Math	Round Rock I.S.D. 2015-2016	
ARRC At-A-Glance Map	Grade Level: **TAG 4th Grade**	Revision Date: **08-2015**

1st Nine Weeks		2nd Nine Weeks	
August 25 – October 23		October 26 – December 17	
Refer to Instructional Timelines when planning units. **R** – Readiness Standard **S** – Supporting Standard **NT** – Not Eligible for STAAR			
Units– (All units include a computational fluency component) **1 – Place Value, Addition, Subtraction, Estimation, and Rounding (8 days)** **2 – Operations and Data Analysis (10 days)** **3 – Fractions (13 days)**		**Units– (All units include a computational fluency component)** **4 – Patterns, Expressions, and Data Analysis (14 days)** **5 – Multiplication and Division of Decimals (8 days)** **6 – Multiplication and Division of Fractions (8 days)**	
Revised TEKS / Student Expectations: **Overarching Process TEKS**		**Revised TEKS / Student Expectations:** **Overarching Process TEKS**	
4.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace	5.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace	4.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace	5.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace
4.1 (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution	5.1 (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution	4.1 (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution	5.1 (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution
Unit 1: Place Value, Addition, Subtraction, Estimation, and Rounding		**Unit 4: Patterns, Expressions, and Data Analysis**	
4.2 (A) interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left **S**	5.2 (A) represent the value of the digit in decimals through the thousandths using expanded notation and numerals **S**		5.4 (B) represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity **R**
4.2 (B) represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals **R**			5.4 (C) generate a numerical pattern when given a rule in the form $y = ax$ or $y = x + a$ and graph **R**
	5.2 (B) compare and order two decimals to thousandths and represent comparisons using the symbols >, <, or = **R**		5.4 (D) recognize the difference between additive and multiplicative numerical patterns given in a table or graph **S**
	5.2 (C) round decimals to tenths or		5.4 (E) describe the meaning of parentheses and brackets in a numeric

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	hundredths S
	5.3 (K)) add and subtract positive rational numbers fluently R
	5.9 (A) represent categorical data with bar graphs or frequency tables and numerical data, including data sets of measurements in fractions or decimals, with dot plots or stem-and-leaf plots S
	5.10 (E) describe actions that might be taken to balance a budget when expenses exceed income S
Process TEKS Focus of Unit 1:	
4.1 (F) analyze mathematical relationships to connect and communicate mathematical ideas	5.1 (F) analyze mathematical relationships to connect and communicate mathematical ideas
Computational Fluency of Unit 1:	
	5.3 (A) estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, multiplication, or division S
	5.3 (B) multiply with fluency a three-digit number by a two-digit number using the standard algorithm S
	5.3 (C) solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm S

	expression S
	5.4 (F) simplify numerical expressions that do not involve exponents, including up to two levels of grouping R
	5.9 (C) solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot R
	5.10 (B) explain the difference between gross income and net income S
Process TEKS Focus of Unit 4:	
4.1 (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	5.1 (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
4.1 (E) create and use representations to organize, record, and communicate mathematical ideas	5.1 (E) create and use representations to organize, record, and communicate mathematical ideas
4.1 (F) analyze mathematical relationships to connect and communicate mathematical ideas	5.1 (F) analyze mathematical relationships to connect and communicate mathematical ideas
Computational Fluency of Unit 4:	
	5.3 (E) solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers R
	5.3 (G) solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm R
	5.3 (K) add and subtract positive rational numbers fluently R

