

Bridges in Mathematics

Grade 5 Unit 3

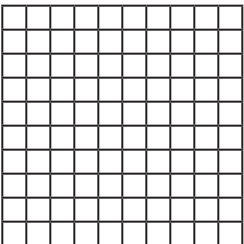



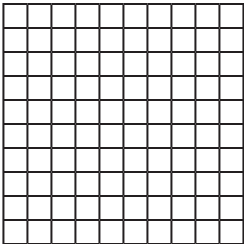
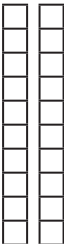



Place Value & Decimals

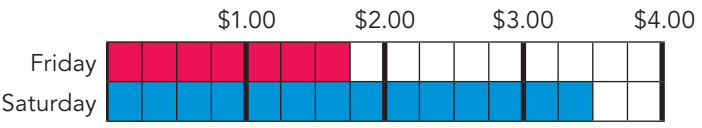
In this unit your child will:

- Divide multi-digit whole numbers
- Read, write, order, model, and compare decimal numbers
- Multiply and divide whole and decimal numbers by 10
- Add and subtract decimal numbers to the hundredths place
- Identify equivalent fractions and decimals



Your child will learn and practice these skills by solving problems like those shown below. Use the free Math Vocabulary Cards app for additional support: mathlearningcenter.org/apps.

PROBLEM	COMMENTS
<p>Write the number that each collection of base ten pieces represents.</p> <div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>1 whole</p> </div> <div style="text-align: center;">  <p>1 tenth</p> </div> <div style="text-align: center;">  <p>1 hundredth</p> </div> <div style="text-align: center;">  <p>1 thousandth</p> </div> </div> <div style="display: flex; align-items: center;"> <div style="text-align: center;">  </div> <div style="text-align: center; margin-left: 20px;">  </div> <div style="margin-left: 20px;">  </div> <div style="margin-left: 10px;">  </div> <div style="margin-left: 10px;">  </div> <div style="margin-left: 10px; color: red; font-weight: bold;">1.236</div> </div>	<p>Students represent decimal numbers in a variety of ways in this unit. They use base ten models like those shown here to make the place value of each digit explicit. These models also make the relationships among place values clear: students can see that 1 hundredth is 100 times smaller than 1, for example, and that 10 hundredths are equal to 1 tenth.</p>
<p>Write the base ten numeral that is equal to this expression.</p> $(6 \times 1) + (4 \times \frac{1}{10}) + (9 \times \frac{1}{100}) = 6.49$	<p>The expression in this example is written in expanded form. Students will also use expanded form with decimals: $(6 \times 1) + (4 \times 0.1) + (9 \times 0.01)$. Writing numbers in expanded form—and rewriting them in standard form—helps students be clear about the value of each digit in the decimal number.</p>

PROBLEM	COMMENTS
<p>Frank and Lucy are using this graph to keep track of how much lemonade they sell each day at their lemonade stand.</p>  <p>How much more money did Lucy and Frank earn on Saturday than they did on Friday?</p> <p><i>They earned \$1.75 more on Saturday than on Friday.</i></p>	<p>Many of the addition and subtraction problems in this unit involve money because it's such a familiar way for students to think about decimal numbers. This particular problem features decimal amounts shown on a bar graph. Students can see the difference between \$1.75 and \$3.50 represented. Many students will see the whole dollar between \$2 and \$3 and then add on the three \$0.25 sections for a total difference of \$1.75.</p>

FREQUENTLY ASKED QUESTIONS ABOUT UNIT 3

Q: Why does this unit have so much work involving rounding?

A: Rounding decimal numbers requires students to think explicitly about the place value of the digits in those numbers. It also encourages them to think about the relationships among decimal numbers and whole numbers. Rounding is also a useful skill in and of itself: it promotes a strong number sense and helps students make sensible estimates.