

Common Core Standards Alignment Chart • Grade 3

Units	3.NBT.1	3.NBT.2	3.NBT.3	3.OA.1	3.OA.2	3.OA.3	3.OA.4	3.OA.5	3.OA.6-7	3.OA.8	3.OA.9	3.NF.1	3.NF.2	3.NF.3	3.MD.1	3.MD.2	3.MD.3	3.MD.4	3.MD.5	3.MD.6	3.MD.7	3.MD.8	3.G.1	3.G.2
Number & Operations in Base Ten																								
Unit 1: Use Place Value to Round Whole Numbers	✓																							
Unit 2: Estimate Sums and Differences	✓	✓								✓														
Unit 3: Add Whole Numbers		✓																						
Unit 4: Subtract Whole Numbers		✓																						
Operations & Algebraic Thinking																								
Unit 5: Solve Two-Step Word Problems	✓									✓														
Unit 6: Meaning of Multiplication				✓																				
Unit 7: Properties of Multiplication								✓																
Unit 8: Patterns in Multiplication											✓													
Unit 9: Multiply by Multiples of Ten			✓																					
Unit 10: Meaning of Division				✓				✓	✓															
Unit 11: Fact Families for Multiplication & Division									✓															
Unit 12: Solve Multiplication and Division Problems						✓																		
Unit 13: Use Multiplication or Division to Find the Missing Number							✓		✓															
Number & Operations—Fractions																								
Unit 14: Understand Fractions												✓												
Unit 15: Fractions on a Number Line													✓											
Unit 16: Equivalent Fractions														✓										
Unit 17: Compare Fractions														✓										
Measurement & Data and Geometry																								
Unit 18: Time to the Minute															✓									
Unit 19: Grams, Kilograms, Liters																✓								
Unit 20: Measure Length to the Nearest Quarter Inch																		✓						
Unit 21: Make and Use Pictographs																	✓	✓						
Unit 22: Make and Use Bar Graphs																	✓							
Unit 23: Understand Perimeter																						✓		
Unit 24: Understand Area																			✓	✓	✓	✓		
Unit 25: Find Area																			✓	✓	✓	✓		
Unit 26: Quadrilaterals																							✓	
Unit 27: Partition Shapes																								✓

Common CORE Mathematics

Practice at 3 Levels ●●●

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Using This Book

What Is the Common Core?

The Common Core State Standards are an initiative by the states to set shared, consistent, and clear expectations of what students are expected to learn, so teachers and parents know what they need to do to help them. The standards are designed to be rigorous and pertinent to the real world. They reflect the knowledge and skills that our young people need for success in college and careers.

What Are the Intended Outcomes of Common Core?

The goal of the Common Core Standards is to facilitate the following competencies.

Students will:

- demonstrate independence;
- build strong content knowledge;
- respond to the varying demands of audience, task, purpose, and discipline;
- comprehend as well as critique;
- value evidence;
- use technology and digital media strategically and capably;
- come to understand other perspectives and cultures.

What Does This Mean for You?

If your state has joined the Common Core State Standards Initiative, then as a teacher you are required to incorporate these standards into your lesson plans. Your students may need targeted practice in order to meet grade-level standards and expectations and thereby be promoted to the next grade. This book is appropriate for on-grade-level students as well as for intervention, ELs, struggling readers, and special needs. To see if your state has joined the initiative, visit the Common Core States Standards Initiative website to view the most recent adoption map: <http://www.corestandards.org/in-the-states>.

What Does the Common Core Say Specifically About Math?

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.

How Does Common Core Mathematics Help My Students?

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

Unit 16
Equivalent Fractions

Standard

Number & Operations—Fractions
Develop understanding of fractions as numbers.
3.NF.3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
a) Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
b) Recognize and generate simple equivalent fractions, e.g., $\frac{1}{2} = \frac{2}{4}$, $\frac{4}{6} = \frac{2}{3}$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.
c) Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.

Model the Skill

Hand out fraction bars and draw the following model on the board.

◆ **Say:** Today we are going to learn about equivalent fractions. Equivalent fractions are fractions that are equal—they name the same amount! Have students use fraction bars to model one-half. **Say:** We want to see how many fourths it takes to equal one-half. Have students use fraction bars to model the fourths.

◆ **Ask:** How many fourths are equal to one-half? How do you know? *G.* It takes two-fourths to be the same size as one-half. **Say:** One-half and two-fourths are the same size. One-half and two-fourths are equivalent fractions. You might suggest that students place the fourths on top of the half as another way to show they are equal.

◆ 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.

$\frac{1}{2} = \frac{\square}{4}$ $\frac{1}{2} = \frac{\square}{6}$ $\frac{1}{2} = \frac{\square}{8}$ $\frac{1}{2} = \frac{\square}{10}$
 $\frac{2}{4} = \frac{\square}{2}$ $\frac{2}{4} = \frac{\square}{6}$ $\frac{1}{4} = \frac{\square}{6}$ $\frac{2}{4} = \frac{\square}{2}$

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Common Core Standard(s) covered in the unit

Mini-lesson introduces or refreshes target skills and concepts

Quick and easy ongoing assessment opportunities

- **Four practice pages** with three levels of differentiated practice, and word problems follow each mini-lesson.

