

Fifth Grade (TEKS)

Supplemental Mathematics Tasks



This resource is a repository of mathematics tasks aligned to grade level standards compiled by [Shannon Olson](#). Shannon did not write the tasks, but curated them from a variety of open educational resources.

“Effective teaching of mathematics engages students in solving and discussing tasks that promote mathematical reasoning and problem solving and allow multiple entry points and varied solution strategies” (National Council of Teachers of Mathematics, 2014). For more information on facilitating tasks, see [Notes on Task Facilitation](#) in the appendix of this document.

It is not recommended to use these resources as a primary curriculum, but rather to use them as supplemental tasks to enhance a coherent set of materials. For more information see [Notes on Curriculum](#) in the appendix of this document.



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Whole Number Operations

5.3 Number and operations. The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy.

5.4 Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations.

Standards	Task	Task Description
5.4(E)	Picturing Factors in Different Orders	The purpose of this task is to help students picture the multiplicative structure of the number 30 in different ways. Some of this structure is easier to communicate using grouping symbols, as it is easier to interpret $2 \times (3 \times 5)$ than $2 \times 3 \times 5$ in terms of equal-sized groups even though they both mean "2 times 3 times 5."
5.4(E)	Why Do We Need an Order of Operations?	The purpose of this task is to help students think about the reason for the mathematical convention known as the "order of operations."
5.4(E)	You Can Multiply Three Numbers in Any Order	The purpose of this task is for students to use the volume of a rectangular prism to see why you can multiply three numbers in any order you want and still get the same result. Formally, this is a consequence of the commutative and associative properties of multiplication.
5.4(E)	Bowling for Numbers	The purpose of this game is to help students think flexibly about numbers and operations and to record multiple operations using proper notation.



5.4(E)	Using Operations and Parentheses	The purpose of this task is to give students a chance to work creatively with three of the four fundamental arithmetic operations (addition, subtraction, and multiplication). It is well suited for helping students develop fluency with addition, subtraction, and multiplication of single digit numbers.
5.4(E)	Watch Out for Parentheses 1	This problem asks the student to evaluate six numerical expressions that contain the same integers and operations yet have differing results due to placement of parentheses. It helps students see the purpose of using parentheses. This particular task supports the demonstration of Mathematical Practice Standard 6, Attend to precision.
5.4(F)	Comparing Products	The purpose of this task is to generate a classroom discussion that helps students synthesize what they have learned about multiplication in previous grades.
5.4(F)	Seeing is Believing	The purpose of this task is to help students see that $4 \times (9+2)$ is four times as big as $(9+2)$. Though this task may seem very simple, it provides students and teachers with a very useful visual for interpreting an expression without evaluating it because they can see for themselves that $4 \times (9+2)$ is four times as big as $(9+2)$.
5.4(F)	Video Game Scores	This task asks students to exercise, writing an expression in part (a) and interpreting a given expression in (b). The numbers given in the problem are deliberately large and "ugly" to discourage students from calculating Eric's and Leila's scores. The focus of this problem is not on numerical answers, but instead on building and interpreting expressions that could be entered in a calculator or communicated to another student unfamiliar with the context.



5.4(F)	Words to Expressions 1	This problem allows students to see words that can describe the expression from part (c) of "5.OA Watch out for Parentheses." Additionally , the words (add, sum) and (product, multiply) are all strategically used so that the student can see that these words have related meanings.
5.3(B)	Elmer's Multiplication Error	This task has students explore a very common multiplication error that occurs when using the standard algorithm
5.3(C) 5.7(A)	Minutes and Days	This task requires division of multi-digit numbers in the context of changing units and so illustrates 5.3(C) and 5.7(A). In addition, the conversion problem requires two steps since 2011 minutes needs to be converted first to hours and minutes and then to days, hours, and minutes.
5.3(C), 7	Sugar Cubes	3 Act Task in which students divide decimals with whole number quotients to determine how many sugar cubes are in soda.
See additional Whole Number Operations tasks at K-5 Math Teaching Resources		
See additional Whole Number Operations tasks at Open Middle		



Decimals

5.2 Number and operations. The student applies mathematical process standards to represent, compare, and order positive rational numbers and understand relationships as related to place value.

5.3 Number and operations. The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy.

5.4 Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations.

