

FOURTH GRADE

COMMON CORE

MATH

AND

ENGLISH LANGUAGE ARTS

OVERVIEW

FOR PARENTS

Mathematics | Standards for Mathematical Practice for All Grades

The Standards for Mathematical Practice describe behaviors that all students will develop in the Common Core Standards. These practices rest on important “processes and proficiencies” including problem solving, reasoning and proof, communication, representation, and making connections. These practices will allow students to understand and apply mathematics with confidence.

- Make sense of problems and persevere in solving them.
 - Find meaning in problems
 - Analyze, predict and plan solution pathways
 - Verify answers
 - Ask themselves the question: “Does this make sense?”

- Reason abstractly and quantitatively.
 - Make sense of quantities and their relationships in problems
 - Create coherent representations of problems

- Construct viable arguments and critique the reasoning of others.
 - Understand and use information to construct arguments
 - Make and explore the truth of conjectures
 - Justify conclusions and respond to arguments of others

- Model with mathematics.
 - Apply mathematics to problems in everyday life
 - Identify quantities in a practical situation
 - Interpret results in the context of the situation and reflect on whether the results make sense

- Use appropriate tools strategically.
 - Consider the available tools when solving problems

- Are familiar with tools appropriate for their grade or course (pencil and paper, concrete models, ruler, protractor, calculator, spreadsheet, computer programs, digital content located on a website, and other technological tools)

- Be precise.
 - Communicate precisely to others
 - Use clear definitions, state the meaning of symbols and are careful about specifying units of measure and labeling axes
 - Calculate accurately and efficiently

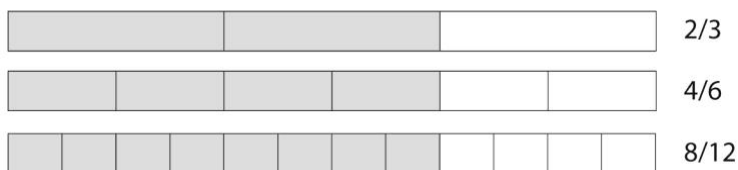
- Look for and make use of structure.
 - Discern patterns and structures
 - Can step back for an overview and shift perspective
 - See complicated things as single objects or as being composed of several objects

- Look for and identify ways to create shortcuts when doing problems.
 - When calculations are repeated, look for general methods, patterns and shortcuts
 - Be able to evaluate whether an answer makes sense

Grade 4 Overview | Mathematics

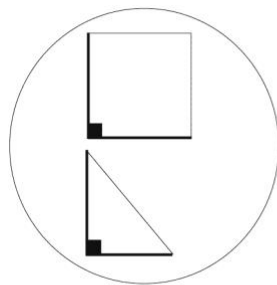
Fourth graders use their knowledge of place value to generalize to 1,000,000 and learn to round multi-digit whole numbers to any place. They fluently add and subtract using the standard algorithm and multiply and divide with multi-digit numbers. Fourth graders extend understanding of fractions to include equivalence, ordering and simple decimal notation. Students measure angles and classify geometric shapes by lines (parallel, perpendicular, etc.) and angles (right, acute, obtuse, etc.).

- Use addition, subtraction, multiplication, and division with whole numbers to solve word problems
- Learn about factors and multiples
 - Factors of 24: 1, 2, 3, 4, 6, 8, 12
 - Multiples of 4: 4, 8, 12, 16, 20
- Make and describe patterns with objects and numbers
- Understand and use place value to generalize to 1,000,000
 - Expanded form: $6783 = 6000 + 700 + 80 + 3$
- Compute with multi-digit numbers
- Solve problems involving using multiplication of multi-digit by two-digit numbers
- Divide multi-digit numbers by one-digit divisor
- Round multi-digit numbers to any place
- Build understanding of equivalent fractions and ordering fractions

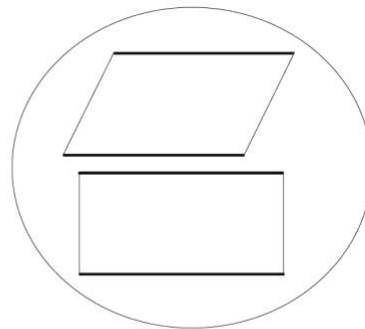


- Compare two fractions with different numerators and different denominators by making common denominators
- Add and subtract fractions and mixed numbers with like denominators
- Understand the decimal notation for fractions

- Compare decimals
- Solve problems using measurement conversions
- Apply area and perimeter formulas for rectangles
- Organize and explain data using a line plot
(continued)
- Understand and measure angles
- Draw and identify lines and angles
- Describe and sort shapes by their lines and angles



Right Angles



Parallel Lines

- Recognize lines of symmetry

Grade 4 Overview | English Language Arts

Fourth grade students read longer words and use roots, prefixes, and suffixes to determine the meanings of unknown words. They use details and examples in the text to determine the main idea and describe a character, setting, or event. Students produce writing that is developed, focused, organized, and edited. They group related ideas in paragraphs and sections, and provide a conclusion. Fourth grade students know when to use formal English, and when informal English is appropriate.

Reading

- Use details and examples in the text to determine the main idea and describe a character, setting, or event
- Use first person (e.g., *I said*) and third person (e.g., *She said*) narrative styles
- Read and understand literature and informational texts

Reading: Foundational Skills

- Use grade-level phonics and word analysis skills
 - Roots, prefixes, and suffixes
- Read words with multiple syllables
- Read with accuracy and understanding

Writing

- Write opinion pieces that include a conclusion related to the opinion
- Write informative pieces that group related ideas in paragraphs and sections, and provide a conclusion
- Write narratives that introduce a narrator and characters; write about what the characters say, feel, and think; use sensory details
 - Sight, sound, scent
- Produce writing that is developed, focused, organized, and edited
- Write a short research piece

Speaking and Listening

- Participate in discussions, carrying out assigned roles
- Paraphrase portions of information presented aloud
- Plan and deliver a presentation based on a personal experience
- Speak clearly, in complete sentences, and at an appropriate pace

Language

- Use correct grammar
- Use complete sentences

- Correctly use frequently confused words
 - To, two, too
 - There, their, they're
- Use correct capitalization, punctuation, and spelling
- Spell grade-level words correctly
- Know when to use formal English and when informal English is appropriate

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