

Common Core Standards Alignment Chart • Grade 4

| Units | 4.OA.1 | 4.OA.2 | 4.OA.3 | 4.OA.4 | 4.OA.5 | 4.NBT.1 | 4.NBT.2 | 4.NBT.3 | 4.NBT.4 | 4.NBT.5 | 4.NBT.6 | 4.NF.1 | 4.NF.2 | 4.NF.3 | 4.NF.4 | 4.NF.5 | 4.NF.6 | 4.NF.7 | 4.MD.1 | 4.MD.2 | 4.MD.3 | 4.MD.4 | 4.MD.5 | 4.MD.6 | 4.MD.7 | 4.G.1 | 4.G.2 | 4.G.3 |
|--|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|
| Operations & Algebraic Thinking | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit 1: Write an Equation | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit 2: Solve Multi-Step Problems | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit 3: Factors and Multiples | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit 4: Generate Patterns | | | | | ✓ | | | | | | | | | | | | | | | | | | | | | | | |
| Number & Operations in Base Ten | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit 5: Use Place Value | | | | | | ✓ | ✓ | ✓ | | | | | | | | | | | | | | | | | | | | |
| Unit 6: Add Multi-Digit Numbers | | | | | | | | | ✓ | | | | | | | | | | | | | | | | | | | |
| Unit 7: Subtract Multi-Digit Numbers | | | | | | | | | ✓ | | | | | | | | | | | | | | | | | | | |
| Unit 8: Multiplication Properties | ✓ | ✓ | ✓ | ✓ | | | | | | ✓ | | | | | | | | | | | | | | | | | | |
| Unit 9: Multiply by One-Digit Number | ✓ | ✓ | ✓ | ✓ | | | | | | ✓ | | | | | | | | | | | | | | | | | | |
| Unit 10: Multiply by Two-Digit Number | ✓ | ✓ | ✓ | ✓ | | | | | | ✓ | | | | | | | | | | | | | | | | | | |
| Unit 11: Divide Two-Digit Numbers | ✓ | ✓ | ✓ | ✓ | | | | | | | | ✓ | | | | | | | | | | | | | | | | |
| Unit 12: Divide Multi-Digit Numbers | ✓ | ✓ | ✓ | ✓ | | | | | | | ✓ | | | | | | | | | | | | | | | | | |
| Number & Operations—Fractions | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit 13: Find Equivalent Fractions | | | | | | | | | | | | ✓ | | | | | | | | | | | | | | | | |
| Unit 14: Compare and Order Fractions | | | | | | | | | | | | | ✓ | | | | | | | | | | | | | | | |
| Unit 15: Add and Subtract Fractions | | | | | | | | | | | | | | ✓ | | | | | | | | | | | | | | |
| Unit 16: Add and Subtract Mixed Numbers | | | | | | | | | | | | | | ✓ | | | | | | | | | | | | | | |
| Unit 17: Multiply Fraction/Whole Number | | | | | | | | | | | | | | | ✓ | | | | | | | | | | | | | |
| Unit 18: Tenths and Hundredths | | | | | | | | | | | | | | | | ✓ | ✓ | | | | | | | | | | | |
| Unit 19: Compare Decimals | | | | | | | | | | | | | | | | | | ✓ | | | | | | | | | | |
| Measurement & Data | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit 20: Use Metric Measurements | | | | | | | | | | | | | | | | | | | ✓ | ✓ | | | | | | | | |
| Unit 21: Use Customary Measurements | | | | | | | | | | | | | | | | | | | ✓ | ✓ | | | | | | | | |
| Unit 22: Perimeter and Area | | | | | | | | | | | | | | | | | | | | | ✓ | | | | | | | |
| Unit 23: Make Line Plots | | | | | | | | | | | | | | | | | | | | | | ✓ | | | | | | |
| Geometry | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Unit 24: Lines and Angles | | | | | | | | | | | | | | | | | | | | | | | | | | ✓ | | |
| Unit 25: Measure Angles | | | | | | | | | | | | | | | | | | | | | | ✓ | ✓ | ✓ | | | | |
| Unit 26: Classify Polygons | | | | | | | | | | | | | | | | | | | | | | | | | | | ✓ | |
| Unit 27: Symmetry | | | | | | | | | | | | | | | | | | | | | | | | | | | | ✓ |

How Does Common Core Mathematics Help My Students?