Standards	Task	Task Description
5.2(A-B)	Placing Thousandths on the Number Line	This task primarily deals with comparing decimal numbers on a number line, and it also requires students to draw upon what they know about the base ten system. They must recognize that the distance from 0 to 0.1 is partitioned into ten equal pieces and that one tenth of one tenth is 0.01
5.2(A-B)	Drawing Pictures to Illustrate Decimal Comparisons	The purpose of this task is for students to compare decimal numbers using pictures or diagrams. Using such visual representations helps develop a deep understanding of the base-ten system and underscores that the relative place value of the digits can be more important than the value of the digits as numbers between 0 and 9.
5.2(A-B)	Chasing Gold	3 Act Task in which students compare 100 M race times in decimals.
5.2(A-B)	Final Lap	3 Act Task in which students compare race car times in decimals.
5.2(A-B)	How Do You Write a Check to Pay for	Students explore writing the dollar amount for a check in words.



	Something?	
5.2(C)	Rounding to Tenths and Hundredths	The purpose of this task is for students to use the position of a number on the number line to round the number without knowing its exact value. Though this task deals most directly with rounding, it also requires students to understand or figure out that one tenth of 0.1 is 0.01.
See additional Numbers and Operations Base Ten (5.NBT.3-4) tasks at K-5 Math Teaching Resources		
See additional Numbers and Operations Base Ten (5.NBT.3-4) tasks at Open Middle		

Standards	Task	Task Description
5.3(D-F)	How Much Money are the Coins Worth?	3 Act Task in which students see money put into a coinstar machine and estimate and then solve for the amount of money.
5.3(D-F)	Tomato-Tomato	3 Act Task in which students multiply and divide decimals to determine how many little ketchup bottles it will take to fill up the large bottle.
5.3(D-F)	The Value of Education	The purpose of this task is for students to add, subtract, multiply, and divide decimal numbers in a real-world context. The weekly income earned by each person in the task is the median weekly income for their education level.
5.3(D-F) 5.NF.3	What is $23 \div 5$?	When a division problem involving whole numbers does not result in a whole number quotient, it is important for students to be able to decide whether the context requires the result to be reported as a whole number with remainder or a mixed number/decimal. This particular task helps illustrate Mathematical



		Practice Standard 1, Make sense of problems and persevere in solving them.
5.3(D-F)	Cups	3 Act Task in which students determine how many cups will stack when given the diameters in decimals of centimeters.
5.3(D-F)	Pop Top	3 Act Task in which students multiply decimals to find how many chips will fit in a container.
5.3(D-F)	Filling the Tank	3 Act Task in which students multiply and divide decimals to solve for the cost of filling a gas tank.
5.3(D-F)	Granny Smith's Skins	3 Act Task in which students estimate and compute decimals to estimate the length of a peeled apple skin.
5.3(D-F)	Hanging By a Hair	3 Act Task in which students multiply and divide decimals to estimate the amount of hair needed to support one's body weight.
5.3(D-F)	Straighten Up	3 Act Task in which students multiply decimals to solve for the length of paperclips.
5.3(D-F)	Is It Cheaper To Pay Monthly or Annually?	Students use operations with decimals to find the total cost of paying monthly for a Disneyland pass and compare it to the cost of paying annually.
See additional Decimals tasks at K-5 Math Teaching Resources		
See additional Decimals tasks at Open Middle		



Fractions

5.3 Number and operations. The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy.

Standards	Task	Task Description
5.3(A,H,K)	Measuring Cups	This task could form part of a classroom activity where students are encouraged to find as many different ways as possible to make different fractions such as $\frac{1}{2}$ and then share their methods. Work on this task can support many of the standards of mathematical practice including MP2, MP3, and MP 4.
5.3(A,H,K) 5.3(I)	To Multiply or not to multiply? To Multiply Or Not to Multiply, Variation 2	Students must decide to multiply, add, or subtract. Many real world problems appear similar. Even when children might know what operation to choose when the problem only involves whole numbers, they often are confused with fractions.
5.3(A,H,K)	Egyptian Fractions	One goal of this task is to help students develop comfort and ease with adding fractions with unlike denominators. Another goal is to help them develop fraction number sense by having students decompose fractions. Because the Egyptians represented fractions differently than we do, it can also help students understand that there can be many ways of representing the same number.
5.3(A,H,K)	Finding Common Denominators to Add	The purpose of this task is to help students realize that they can use any common denominator to find a solution, not just the least common denominator. It gives students an opportunity to



