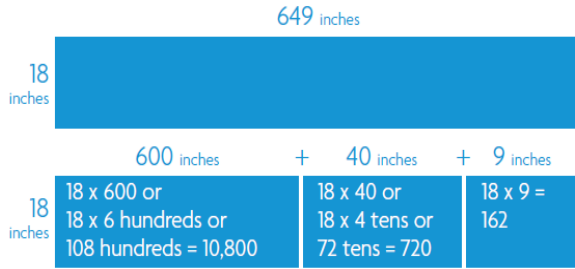


Here are just a few examples of how students will develop and use their understanding of place value in grade four.

To find the area of this rectangle, students can first break it down into three parts.

The length of each part can then be multiplied by the width of 18. $18(600+40+9) = 18 \times 600 + 18 \times 40 + 18 \times 9$.

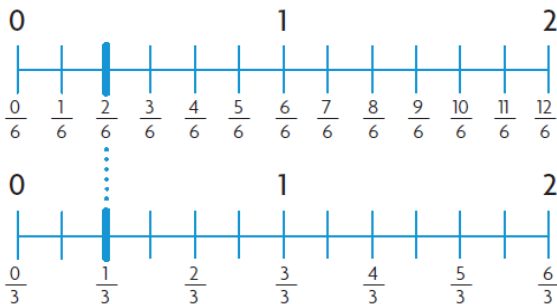


Students learn that 649×18 is also equal to $(649 \times 10) + (649 \times 8)$.

$$\begin{array}{r} 37 \\ 649 \\ \times 18 \\ \hline 5192 \\ 6490 \\ \hline 11,682 \end{array}$$

Here are just a few examples of how students will learn about and work with fractions in grade four.

Students will use the number line to break fractions into smaller fractions and to show that $\frac{2}{6} = \frac{1}{3}$.



Grade 4 Mathematics

- Break down a fraction into smaller fractions with the same denominator, or bottom number, in more than one way ($\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \frac{2}{8} + \frac{1}{8}$)
- Explain why a fraction is equal to another fraction
- Add and subtract mixed numbers (whole numbers mixed with fractions, such as $1 \frac{1}{5}$) with the same denominators
- Multiply a fraction by a whole number

Helping your child learn outside of school

1. Use everyday objects to allow your child to explore the concept of fractions. For example, use measuring cups so students see how many times you have to refill a $\frac{1}{4}$ cup to equal a $\frac{1}{2}$ cup or how many $\frac{1}{3}$'s are in two cups. Have students describe two fractions that are equal using a measuring cup (filling a $\frac{1}{4}$ measuring cup twice is the same as filling one $\frac{1}{2}$ measuring cup).
2. Have your child write or describe fractions in different ways. For example, what are some different ways to make $\frac{3}{4}$? Answers could include $\frac{1}{4} + \frac{1}{4} + \frac{1}{4}$ or $3 \times \frac{1}{4}$
3. Ask your child create and describe equal fractions. For example, have students take a sheet of paper, fold the paper in half, and then unfold and shade $\frac{1}{2}$. Then have students take the same sheet of paper and fold the paper in a half again. Unfold the paper and have students discuss the number of parts that are now shaded. Encourage your child to talk about ways to show that $\frac{1}{2} = \frac{2}{4}$. (Students may continue this process creating other equal fractions.)
4. Encourage your child to stick with it whenever a problem seems difficult. This will help your child see that everyone can learn math.
5. Praise your child when he or she makes an effort and share in the excitement when he or she solves a problem or understands something for the first time.

Parent ROADMAP

to
California Common
Core
Standards
4th Grade

To view Common Core State Standards:
www.cde.ca.gov/re/cc/index.asp



The way we taught students in the past simply does not prepare them for the higher demands of college and careers today and in the future. Your school and schools throughout the country are working to improve teaching and learning to ensure that all children will graduate high school with the skills they need to be successful.

SUPPORTING YOUR CHILD IN GRADE 4

ENGLISH LANGUAGE ARTS

In grade four, students will continue to build important reading, writing, speaking, and listening skills. They will read more challenging literature, articles, and other sources of information and continue to grow their vocabulary. They will also be expected to clearly explain in detail what they have read by referring to details or information from the text. In writing, students will organize their ideas and develop topics with reasons, facts, details, and other information.