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Unit 2: Operations and Data Analysis	
	5.3 (A) estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, multiplication, or division **S**
	5.3 (B) multiply with fluency a three-digit number by a two-digit number using the standard algorithm **S**
	5.3 (C) solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm **S**
	5.4 (A) identify prime and composite numbers **S**
	5.4 (B) represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity **R**
	5.4 (F) simplify numerical expressions that do not involve exponents, including up to two levels of grouping **R**
4.9 (A) represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions **R**	5.9 (A) represent categorical data with bar graphs or frequency tables and numerical data, including data sets of measurements in fractions or decimals, with dot plots or stem-and-leaf plots **S**
4.9 (B) Solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot **S**	5.9 (C) solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot **R**
	5.10 (F) balance a simple budget **S**
Process TEKS Focus of Unit 2:	
4.1 (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	5.1 (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems

Unit 5: Multiplication and Division of Fractions	
	5.3 (I) represent and solve multiplication of a whole number and a fraction that refers to the same whole using objects and pictorial models, including area models **S**
	5.3 (J) represent division of a unit fraction by a whole number and the division of a whole number by a unit fraction such as 1/3 ÷ 7 and 7 ÷ 1/3 using objects and pictorial models, including area models **S**
	5.3 (L) divide whole numbers by unit fractions and unit fractions by whole numbers **R**
Process TEKS Focus of Unit 6:	
4.1 (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication	5.1 (G) display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication
Computational Fluency of Unit 6:	
	5.4 (E) describe the meaning of parentheses and brackets in a numeric expression **S**
	5.4 (F) simplify numerical expressions that do not involve exponents, including up to two levels of grouping **R**

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4.1 (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	5.1 (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
Computational Fluency of Unit 2:	
Fluency with operations with whole numbers and applications of basic facts	

Unit 3: Fractions	
4.3 (D) compare two fractions with different numerators and different denominators and represent the comparison using the symbols >, =, or < **R**	
4.3 (G) represent fractions and decimals to the tenths or hundredths as distances from zero on a number line **S**	
	5.3 (A) estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, multiplication, or division **S**
	5.3 (H) represent and solve addition and subtraction of fractions with unequal denominators referring to the same whole using objects and pictorial models and properties of operations **S**
	5.3 (K) add and subtract positive rational numbers fluently **R**
	5.4 (H) represent and solve problems related to perimeter and/or area and related to volume **R** *[perimeter only in this unit]*
Process TEKS Focus of Unit 3:	

Unit 6: Multiplication and Division of Decimals	
	5.3 (D) represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models **S**
	5.3 (E) solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers **R**
	5.3 (F) represent quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using objects and pictorial models, including area models **S**
	5.3 (G) solve for quotients of decimals to the hundredths, up to four-digit dividends and two-digit whole number divisors, using strategies and algorithms, including the standard algorithm **R**
Process TEKS Focus of Unit 5:	
4.1 (E) create and use representations	5.1 (E) create and use representations

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4.1 (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	5.1 (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	to organize, record, and communicate mathematical ideas	to organize, record, and communicate mathematical ideas
Computational Fluency of Unit 3:		**Computational Fluency of Unit 5:**	
	5.4 (E) describe the meaning of parentheses and brackets in a numeric expression **S**	Modeling multiplication and division of decimals	
	5.4 (F) simplify numerical expressions that do not involve exponents, including up to two levels of grouping **R**		
AIMSweb TBD			

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Math	Round Rock I.S.D. 2015-2016	
ARRC At-A-Glance Map	Grade Level: **TAG 4th Grade**	Revision Date: **07-2015**