		choose a denominator and possibly to compare their solution method with another student who chose a different denominator.
5.3(A,H,K)	Finding Common Denominators to Subtract	The purpose of this task is to help students realize that they can use any common denominator to find a solution, not just the least common denominator. It gives students an opportunity to choose a denominator and possibly to compare their solution method with another student who chose a different denominator.
5.3(A,H,K)	Jog-A-Thon	The purpose of this task is to present students with a situation where it is natural to add fraction with unlike denominators; it can be used for either assessment or instructional purposes. Teachers should anticipate two types of solutions: one where students calculate the distance Alex ran to determine an answer, and one where students compare the two parts of his run to benchmark fractions.
5.3(A,H,K)	Making S'Mores	The purpose of this instructional task is to motivate a discussion about adding fractions and the meaning of the common denominator. The different parts of the task have students moving back and forth between the abstract representation of the fractions and the meaning of the fractions in the context. This particular task helps illustrate Mathematical Practice Standard 2, Reason abstractly and quantitatively.
5.3(A,H,K)	Mixed Numbers with Unlike Denominators	The purpose of this task is to help students realize there are different ways to add mixed numbers and is most appropriate for use in an instructional setting. The two primary ways one can expect students to add are converting the mixed numbers to fractions greater than 1 or adding the whole numbers and fractional parts separately. It is good for students to develop a



		sense of which approach would be better in a particular context.
5.3(A,H,K) 5.9(C)	Fractions on a Line Plot	The purpose of this task is for students to add unit fractions with unlike denominators and solve addition and subtraction problems involving fractions that have more than one possible solution. Students are asked to record their results on a line plot as a way to systematically record their sums and to help them reason about the possible sums they can make with the cards. The task pushes students to engage in MP.3, Construct Viable Arguments and Critique the Reasoning of Others.
5.3(A,H,K)	Do These Add Up?	This task addresses common errors that students make when adding fractions. For each of the following word problems, determine whether or not $(2/5+3/10)$ represents the problem. Explain your decision.
5.3(A,H,K) 5.3(J,L).c	Salad Dressing	The purpose of this task is to have students add fractions with unlike denominators and divide a unit fraction by a whole number. This accessible real-life context provides students with an opportunity to apply their understanding of addition as joining two separate quantities. This particular task helps illustrate Mathematical Practice Standard 4, Model with mathematics.
5.3(A,H,K)	Sharing Lunches	This task requires students to think about how a single situation involving fractions can be accurately represented using addition or multiplication.
See additional NUMBER AND OPERATIONS: FRACTIONS tasks at K-5 Math Teaching Resources		
See additional NUMBER AND OPERATIONS: FRACTIONS tasks at Open Middle		



Standards	Task	Task Description
5.3(I,J,L)	Paul Sturgess	3 Act Task: What fraction is LeBron James of Paul Sturgess? What about the average guy?
5.3(I,J,L)	Crane Rescue	3 Act Task in which students calculate a fraction of a tower.
5.3(D-F)	What is $23 \div 5$?	When a division problem involving whole numbers does not result in a whole number quotient, it is important for students to be able to decide whether the context requires the result to be reported as a whole number with remainder or a mixed number/decimal. This particular task helps illustrate Mathematical Practice Standard 1, Make sense of problems and persevere in solving them.
5.3(A,H,K)	Sharing Lunches	This task requires students to think about how a single situation involving fractions can be accurately represented using addition or multiplication.
5.3(I)	Painting a Wall	The purpose of this task is for students to find the answer to a question in context that can be represented by fraction multiplication.
5.3(I)	Connor and Makayla Discuss Multiplication	The purpose of this task is to have students think about the meaning of multiplying a whole number by a fraction, and compare this meaning to their previous understanding of multiplying a fraction by a whole number in order to see an instance of the commutative property of multiplication in the case of fractions.
5.3(I)	Cornbread Fundraiser	This task is designed to introduce students to an area representation for multiplying a fraction by a fraction.
5.3(I)	Cross Country Training	This task was designed to provide students with opportunities to extend their understanding of whole number multiplication to multiplication



