



4th Grade Session - Math *Curriculum, Instruction & Assessment (CIA)*

Priority Standards	Textbooks And Other Curriculum Resources
<p>Link to the Math CCSS</p> <p>This is a link to a document with the progression of skills and corresponding standards TK-8 that have been identified as a priority for preparing students to be successful in Algebra by the 8th grade. Also, please use the MATH STUDY GUIDE as a resource for standards, curriculum, evidence based practices, differentiation, assessment and grading best practices and resources.</p>	<ul style="list-style-type: none"> Go Math Instruction and Standards Practice Books Think Central Personal Math Trainer Go Math - Show & Share (Exit Tickets) Go Math Reteach and Enrich Go Math ISE and Math on the Spot Videos Homework - informal assessments (modified) GO Math Online Test (modified) Manipulates that came with Go Math iReady Eureka Math <p>Suggested order of chapters: 1, 2, 3, 5, 4, 7, 6 (Measurement & Data, Geometry embedded)</p>
Grading Best Practices	Technology Tools To Support Teaching & Learning
<p>Rubric Grading Grade 1: Student demonstrates progress towards standards Grade 2: Monitor student effort towards goals</p> <p>Student Choice Indicate when they are ready for assessment Choice of how to show their thinking</p> <p>Communication</p> <ul style="list-style-type: none"> Weekly updates Grades in Google Classroom 	<ul style="list-style-type: none"> Freckle (free version and paid for version) Khan Academy XtraMath (fact fluency) EdPuzzle - easily synced to Google Classroom Mr. Math Blog videos - all Go Math Lessons - ALL GRADE LEVELS MathAntics Achieve the core - guidance documents Kahoot Quizizz - syncs to Google Classroom Wootmath.com - virtual manipulatives PHET Simulators - Math/Science

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<ul style="list-style-type: none"> • Only grade most essential standards • Provide feedback on assignments • Hybrid between traditional grading and a pass/no credit policy that will encourage high-achieving students to continue to set ambitious academic goals for themselves • District-wide agreement on the types of assignments that should receive formal grade/be scored (purposeful grading and purposeful assignments) • Agreed upon district-wide components of the curriculum that teachers should grade, the assessment instruments that teachers should use, and the format of students' final grades. 	<ul style="list-style-type: none"> • youtube - number rock
Modes of Communication	Other Information/Considerations
<ul style="list-style-type: none"> • District and Schools to Families: Aeries Communication • Teachers to Families: Remind, Class Dojo, Class Tag, Google Classroom Guardian Invite • Teachers to Students: Feedback and comments from Google Classroom to student email 	<ul style="list-style-type: none"> • Parents • Holding students accountable - assessment • Building a relationship is vital. • How do we build a relationship if we start with distance learning? • Mystery Science • A schedule for distance learning with expectations. • 4th grade Google Classroom Collaboration for Teachers (email Melissa Hauck or Casey Steinert)