Unit 16 • Equivalent Fractions Name _____

Use fraction bars or a number line. Write the missing numerator.

1 2
 $\frac{1}{2} = \frac{\square}{4}$ $\frac{1}{4} = \frac{\square}{8}$

3 4
 $\frac{1}{3} = \frac{\square}{6}$ $\frac{2}{4} = \frac{\square}{8}$

5 6
 $\frac{2}{6} = \frac{\square}{6}$ $\frac{3}{4} = \frac{\square}{8}$

fractions that are equivalent to one-half.

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Level 1: Students who need extra support can start at the first practice page, which offers the most on-page support. This page often includes illustrations or model drawing to support every question.

Level 1



Level 2: The second level of practice offers streamlined support features for the first few problems (illustrations, model drawing, or an algorithm reminder for support).



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



Level 3: The third practice page does not offer on-page support and depicts how students are expected to be able to perform at this grade level, whether in class or in testing.



Tell how you find the missing numerator.

Bonus Thinking Skills question on each practice page

Unit 10 • Equivalent Fractions

Name _____

Use fraction bars or a number line. Write equivalent fractions.

1 $\frac{1}{3} = \frac{\square}{\square}$ 2 $\frac{2}{3} = \frac{\square}{\square}$ 3 $\frac{3}{3} = \frac{\square}{\square}$

4 $\frac{1}{2} = \frac{\square}{\square}$ 5 $\frac{1}{4} = \frac{\square}{\square}$ 6 $\frac{3}{4} = \frac{\square}{\square}$

7 $\frac{2}{8} = \frac{\square}{\square}$ 8 $\frac{4}{8} = \frac{\square}{\square}$ 9 $\frac{6}{8} = \frac{\square}{\square}$

10 $\frac{2}{10} = \frac{\square}{\square}$ 11 $\frac{4}{10} = \frac{\square}{\square}$ 12 $\frac{6}{10} = \frac{\square}{\square}$

☆ Tell how you know the fractions are equivalent.

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Level 2

Unit 10 • Equivalent Fractions

Name _____

Use fraction bars or a number line. Write the missing numerators and denominators.

1 $\frac{2}{3} = \frac{\square}{\square}$ 2 $\frac{1}{4} = \frac{\square}{\square}$ 3 $\frac{2}{5} = \frac{\square}{\square}$

4 $\frac{3}{6} = \frac{\square}{\square}$ 5 $\frac{4}{4} = \frac{\square}{\square}$ 6 $\frac{6}{8} = \frac{\square}{\square}$

7 $\frac{2}{5} = \frac{\square}{\square}$ 8 $\frac{4}{8} = \frac{\square}{\square}$ 9 $\frac{6}{6} = \frac{\square}{\square}$

10 $\frac{6}{10} = \frac{\square}{\square}$ 11 $\frac{4}{6} = \frac{\square}{\square}$ 12 $\frac{5}{10} = \frac{\square}{\square}$

13 $\frac{2}{8} = \frac{\square}{\square}$ 14 $\frac{1}{3} = \frac{\square}{\square}$ 15 $\frac{4}{5} = \frac{\square}{\square}$

☆ Tell how you find the missing numerator.

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Level 3

Word Problems: Each unit ends with a page of short answer and multiple-choice word problems so students are challenged to marry their computation skills with their quantitative-reasoning and problem-solving skills and grow more familiar with the types of problems they will encounter on standardized tests.

Unit 10 • Word Problems • Equivalent Fractions

Name _____

Solve.

1 A pizza has 8 slices. One-half of the pizza has meatballs. How many slices have meatballs?

$$\frac{1}{2} = \frac{?}{8}$$

2 The fruit bowl has 6 apples. Half of the apples are green. How many apples are green?

$$\frac{1}{2} = \frac{?}{6}$$

3 Robin has some bananas. 6 bananas are ripe. Three-fifths of the bananas are ripe. How many bananas does Robin have in all?

$$\frac{3}{5} = \frac{6}{?}$$

4 Tate has 4 dollars in her wallet. One-half of her dollars are in her wallet. How many dollars does she have in all?

$$\frac{1}{2} = \frac{4}{?}$$

5 Which of the following fraction is equal to one-half?

a) $\frac{4}{6}$ b) $\frac{2}{3}$ c) $\frac{4}{2}$ d) $\frac{2}{4}$

6 Nils has 9 pages in the chapter. He has read 3 pages. How much of the chapter has he read?

a) $\frac{9}{3}$ b) $\frac{1}{2}$ c) $\frac{1}{4}$ d) $\frac{1}{3}$

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Word Problems