		with fractions. Students build upon multiplicative comparison that was introduced in fourth grade as they compare two quantities by showing that one quantity is n times farther than the other.
5.3(I)	Folding Strips of Paper	The purpose of this task is to provide students with a concrete experience they can relate to fraction multiplication. Perhaps more importantly, the task also purposefully relates length and locations of points on a number line, a common trouble spot for students. This task is meant for instruction and would be useful as part of an introductory unit on fraction multiplication. This particular task engages students in Mathematical Practice Standard 5, Use appropriate tools strategically.
5.3(I)	Mrs. Gray's Homework Assignment	This task is intended to assess students' ability to compare the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.
5.3(I)	Connecting the Area Model to Context	This task is designed to assess students' conceptual understanding of the area model (one of the visual fraction models referred to in the standard for multiplying fractions). If students are able to construct contexts that should use an area model, then the teacher will have information about the students' readiness to move forward or need for more instruction. It should be given after students have worked with the area model in class.
5.3(I)	Chavone's Bathroom Tiles	This task helps students link the concepts of multiplication and area.
5.3(I)	New Park	This task is designed to elicit student thinking about multiplication of fractions and the commutative property.
5.3(I)	Comparing Heights of	The goal of this task is to compare three quantities using the notion of multiplication as



	Buildings	scaling.
5.3(I)	Running to School Drinking Juice Half of a Recipe	A series of three tasks involving fraction multiplication that can be solved with pictures or number lines.
5.3(I)	Making Cookies	A recipe for chocolate chip cookies makes 4 dozen cookies and calls for the following ingredients: • How much of each ingredient is needed to make 3 recipes? • How much of each ingredient is needed to make $\frac{3}{4}$ of a recipe?
5.3(I)	The Big Pad	3 Act Task in which students find an area with unit fractions by finding how many small post it notes fit on a big post it note pad.
5.3(I)	How Much Dew	3 Act Task in which students multiply fractions to find how much Mountain Dew is drunk and how much is left.
5.3(I)	The Kool-Aid Kid	3 Act Task in which students multiply fractions find how much Kool-Aid is drunk and how much is left.
5.3(I) 5.3(A,H,K)	To Multiply or not to multiply? To Multiply Or Not to Multiply, Variation 2	Students must decide to multiply, add, or subtract. Many real world problems appear similar. Even when children might know what operation to choose when the problem only involves whole numbers, they often are confused with fractions.
5.3(J,L)	How Many Biscuits Can You Make?	This lesson is a real world context for dividing fractions and mixed numbers that's ripe with potential misconceptions. Students will need to uncover how much of each ingredient they have available, how much of each ingredient is needed for a batch, and how many biscuits each batch makes.



5.3(J,L)	The Nectarine	3 Act Task in which students multiply and divide fractions to balance the weight of a nectarine on a scale.
5.3(J,L)	Banana Pudding	The purpose of this task is to provide students with a concrete situation they can model by dividing a whole number by a unit fraction.
5.3(J,L)	Dividing by One-Half	This task requires students to recognize both "number of groups unknown" (part (a)) and "group size unknown" (part (d)) division problems in the context of a whole number divided by a unit fraction. It also addresses a common misconception that students have where they confuse dividing by 2 or multiplying by $\frac{1}{2}$ with dividing by $\frac{1}{2}$.
5.3(J,L)	How many servings of oatmeal?	This task provides a context for performing division of a whole number by a unit fraction. This problem is a "How many groups?" example of division: the "groups" in this case are the servings of oatmeal and the question is asking how many servings (or groups) there are in the package.
5.3(J,L)	How many marbles?	This task is intended to complement "How many servings of oatmeal?" Both tasks address the division problem $4 \div \frac{1}{3}$ but from different points of view.
5.3(J,L)	Painting a room	The purpose of this task is to provide students with a situation in which it is natural for them to divide a unit fraction by a non-zero whole number. Determining the amount of paint that Kulani needs for each wall illustrates an understanding of the meaning of dividing a unit fraction by a non-zero whole number.
5.3(J,L)	Origami Stars	The purpose of this task is to present students with a situation in which they need to divide a whole number by a unit fraction in order to find a solution. Calculating the number of origami stars that Avery and Megan can make illustrates students' understanding of the process of



		dividing a whole number by a unit fraction.
5.3(J,L)	Standing in Line	The purpose of this task is for students to solve a problem in context that can be solved in different ways, but in particular by dividing a whole number by a unit fraction.
See additional NUMBER AND OPERATIONS: FRACTIONS tasks at K-5 Math Teaching Resources		
See additional NUMBER AND OPERATIONS: FRACTIONS tasks at Open Middle		



Graphing on the Coordinate Plane

5.4 Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations.

