

3RD GRADE MATH PRIORITY STANDARDS- "I CAN..."

Operations and Algebraic Thinking

- I can understand multiplication by thinking about groups of objects (ex. 5×7 is 5 groups of 7 objects). (3.OA.1)
- I can understand division by thinking about how one group can be divided into smaller equal groups. (3.OA.2)
- I can use what I know about multiplication and division to solve word problems within 100. (3.OA.3)
- I can find the missing number in a multiplication or division problem. (3.OA.4)
- I can use the commutative property of multiplication. (if $6 \times 4 = 24$, then $4 \times 6 = 24$) (3.OA.5)
- I can use the associative property of multiplication (To figure out $3 \times 5 \times 2$, I can multiply $3 \times 5 = 15$, then $15 \times 2 = 30$ OR multiply $5 \times 2 = 10$, then $3 \times 10 = 30$). (3.OA.5)
- I can use the Distributive property of multiplication. (To find 8×7 , I can think of $8 \times (5 + 2)$ which means $(8 \times 5) + (8 \times 2) = 40 + 16 = 56$). (3.OA.5)
- I can find the answer to a division problem by thinking of the missing factor in a multiplication problem. ($32 \div 8 = 4$ because $8 \times 4 = 32$) (3.OA.6)
- I can multiply and divide within 100 (3.OA.7)
- I can solve two-step word problems that involve addition, subtraction, multiplication and division. (3.OA.8)

Number and Operations in Base Ten

- I can multiply any one digit whole number by a multiple of 10 (4×50 , 6×90). (3.NBT.3)

Numbers and Operations Fractions

- I can show and understand that fractions represent equal parts of a whole, where the numerator (top number) is the part and the denominator (bottom number) is the total number of parts in the whole. (3.NF.1)
- I can understand a fraction as a number on the number line by showing fractions on a number line diagram by marking off equal parts between two whole numbers. (3.NF.2)
- I can understand two fractions as equivalent (equal) if they are the same size or at the same point on a number line. (3.NF.3a)
- I can recognize and write simple equivalent (equal) fractions and explain why they are equal using words or models. (3.NF.3b)
- I can show whole numbers as fractions. ($3 = 3/1$) (3.NF.3c)
- I can recognize fractions that are equal to one whole. ($1 = 4/4$) (3.NF.3c)
- I can compare two fractions with the same numerator (top number) or the same denominator (bottom number) by reasoning about their size. (3.NF.3d)

Measurement and Data

- I can use addition, subtraction, multiplication and division to solve word problems about mass or volume. (grams, kilograms, liters) (3.MD.2)
- I can I can draw a picture graph and bar graph and solve problems using information in a bar graph. (3.MD.3)
- I can solve real world math problems involving perimeter and area. (3.MD.5, 3.MD.7, 3.MD.8)

Geometry

- I can place shapes into categories depending upon their attributes (parts) and name the category (ex. Rectangles, quadrilaterals. (3.G.1)
- I can divide shapes into parts with equal areas and show those areas as fractions. (3.G.2)

Fluency

- I know my single digit multiplication facts. (3.OA.7.1)

8 STANDARDS FOR MATHEMATICAL PRACTICE: GRADES K- 12

Mathematical Practice

How a student can use the standard.
Student "I can" statements.

How a parent or caregiver can support the standard.

Make sense of problems and persevere in solving them.

- I can make a plan for solving the problem.
- I can keep going even when it is difficult.
- I can check if my answer is reasonable.
- I can solve it in another way to check my answer.
- I can visualise the problem to help me make a plan to solve it.
- I will try another strategy if my first one does not work.

- Allow time for students to think when asking questions.
- "What plan can you make to solve this problem?"
- "What information is in the problem and what are you trying to figure out?"
- For word problems encourage them to explain what it is about without considering the math or how to solve it first.
- Encourage the math to become about the process/students thinking rather than the one right answer.
- "Why do you think that might be the answer?"

Reason abstractly and quantitatively

- I can use numbers and words to help make sense of the problem.
- I can think about the relationships between the numbers in the problem.
- I can think about what each number or variable in the problem represents.
- I can show the problem in ways that are not the standard algorithm (symbols, pictures, manipulatives, etc.)
- I can explain my thinking.

- "Can you explain what the numbers or variables in the problem mean?"
- "How did you decide to use this operation or strategy?"
- Ask questions that help lead students to understanding.
- Encourage critical thinking and reasoning.
- Encourage students to explain their thinking even if the answer is not correct.

Construct viable arguments and critique the reasoning of others.

- I can ask questions to clarify my understanding.
- I can make connections to other strategies.
- I can communicate to others what I am thinking and why.
- I can justify my answer/conclusion.
- I can consider the thinking of other students.
- I can use mathematical language and evidence to support my answer.

- "How did you get your answer?"
- "How do you know that your answer is correct?"
- Ask clarifying questions.
- Establish an environment where the student is not afraid to get the answer incorrect as long as they can explain their reasoning.

Model with mathematics

- I can relate mathematics to real life situations.
- I can use pictures, words, objects, or symbols to solve problems.
- I can use different manipulatives (ex. number lines, arrays, base 10 blocks, algebra tiles, etc.) to represent and solve my problem.

- What model can you use to help you solve this problem?"
- "Can you visualize what is happening in this problem?"
- Point out where math is in real life situations.

8 STANDARDS FOR MATHEMATICAL PRACTICE: GRADES K- 12

Mathematical Practice

How a student can use the standard. Student "I can" statements.

How a parent or caregiver can support the standard.

Use appropriate tools strategically.

- I can select and use math tools such as number lines, calculators, objects, tables, graphs, words, manipulatives, etc. to help me solve the problem.
- I can explain why I chose a specific tool to solve the problem.
- I can estimate to help me solve the problem.

- "Is there a tool that might help you solve this problem?"
- "What information do you have/know that might help you solve this problem?"
- "Why did you choose this tool to help you solve this problem?"
- "Before you solve the problem can you estimate the answer?"
- Encourage them to find everyday items to help solve the problem.

Attend to precision.

- I always think about whether my answer is reasonable.
- I am able to communicate to others using mathematics vocabulary so that they understand what I am doing.
- I am precise in my calculations.
- I use appropriate symbols and units of measure.

- "How do you know that your solution is reasonable?"
- "What units of measure are you using?"
- Encourage students to use mathematical language.
- Encourage students to take their time and always have a reason for their actions.
- Encourage students to explain exactly what they do and do not understand. (Discourage the phrase, "I do not get any of it")

Look for and make use of structure.

- I look for patterns that can help me solve a problem.
- I can relate other problems that I have solved previously to help me solve new problems.
- I try to connect mathematical ideas.

- "What are some other problems that are similar to this one?"
- "Do you see any patterns/similarities in the problems you have been solving?"

Look for and express regularity in repeated reasoning.

- I can notice when calculations are repeated and use these ideas to create a strategy.
- I can create rules for patterns.
- I can determine if my answer is reasonable..

- Encourage students to create rules for patterns they observe and explore if they are always true.
- "What do you think is happening in this problem?"
- "What shortcut can you think of that will always work for these kinds of problems?"