

Major Learning Targets for This Grade

Numbers and Operations in Base Ten

Students will extend understanding of base-ten notation (place value) and build fluency with addition and subtraction.

"I can represent and solve problems involving addition and subtraction."

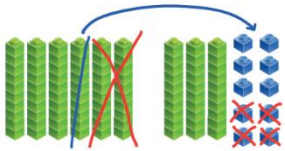
"I can use place value understanding and properties of operations to add and subtract within 100."

"I can add and subtract within 20 fluently using many strategies."

Example Task:

Some students are in the cafeteria. 24 more students came in. Now there are 60 students in the cafeteria. How many students were in the cafeteria to start with? Use drawings and equations to show your thinking.

Possible Student Work:



"I read the problem and thought about how to write it with numbers. I thought, "What and 24 makes 60?" I used a math drawing to solve it. I started with 24. Then I added tens until I got close to 60; I added 3 tens. I stopped at 54. Then I added 6 more ones to get to 60. So, $10 + 10 + 10 + 6 = 36$. So, there were 36 students in the cafeteria to start with. My equation for the problem is $_ + 24 = 60$ "

Measurement

Students will use standard units of measure.

"I can estimate and measure lengths in standard units (inches, feet, cm, meters)."

"I can relate addition and subtraction to length."

"I can add and subtract on a number line."

Example Task:

Kate jumped 14 inches in gym class. Lilly jumped 23 inches. How much farther did Lilly jump than Kate? Solve the problem and then write an equation.

- 1) Use a number line to solve.
- 2) Make a model using base ten blocks.
- 3) If Jaylin jumped 19 inches on her first try, how much farther will she need to jump to beat Lilly's jump?

Describing and Analyzing Shapes

Students will describe and analyze shapes.

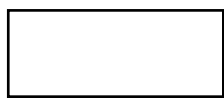
"I can describe and draw triangles, quadrilaterals, pentagons, hexagons, and cubes by examining their sides and angles."

"I can partition (divide) circles and rectangles into two, three, or four equal shares."

"I can partition a rectangle into rows and columns of same-size squares and count to find the total number of squares."

Example Tasks:

Norah is making brownies for her family. There are 12 people in her family. How can she divide the brownies so everyone gets at least one piece?

 _____ rows
 _____ columns
 _____ pieces of brownie

Which of these shows a birthday cake cut into thirds?



Expected Behaviors in Math Class

Students will...

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

How Can I Support My Student in This Course?

1. Ask Questions

- When your student is stuck, ask him/her questions like:
 - “How do you know?”
 - “Have you seen a similar problem like this before?”
 - “Does your answer make sense?”
 - “What is the problem asking you?”
 - “What information do you need to solve this question?”

2. Encourage Your Student to Ask Questions

- You don’t need to be able to answer every question that students may come up with; encourage your student to write down his/her question to bring to a teacher or peer the next day

3. Ask Your Student to Draw the Math Problem

- All mathematics can be represented visually; visual representations help students understand the concepts
- Encourage color coding

4. Encourage Multiple Representations of the Problem

- Ask your student to solve the problem in a different way, and to make connections between the different representations

5. 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

6. Don’t Simply Tell Them the Right Answer

- Once students are aware that their answer is right, they are more likely to stop thinking about the math
- Instead of telling them the right answer, ask them a question (see #1) or have them draw a picture

7. Praise Effort

- When your student gets a right answer, acknowledge how hard they must have worked and practiced
- When your student is stuck, acknowledge that sometimes math is challenging and that if they continue to practice and work hard, they will improve

For more information, visit scusd.edu/math or contact Mikila-Fetzer@scusd.edu, Math Coordinator

SCUSD’s Vision for Instruction and Assessment: *As a community of learners, we strive to create positive and engaging environments where a rigorous, student-centered curriculum is central. Teachers use inquiry-based instruction and formative assessment practices to support ALL learners in maturing socially and in becoming disciplinary thinkers.*