5.8 Geometry and measurement. The student applies mathematical process standards to identify locations on a coordinate plane.

Standards	Task	Task Description
5.OA.3	Sidewalk Patterns	The purpose of this task is to help students articulate mathematical descriptions of number patterns. This task helps illustrate Mathematical Practice 8, Look for and express regularity in repeated reasoning.
See additional Operations and Algebraic Thinking (5.OA.3) tasks at K-5 Math Teaching Resources		
See additional Operations and Algebraic Thinking (5.OA.3) tasks at Open Middle		

Standards	Task	Task Description
5.8(A-B)	Battle Ship Using Grid Paper	The purpose of this task is to give students practice plotting points in the first quadrant of the coordinate plane and naming coordinates of points.
5.8(C)	Meerkat Coordinate Plane Task	The purpose of this task is for students to answer questions about a problem situation by drawing and interpreting the meaning of points that are in the first quadrant of the coordinate plane.
See additional GEOMETRY tasks at K-5 Math Teaching Resources		



Geometry and Measurement

5.5 Geometry and measurement. The student applies mathematical process standards to classify two-dimensional figures by attributes and properties.

5.6 Geometry and measurement. The student applies mathematical process standards to understand, recognize, and quantify volume.

5.7 Geometry and measurement. The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving measurement.

Classify two-dimensional figures into categories based on their properties.
(5.5(A)-4)

Standards	Task	Task Description
5.5(A)	Always, Sometimes, Never	The purpose of this task is to have students reason about different kinds of shapes based on their defining attributes and to understand the relationship between different categories of shapes that share some defining attributes.
5.5(A)	What do these shapes have in Common?	This task asks students to classify shapes based on their properties. The task itself is straightforward, but there are a number of opportunities to present this task in class and push the level of discussion and reasoning.
5.5(A)	What is a Trapezoid? (Part 2)	The purpose of this task is for students to compare different definitions for trapezoids. Some people define trapezoids to have one and only one pair of opposite sides parallel, while some people define trapezoids to have at least one pair of opposite sides parallel. The question of whether parallelograms are trapezoids depends on which of these definitions we agree on.
See additional GEOMETRY tasks at K-5 Math Teaching Resources		



Standards	Task	Task Description
5.7(A) 5.3(C)	Minutes and Days	This task requires division of multi-digit numbers in the context of changing units and so illustrates 5.3(C) and 5.7(A). In addition, the conversion problem requires two steps since 2011 minutes needs to be converted first to hours and minutes and then to days, hours, and minutes.
5.7(A)	Converting Fractions of a Unit into a Smaller Unit	In each of these problems we are given a set of a specified size and a specified number of subsets into which it is to be divided. The questions ask the student to find out the size of each of the subsets. Having students identify what information they need to have to solve the problem and knowing where to go to find it allows them to engage in Standard for Mathematical Practice 5, Use appropriate tools strategically.
5.7(A)	Sam Houston	3 Act Task in which students estimate and solve for how many humans it takes to be the size of a statue.
5.7(A) 5.MD.5	The Fish Tank	3 Act Task in which students estimate and solve for how long it will take to fill a fish tank.
See additional MEASUREMENT AND DATA tasks at K-5 Math Teaching Resources		



Standards	Task	Task Description
5.6(A-B)	Box of Clay	This task provides an opportunity to compare the relative volumes of boxes in order to calculate the mass of clay required to fill them. These relative volumes can be calculated geometrically, filling the larger box with smaller boxes, or arithmetically using the given dimensions. The purpose of this task is to help students understand what happens when you scale the dimensions of a right rectangular solid.
5.MD.3-4	Got Cubes	3 Act Task in which students estimate and solve for how many unit cubes will fit in a box.
5.6(A-B)	Overflow	3 Act Task in which students estimate and solve for how many cubes it will take before the water in a container overflows.
5.6(A-B)	Packing Sugar	3 Act Task in which students estimate and solve for how many sugar cubes are packed in a box.
5.6(A-B)	How Much Money IS That?!	Given images of a pile of money, students estimate the total amount of money.
5.6(A-B)	30 Cubes	Students are asked to think in cubes by building, drawing, and quantifying their results. "How many different rectangular prisms, which Jo calls cuboids, can you make using 1 cube, 2 cubes, 3 cubes and onwards to 30 cubes?"
5.MD.5 5.4(E)	You Can Multiply Three Numbers in Any Order	The purpose of this task is for students to use the volume of a rectangular prism to see why you can multiply three numbers in any order you want and still get the same result. Formally, this is a consequence of the commutative and associative properties of multiplication.
5.MD.5.a	Using Volume to	The purpose of this task is for students to use the