3rd Nine Weeks		4th Nine Weeks	
January 5 – March 25		March 28 – June 2	
Refer to Instructional Timelines when planning units. **R** – Readiness Standard **S** – Supporting Standard **NT** – Not Eligible for STAAR			
Units– (All units include a computational fluency component) **7 – Measurement (15)** **8 – Geometry (15)** **9 – Personal Finance (7)**		**Units– (All units include a computational fluency component)** **10 - Applications of Geometry, Measurement, and Data (13)** **11 – STAAR Review (5 days)** **12 – Applications of Algebra (13)** **13 – Personal Financial Literacy (13 days)**	
Revised TEKS / Student Expectations: **Overarching Process TEKS**		**Revised TEKS / Student Expectations:** **Overarching Process TEKS**	
4.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace	5.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace	4.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace	5.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace
4.1 (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution	5.1 (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution	4.1 (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution	5.1 (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution
Unit 7: Measurement		**Unit 10: Applications of Geometry, Measurement, and Data**	
4.8 (B) convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table **S**	5.7 solve problems by calculating conversions within a measurement system, customary or metric **S**	4.7 (C) determine the approximate measures of angles in degrees to the nearest whole number using a protractor **R**	
4.8 (C) solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate **R**		4.7 (E) determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures **S**	
			5.4 (H) represent and solve problems related to perimeter and/or area and related to volume **R**
			5.5 classify two-dimensional figures in a hierarchy of sets and subsets using

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	5.4 (G) use concrete objects and pictorial models to develop the formulas for the volume of a rectangular prism, including the special form for a cube ($V = l \times w \times h$, $V = s \times s \times s$, and $V = Bh$) **NT**
	5.4 (H) represent and solve problems related to perimeter and/or area and related to volume **R**
	5.6 (A) recognize a cube with side length of one unit as a unit cube having one cubic unit of volume and the volume of a three-dimensional figure as the number of unit cubes (*n* cubic units) needed to fill it with no gaps or overlaps if possible **S**
	5.6 (B) determine the volume of a rectangular prism with whole number side lengths in problems related to the number of layers times the number of unit cubes in the area of the base **S**
Process TEKS Focus of Unit 7:	
4.1 (E) create and use representations to organize, record, and communicate mathematical ideas	5.1 (E) create and use representations to organize, record, and communicate mathematical ideas
Computational Fluency of Unit 7:	
	5.9 (C) solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot **R**
4.3 (C) determine if two given fractions are equivalent using a variety of methods **S**	

	graphic organizers based on their attributes and properties **R**
	5.7 solve problems bycalculating conversions within a measurement system, customary or metric **S**
	5.9 (C) solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot **R**
Process TEKS Focus of Unit 13:	
4.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace	5.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace
4.1 (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution	5.1 (B) use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution
4.1 (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems	5.1 (C) select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems
Computational Fluency of Unit 13:	
Apply computational fluency in problem solving	

Unit 8: Geometry	
4.6 (A) identify points, lines, line segments, rays, angles, and perpendicular and parallel lines **S**	
4.7 (A) illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle	

Unit 11: STAAR Review	
4.6 (D) Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presences of absence of angles of a specified size **R**	5.5 Classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attributes and properties **R**
4.8 (A) identify relative sizes of	5.7 Solve problems by calculating

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that is "cut out" by the rays of the angle. Angle measures are limited to whole numbers **NT**		measurement units within the customary and metric systems 4.8 (B) convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table **S** 4.8 (C) solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate **R**	conversions within a measurement system, customary, or metric **S**
4.7 (B) illustrate degrees as the units used to measure an angle, where 1/360 of any circle is one degree and an angle that "cuts" *n*/360 out of any circle whose center is at the angle's vertex has a measure of *n* degrees. Angle measures are limited to whole numbers **NT**			
4.7 (C) determine the approximate measures of angles in degrees to the nearest whole number using a protractor **R**			
4.7 (D) draw an angle with a given measure **S**			
4.7 (E) determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures **S**			
4.5 (D) solve problems related to perimeter and area of rectangles where dimensions are whole numbers **R**	5.4 (H) represent and solve problems related to perimeter and/or area and related to volume **R**		5.4 (F) Simplify numerical expressions that do not involve exponents, including up to two levels of grouping **R**
	5.5 classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attributes and properties **R**	4.5 (D) use models to determine the formulas for the perimeter of a rectangle (*l+w+l+w or 2l+2w*) including the special form for perimeter of a square (*4s*) and the area of a rectangle (*lxw*) **R**	5.4 (H) Represent and solve problems related to perimeter and/or area and related to volume **R**
	5.4 (F) simplify numerical expressions that do not involve exponents, including up to two levels of grouping **R**		5.10 (A) Define income tax, payroll tax, sales tax, and property tax **S**
Process TEKS Focus of Unit 8:		4.5 (A) Represent multi-step problems involving the four operations with whole numbers using trip diagrams and equations with a letter standing for the unknown quantity **R**	5.4 (B) Represent and solve multistep problems involving the four operations with the whole numbers using equations with a letter standing for an unknown quantity **R**
4.1 (E) create and use representations to organize, record, and communicate mathematical ideas	5.1 (E) create and use representations to organize, record, and communicate mathematical ideas	4.5 (B) Represent problems using an input-output table and numerical expressions to generate a number patterns that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence **R**	5.4 (C) Generate a numerical pattern when given a rule in the form of y=ax or y=x+a and graph **R**
Computational Fluency of Unit 8:			
	5.3 (I) represent and solve multiplication of a whole number and a fraction that refers to the same whole using objects		