The Common Core State Standards set shared, consistent, and clear expectations of what U.S. students are expected to learn in each grade and are designed to be rigorous and pertinent to the real world. If your state has joined the Common Core State Standards Initiative, then this book will help your students meet these grade-level expectations.

For math, the Common Core sets the following key expectations.

- Make sense of problems and persevere in solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Common Core Mathematics provides:

- 3 levels of scaffolded Math practice
- Mini-lessons to model every skill
- Word problems and assessment questions for every skill
- Critical-thinking questions on every practice page
- Complete coverage of Common Core Standards for Mathematical Practice and Mathematical Content
- Bonus Math fluency practice and teacher resource pages

Mini-lesson for each unit introduces Common Core math skills and concepts.


Full support

Partial support

Minimal support

Word problem page

 **Tell how you multiplied.**

 Each practice page includes a bonus thinking-skills question so students can answer “How do you know?” to address Common Core Standards for Mathematical Practice and demonstrate their reasoning and understanding of the concept.

Common Core Mathematics

Practice at 3 Levels ●●●

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← **SAMPLE UNIT**

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Unit 19

Compare Decimals

Standard

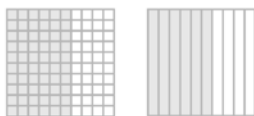
Number & Operations—Fractions

Understand decimal notation for fractions, and compare decimal fractions.

4.NF.7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.

Model the Skill

- ◆ Draw the following models on the board.



- ◆ **Say:** *Today we are going to compare decimals.* Have students write the meaning of the comparison symbols. **Ask:** *Which decimal is greater in the problem? (neither, they are equal) How do you know?* Have students look at the picture. Each square is the same size and represents the same whole. Discuss that while the numbers show tenths and hundredths, they are equivalent decimals, so if we think of them as fractions with the same denominator, we compare the numerators: $60/100$ is equal to $6/10$.
- ◆ **Ask:** *So, what symbol do we write in the oval? (=) Why?* Help students understand that the symbol must make the number sentence true. Continue by adding and deleting shading so students can compare great than and less than values.
- ◆ Assign students the appropriate practice page(s) to support their understanding of the skill.

Assess the Skill

Use the following problems to pre-/post-assess students' understanding of the skill.

- ◆ Have students use symbols to make the following expressions true.

$$0.60 \bigcirc 0.6 \qquad 0.75 \bigcirc 0.57 \qquad 0.05 \bigcirc 0.15$$

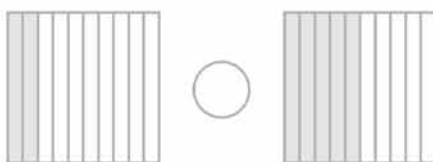
●○○ = full support

Name _____

Unit 19 • Compare Decimals

Compare. Use $>$, $<$, or $=$.

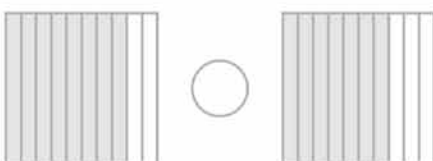
1 0.2 ○ 0.5



2 0.6 ○ 0.5



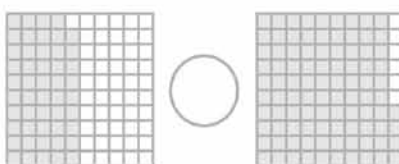
3 0.8 ○ 0.7



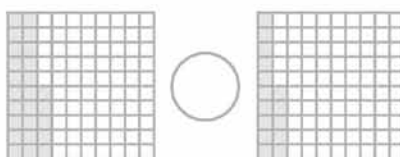
4 0.5 ○ 0.8



5 0.49 ○ 0.94



6 0.25 ○ 0.15



☆ Tell how you know which decimal is greater.