	Understand the Associative Property of Multiplication	volume of a rectangular prism to understand the associative property of multiplication.
5.MD.5.b	Cari's Aquarium	This task asks students to use the volume formula and conceptual understanding to solve real-world problems.
5.MD.5.c	Breaking Apart Composite Solids	The purpose of this task is to help students see different ways of breaking a solid into right rectangular prisms and to relate volume to the operations of multiplication and division.
See additional MEASUREMENT AND DATA tasks at K-5 Math Teaching Resources		
See additional MEASUREMENT AND DATA tasks at Open Middle		



Data Analysis

5.9 Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data.

Standards	Task	Task Description
5.9(C)	Button Diameters	The purpose of this task is for students to measure lengths to the nearest eighth and quarter-inch and to record that information in a line plot.
5.9(C) 5.3(A,H,K)	Fractions on a Line Plot	The purpose of this task is for students to add unit fractions with unlike denominators and solve addition and subtraction problems involving fractions that have more than one possible solution. Students are asked to record their results on a line plot as a way to systematically record their sums and to help them reason about the possible sums they can make with the cards. The task pushes students to engage in MP.3, Construct Viable Arguments and Critique the Reasoning of Others.
See additional MEASUREMENT AND DATA tasks at K-5 Math Teaching Resources		



Appendix: Notes on Task Facilitation

What is a Math Task and How Do I Use One?



Math tasks are problems students engage in without the teacher providing direct instruction or telling the student how to solve the problem. High quality math “tasks encourage reasoning and access to ... mathematics through multiple entry points, including the use of different representations and tools, and they foster the solving of problems through varied solution strategies.” (National Council of Teachers of Mathematics, 2014. p. 17)

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Appendix: Notes on Curriculum

"An excellent mathematics program includes a curriculum that **develops important mathematics along coherent learning progressions and develops connections among areas of mathematical study and between mathematics and the real world.**"

"A mathematics curriculum is more than a collection of activities; instead it is a **coherent sequencing of core mathematical ideas that are well articulated within and across grades** and courses. Such curricula pose problems that promote **conceptual understanding, problem solving, and reasoning and are drawn from contexts in everyday life and other subjects.**"

"Appropriate use of textbooks—whether to teach from them lesson-by-lesson almost exclusively or whether to treat them as one resource among many—**depends on the quality of the textbook**, as defined above. If a textbook develops mathematical topics in a coherent manner, based on learning progressions, and features lessons that consistently support the Mathematics Teaching Practices, then teaching primarily from that textbook makes sense, and significant omissions or deviations can decrease, rather than enhance, the quality of instruction (Banilower et al. 2006). Conversely, if a textbook does not provide such support, then the only option is to treat it as one of many resources and supplement it as needed.

Structuring units—and lessons within the units—around **broad mathematical themes** or approaches, rather than lists of specific skills, creates coherence that provides students with the foundational knowledge for more robust and meaningful learning of mathematics. In particular, attention to the mathematical practices provides students with important mathematical tools that they need to navigate mathematical situations and contexts. In planning lessons, teachers should also **consider the intended standards and the developmental needs of the students**. Consequently, careful consideration should be given to appropriate ways to sequence a series of lessons. Daily lesson plans should take into account the broader perspective of what students learned in the past and where they are headed in the future, as well as the contexts that can be used to motivate students and help them understand why particular topics are important." (National Council of Teachers of Mathematics, 2014. p. 70-75)



Go to <https://www.edreports.org/reports/math> to see how well curriculums align to the standards and recommended practices.

References:

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Appendix: Recommended Tools and Manipulatives

Fifth Grade



[CLICK HERE](#)

to access a list of physical manipulatives, virtual manipulatives, and blackline masters for fifth grade



Appendix: Task References

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