Activities in these areas will include:

- Identifying the theme or main idea of a story, play, or poem
- Comparing stories from different cultures
- Explaining how an author uses facts, details, and evidence to support their points
- Reading and understanding information presented in charts, graphs, timelines, and other illustrations
- Learning the rules of spoken and written English
- Learning and using new words, including words related to specific subjects (such as science words)
- Participating in class discussions by listening, asking questions, sharing ideas, and building on the ideas of others
- Giving a class presentation on a topic or telling a story using relevant, organized facts and details and speaking clearly
- Writing stories with dialogue and descriptions of character's actions, thoughts, and feelings
- Taking notes and organizing information from books, articles, and online sources to learn more about a topic
- Writing research or opinion papers over extended periods of time

READING LITERATURE

Grade 4 Reading

- Students determine the theme of a story, play, or poem from details in the text and summarize the text.
- Students compare and contrast the point of view from which different stories are told, including the difference between first- and third-person accounts.

READING FOR INFORMATION

Grade 4 Reading

- Students refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- Students interpret information presented in charts, graphs, or other visual sources of information and explain how the information contributes to an understanding of the text.

Grade 4 Writing

- Students introduce a topic clearly and develop the topic with facts, definitions, concrete details, quotations, or other information.
- Students provide a concluding statement or section related to the information or explanation presented.
- Students group related information in paragraphs and sections and use formatting (such as headings), illustrations, and multimedia when useful.
- Students link ideas within categories of information using words and phrases (such as *another*, *for example*, *also*, and *because*).
- Students use precise language and subject-specific vocabulary.

Helping your child learn outside of school

1. Provide time and space for your child to read independently. This time should be free from distractions such as television.
2. Ask your child what he or she learned from reading and how that knowledge can be used in real life. Have him or her read the most interesting or useful sections aloud.
3. It is also helpful when your child sees other people reading at home. You could share what you have read.
4. Keep track of the time that your child spends reading every day. Note what kind of reading materials he or she likes (books, magazines, newspaper articles, the Internet, etc.). Then look for additional materials that would encourage your child to read more.
5. Be sure your child has a library card. Children should select books they are interested in to develop a passion for reading. Many libraries have book clubs and family activities that make reading fun for the entire family.
6. Use technology to help build your child's interest in reading. There are several websites where students can read books or articles online. The computer will help with words the student cannot read independently. Libraries also have computers students can use to access those sites. Feel free to ask a librarian or teacher for suggestions.

SUPPORTING YOUR CHILD IN GRADE 4

MATHEMATICS

In grade four, your child will use addition, subtraction, multiplication, and division to solve word problems, including problems involving measurement of volume, mass, and time. Students will continue to build their understanding of fractions—creating equal fractions, comparing the size of fractions, adding and subtracting fractions, and multiplying fractions by whole numbers. They will also start to understand the relationship between fractions and decimals.

Activities in these areas will include:

- Adding and subtracting whole numbers up to 1 million quickly and accurately
- Solving multi-step word problems, including problems involving measurement and converting measurements from larger to smaller units
- Multiplying and dividing multi-digit numbers
- Extending understanding of fractions by comparing the size of two fractions with different numerators (top numbers) and different denominators (bottom numbers)
- Creating equal fractions ($\frac{3}{4} = \frac{3 \times 2}{4 \times 2} = \frac{6}{8}$)
- Adding and subtracting fractions with the same denominator
- Building fractions from smaller fractions ($\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$)
- Connecting addition and subtraction of whole numbers to multiplying fractions by whole numbers
- Connecting addition of fractions to the concept of angle measurement
- Representing and interpreting data
- Converting fractions with denominators of 10 or 100 into decimals
- Locating decimals on a number line
- Comparing decimals and fractions using the symbols $>$ (more than), $=$ (equal to), and $<$ (less than)

Grade 4 Mathematics

- Use place value understanding to round multi-digit whole numbers to any place
- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right
- Use place value understanding to find the product of two multi-digit numbers
- Compare two multi-digit numbers based on meanings of the digits in each place, using the symbols $>$ (more than), $=$ (equal to), and $<$ (less than)