to form small groups of four.

As applicable, complement any of these groupings by pairing students who speak the same home language. Encourage students to use their home language alongside English to make sense of the directions and the mathematics.

To support emergent bilingual students in making cross-linguistic connections through written discourse, consider creating cross-linguistic connections anchor charts. The chart should include

- key terminology in the student’s home language that is related to the current concept,
- the same key terminology in English, and
- images to support understanding.

Family Math | Add Decimals to the Hundredths

Dear Family,

Your student is working on adding decimals to the hundredths place. Students rename decimals as equivalent fractions to add (e.g., $0.3 + 0.5 = \frac{3}{10} + \frac{5}{10}$). They also draw on a place value chart to add decimals and to record the addition in vertical form. Your student also uses the standard algorithm to find the sum of two decimals. You can support your student's progress by asking the questions in the table below as your student adds decimals to the hundredths.

Add. Use the standard algorithm.

$$0.5 + 1.9 = \underline{2.4}$$

$$\begin{array}{r} 0.5 \\ + 1.9 \\ \hline 2.4 \end{array}$$

How can you line up like units in vertical form?

I can make sure I line up the numbers correctly by their place values. The decimal points should be lined up with each other.

Which unit do you add first? Next?

I add the smallest unit first: the tenths. Then I add the ones.

Can you compose a new unit? Where do you write the new unit?

There are 14 tenths. I can use 10 tenths to make 1 one.

I show that I composed 1 one by writing a 1 on the line in the ones place.

Matemáticas en familia | Sumar decimales hasta los centésimos

Estimada familia:

Su estudiante está trabajando en sumar decimales hasta los centésimos. Renombra decimales como fracciones equivalentes para sumar (p. ej., $0.3 + 0.5 = \frac{3}{10} + \frac{5}{10}$). También dibuja en una tabla de valor de posición para sumar decimales y registrar la suma en forma vertical. Su estudiante también usa el algoritmo normal para encontrar la suma de dos decimales. Usted puede apoyar el progreso de su estudiante haciéndole las preguntas de la tabla que sigue mientras su estudiante suma decimales hasta los centésimos.

Suma. Usa el algoritmo normal.

$$0.5 + 1.9 = \underline{2.4}$$

$$\begin{array}{r} 0.5 \\ + 1.9 \\ \hline 2.4 \end{array}$$

¿Cómo puedes alinear unidades semejantes en forma vertical?

Puedo asegurarme de alinear los números correctamente según sus valores de posición. Los puntos decimales deben estar alineados entre sí.

¿Qué unidad sumas primero? ¿Después?

Sumo la unidad más pequeña primero: los décimos. Luego, sumo las unidades.

¿Puedes componer una nueva unidad?

¿Dónde escribes la nueva unidad?

Hay 14 décimos. Puedo usar 10 décimos para formar 1 unidad.

Muestro que compuse 1 unidad escribiendo un 1 en la línea en la posición de las unidades.