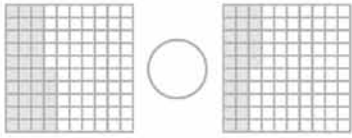
●●○ = partial support

Unit 19 • Compare Decimals

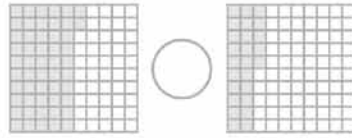
Name _____

Compare. Use $>$, $<$, or $=$.

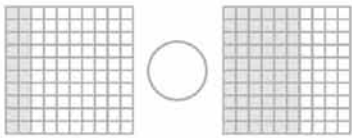
1 0.35 ○ 0.25



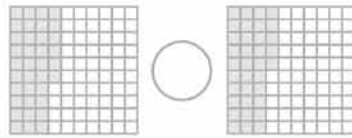
2 0.52 ○ 0.25



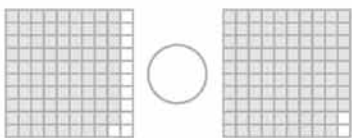
3 0.2 ○ 0.60



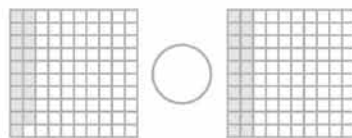
4 0.36 ○ 0.35



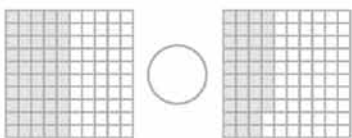
5 0.89 ○ 0.98



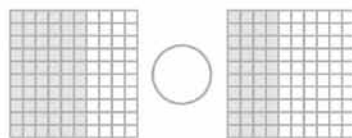
6 0.19 ○ 0.2



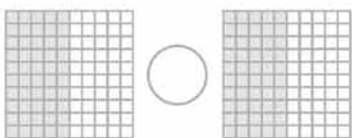
7 0.50 ○ 0.38



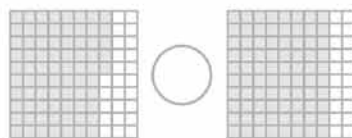
8 0.60 ○ 0.4



9 0.50 ○ 0.5



10 0.75 ○ 0.8



☆ Tell how you know which decimal is greater.



= minimal support

Name _____

Unit 19 • Compare Decimals

Compare. Use >, <, or =.

① $0.35 \bigcirc 0.4$

② $0.06 \bigcirc 0.60$

③ $0.3 \bigcirc 0.03$

④ $0.42 \bigcirc 0.24$

⑤ $0.69 \bigcirc 0.6$

⑥ $0.50 \bigcirc 0.38$

⑦ $0.8 \bigcirc 0.80$

⑧ $0.25 \bigcirc 0.35$

⑨ $0.1 \bigcirc 0.10$

⑩ $0.50 \bigcirc 0.38$

⑪ $0.67 \bigcirc 0.65$

⑫ $0.25 \bigcirc 0.2$

**Tell how you know when decimals are equal.**

Unit 19 • Word Problems • Compare Decimals

Name _____

Solve.

- ① Billy has 0.56 of a dollar in his pocket. Jesse has six-tenths of a dollar in his pocket. Who has a greater amount of money in his pocket?
- ② Fiona paid sixty-eight hundredths of a dollar for the pencil. She paid eighty-three hundredths for a pen. Which cost more?
-
- ③ The book is 16.37 centimeters long. The laptop is 16.8 centimeters long. Which is longer?
- ④ The sandwich costs \$4.73. The salad costs \$4.39. Which costs more?

Circle the letter for the correct answer.

- ⑤ Dia makes hats. Six-tenths of the hats she makes have flowers. Four-tenths of the hats have feathers. Which statement best describes Dia's hats?
- a) Dia makes more feather hats.
b) Dia makes fewer flower hats.
c) Dia makes more flower hats.
d) Dia makes an equal number of feather and flower hats.
- ⑥ Which of the following decimals is equal to one-half?
- a) 0.5
b) 0.50
c) 0.05
d) a and b only

Answers appear in Answer Key pp. 151–159 of book.