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	and pictorial models, including area models S	4.9 (B) Solve one- and two- step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot S	5.9 (C) Solve one- and two- step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplots R
	5.3 (L) divide whole numbers by unit fractions and unit fractions by whole numbers R		
Unit 9: Personal Finance		**Unit 12: Applications of Algebra**	
4.10 (B) calculate profit in a given situation S			5.4 (B) Represent and solve multistep problems involving the four operations with the whole numbers using equations with a letter standing for an unknown quantity R
4.10 (C) compare the advantages and disadvantages of various savings options NT			5.4 (C) Generate a numerical pattern when given a rule in the form of y=ax or y=x+a and graph R
4.10 (A) distinguish between fixed and variable expenses S			5.4 (D) recognize the difference between additive and multiplicative numerical patterns given in a table or graph S
Process TEKS Focus of Unit 9:			5.4 (E) describe the meaning of parentheses and brackets in a numeric expression S
4.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace	5.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace		5.4 (F) Simplify numerical expressions that do not involve exponents, including up to two levels of grouping R
Computational Fluency of Unit 9:		**Process TEKS Focus of Unit 12:**	
Apply computational fluency in problem solving		4.1 (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	5.1 (D) communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
		4.1 (E) create and use representations to organize, record, and communicate mathematical ideas	5.1 (E) create and use representations to organize, record, and communicate mathematical ideas
		4.1 (F) analyze mathematical relationships to connect and communicate mathematical ideas	5.1 (F) analyze mathematical relationships to connect and communicate mathematical ideas
		Computational Fluency of Unit 12:	
		Apply computational fluency in problem solving	
		Unit 13: Personal Financial Literacy	
		4.10 (B) calculate profit in a given situation S	

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	4.10 (C) compare the advantages and disadvantages of various savings options NT	
	4.10 (A) distinguish between fixed and variable expenses S	5.10 (A) define income tax, payroll tax, sales tax, and property tax S
		5.10 (B) explain the difference between gross income and net income S
		5.10 (C) identify the advantages and disadvantages of different methods of payment, including check, credit card, debit card, and electronic payments NT
		5.10 (D) develop a system for keeping and using financial records NT
		5.10 (E) describe actions that might be taken to balance a budget when expenses exceed income S
		5.10 (F) balance a simple budget S
		5.9 (A) represent categorical data with bar graphs or frequency tables and numerical data, including data sets of measurements in fractions or decimals, with dot plots or stem-and-leaf plots S
		5.9 (C) solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot R
	Process TEKS Focus of Unit 11:	
	4.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace	5.1 (A) apply mathematics to problems arising in everyday life, society, and the workplace
	Computational Fluency of Unit 11:	
	Apply computational fluency in problem solving	
STAAR-Ready Assessment **TBD** **AIMSweb** **TBD**	**STAAR –** **STAAR Test May 9, 2016** **AIMSweb** **TBD**	

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