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	Fluency	(Counting & Cardinality) TK/K only Operations & Algebraic Thinking	Numbers & Operations Fractions (3th-5th grade)	Measurement & Data Geometry
<p><u>Progression Of Skills</u></p> <p>Use this to identify priority standards</p> <p>Standards</p> <p>SB County Math Resource</p>	<p>4.NBT.B.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.</p>	<p>4 OA.3 Use the four operations with whole numbers to solve problems. (focus on multi-step word problems and reasonableness of answers)</p> <p>4 OA.B Gain familiarity with factors and multiples.</p> <p><u>4.OA.C.5 Generate and analyze patterns (place value support)</u></p>	<p>4 NBT.A Generalize place value understanding for multi-digit whole numbers.</p> <p>4 NBT.B.5 Use place value understanding and properties of operations to perform multi-digit arithmetic.</p> <p>4 NF.A Extend understanding of fraction equivalence and ordering.</p> <p>4 NF.B Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</p> <p>4 NF.C Understand decimal notation for fractions, and compare decimal fractions.</p>	<p>4.MD.A Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.</p> <p>4.MD.B Represent and interpret data.</p> <p>4.MD.A.3 Perimeter and area</p> <p>4.MD.6 and 7 Geometric measurement: understand concepts of angle and measure angles.</p> <p>4.G.1 and 2 Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</p>
<p>Skills/ Key Vocabulary</p>	<p><u>Skills</u></p> <ul style="list-style-type: none"> fact fluency place value addition/subtraction with algorithm <p><u>Vocabulary</u></p> <ul style="list-style-type: none"> addition subtraction sum difference regroup addend minuend 	<p><u>Skills</u></p> <ul style="list-style-type: none"> whole number operations - +, -, x, / multi step problems context clues simplifying fractions / equivalent fractions fact fluency place value long division basic reading skills to do math study skills multidigit addition, subtraction, multiplication, division 	<p><u>Skills</u></p> <ul style="list-style-type: none"> conceptual knowledge of fractions - part / whole basic reading skills to do math study skills Visual representation of problems with manipulatives (technology) multiple strategies for problem solving knowing how to break down a problem to determine next steps for solving <p><u>Vocabulary</u></p>	<p><u>Skills</u></p> <ul style="list-style-type: none"> place value/powers of ten relative benchmark measurements line plots input/output charts open number lines polygons (three and four sided) line of symmetry decomposing composite shapes correct use of measurement tools <p><u>Vocabulary</u></p> <ul style="list-style-type: none"> line plots

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	<ul style="list-style-type: none">• subtrahend	<ul style="list-style-type: none">• multiple strategies for problem solving• knowing how to break down a problem to determine next steps for solving• Base ten number system (regrouping)• Visual representation of problems with manipulatives (technology) <p><u>Vocabulary</u></p> <ul style="list-style-type: none">• quotient• dividend• divisor• remainder• factors• multiples• row• column• product• addends• sum• greater than, less than• context clues• difference• estimate	<ul style="list-style-type: none">• numerator• denominator• part• whole• equivalent fractions• simplify• mixed numbers• improper fractions• unit fraction• benchmark fractions• compare• greater than/less than/equal to• order/ordering fractions	<ul style="list-style-type: none">• units of measurement<ul style="list-style-type: none">○ length<ul style="list-style-type: none">■ inches, feet, yards, miles■ millimeter, centimeter, meter, kilometer○ volume<ul style="list-style-type: none">■ oz, cups, pints, quarts, gallons■ milliliter, centiliter, liter, kiloliter○ mass<ul style="list-style-type: none">■ oz, pounds, ton■ milligram, centigram, gram, kilogram• area<ul style="list-style-type: none">○ row○ column○ units○ square units• perimeter<ul style="list-style-type: none">○ units○ length○ width• quadrilateral<ul style="list-style-type: none">○ parallelogram○ rhombus○ square○ rectangle○ trapezoid
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Content Content Resources		•	•	
Assessments		Classroom Formative/Summative <ul style="list-style-type: none"> • Go Math End of Chapter Tests/Mid-Chapter Checkpoints • CAASPP IABs • Performance Tasks • Fluency tests 		District-Wide Cumulative <ul style="list-style-type: none"> • iReady Diagnostic (3x/yr) • iReady Standards Check (2x/yr) • SBAC

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Performance Tasks		1.	1.	1.
<u>Differentiation</u> Identify strategies to adjust content, teaching processes, and the work students are expected to produce to support struggling students and accelerate learning for advanced students towards meeting and exceeding standards e.g. specific use of visual aids, curriculum compacting, leveled text etc. Examples of differentiated lessons		Content (Curriculum) <ul style="list-style-type: none"> • iReady Math (online) • iReady (tools for instruction) • Go Math Reteach and Enrich • Eureka/Engage NY materials Engagement with the Curriculum <ul style="list-style-type: none"> • individual iReady work in pathway • small-group instruction (skills focused) • DNA math strategies 	Process (Teaching Practices) <ul style="list-style-type: none"> • DNA open-ended math tasks • Exit Tickets • Group tasks and interactions • Student choice 	Product (Student Work) <ul style="list-style-type: none"> • Project based learning • Multi-media representational choice • Students explain their reasoning, thinking, and process.