

# Major Learning Targets for This Grade

Fractions							
Students will use equivalent fractions to add and subtract fractions; extend multiplication and division of whole numbers to multiply and divide fractions.							
"I can fluently add and subtract fractions."	"I can multiply fractions."	"I can divide whole numbers by unit fractions."	"I can divide unit fractions by whole numbers."				
Example Task:     Four students sitting at a table were given $\frac{1}{3}$ of a pan of cornbread to share equally. What fraction of the whole pan of cornbread will each student get if they share the remaining cornbread equally?     Solution: The diagram shows the $\frac{1}{3}$ of a pan of cornbread divided into four equal shares. When replicated to fill out the entire pan, it becomes clear that each piece is $\frac{1}{12}$ of an entire pan. (If the $\frac{1}{3}$ -sized pieces are each divided into 4 equal pieces, this makes a total of 12 equal pieces of the original whole.)							
	$\frac{1}{3}$ $\Rightarrow$						

Decimals								
Students will add, subtract, multiply and divide decimals.								
"I can solve word problems involving addition and subtraction of decimals."	"I can rename fractions to decimal numbers."	"I can multiply decimals using strategies."	"I can divide any number by a two-digit number, which may lead to a decimal answer."					
Example Task: Use an area model to multiply decimals. Show that $2.4 \times 1.3 = 3.12$ Possible Solution: $1.3 \qquad 2.4 \qquad \frac{2.4}{1.3} \qquad \frac{2.4}{1.2} $								
2.4	$\frac{+2.00}{3.12}$							

Volume								
Students will understand the concept of volume and relate these to multiplication and division.								
"I can pack prisms using cubes without gaps or overlaps to find the total number of cubes used."	"I can describe volume as layering areas on top of each other."	"I can find the volume of irregular prisms by breaking them up into smaller prisms and add the smaller volumes together."		ms ns :"				
<i>Example Task:</i> You have 24 "unit" cubes, make as many rectangular prisms as possible and record the dimensions as you build.		Length 1 2 4 8	Width       2       2       2       3	Height 12 6 3 1				



# Expected Behaviors in Math Class

Students will...

- Consider available tools to help them solve problems and deepen understanding (including hands-on tools and technology).
- Look for patterns and connections.
- Explain their thinking and their process for solving a problem.
- Make predictions and estimations.
- Decide if an answer is reasonable.
- Justify conclusions.
- Communicate ideas clearly verbally and in writing, using math vocabulary when appropriate.
- Apply mathematics to solve problems in everyday life.

## How Can I Support My Student in This Course?



#### Access Google Classroom Regularly (if Applicable)

⇒Look at the Stream for daily announcements and a weekly schedule.
⇒View the Classwork for assignment information and support.



### Encourage Multiple Strategies and Representations of the Problem

⇒Ask your student to solve the problem in different ways.
⇒Encourage the use of different representations (e.g., symbols, words, or pictures/visuals), and have them make connections between representations.



### Ask Questions & Encourage Your Student to Ask Questions

⇔When your student is stuck, don't simply tell them the correct answer. Ask questions like:

- "What is the question in the problem/task?"
- "What do you understand/know from the task?"
- "How do you know?" Listen while your student explains their mathematical reasoning and ask, "Does your answer make sense?" based on the context of the problem or task.

⇒Encourage your student to write down questions to bring to their teacher or peer the next day.

#### Value Mistakes

⇒Students are learning when they are making mistakes; create an environment where your student feels comfortable making a mistake and learning from it.



#### Acknowledge Effort over Answers and Speed

Celebrate how hard your student is working, whether their answer is correct or not.
When your student is stuck, remind them that learning can be challenging, and if they continue to practice and work hard, they will improve.

For more information, visit <u>scusd.edu/math</u> or contact <u>Mikila-Fetzer@scusd.edu</u>, Director of PL, Science, EdTech, PE, & Mathematics SCUSD's Equity & Access Guiding Principle: All students are given an equal opportunity to graduate with the greatest number of postsecondary choices from the widest array of options.