GT Mathematics Fifth Grade – 1st Six Weeks Calendar
Irving Independent School District

Essential Questions:

- Where can I find patterns in my environment?
- How do comparisons help me understand my surroundings?
- How do I use reasoning to connect what I'm learning in school to the outside world?
- What processes and tools can I use to solve problems?
- How do I communicate what I know to others?

TEKS Knowledge & Skills	**Student Expectations** The student is expected to...	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Number, Operation, & Quantitative Reasoning	5.1 The student uses place value to represent whole numbers and decimals. **Focus Questions:** ▪ **How do you use the base ten system to find the value of a number?** ▪ **How do you read and write large numbers?** ▪ **How do you read and write small numbers?**	A) use place value to read, write, compare, and order whole numbers through the billions place.	1	1	✓ T 999,999	✓ T millions	✓ T	▪ identify a digit in a number with its place value. ▪ identify a number with its name written in words. ▪ select numbers that are greater than given numbers. ▪ select numbers that are less than given numbers. ▪ sequence whole numbers in a list in order from greatest to least or least to greatest. ▪ sequence the labels associated with numbers in order from least to greatest or greatest to least.	Mathematics Toolkit Assessment Connection 5.1 A Textbook Everyday Mathematics Lesson 2.10 TexTeam Activities Software

✓ = Objectives taught **T** = Objectives tested on TAKS * Optional lesson

TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Number, Operation, & Quantitative Reasoning								
5.1 The student uses place value to represent whole numbers and decimals. **Focus Questions:** ▪ **How do you put numbers in order from largest to smallest or least to greatest?** ▪ **How do you make numbers larger or smaller?**	B) use place value to read, write, compare, and order decimals through the thousandths place.	1	1		✔ T tenths & hundredths	✔ T	▪ match a digit in a number with its place value. ▪ match a number with its name written in words. ▪ select decimals that are greater than given decimals. ▪ select decimals that are less than given decimals. ▪ sequence decimals in a list in order from greatest to least and least to greatest. ▪ sequence the labels associated with numbers in order from least to greatest and greatest to least. ▪ identify decimals on a number line.	Mathematics Toolkit Assessment Connection 5.1 B Textbook Everyday Mathematics Lesson 2.2 TexTeam Activities • Number Concepts p 11 "Exchange with Base Ten Blocks" • Relations and Functions p 14 "Big Blank Number Line" Other Resources Target the Question Software Exemplars a

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Number, Operation, and Quantitative Reasoning								
5.3 The student adds, subtracts, multiplies, and divides to solve meaningful problems. **Focus Questions:** ▪ **How do you know when to add and when to subtract?** ▪ **How can addition and subtraction help you solve problems?**	A) use addition and subtraction to solve problems involving whole numbers and decimals.	6 7	1	✔ T whole #s through 999	✔ T decimals, concrete & pictorial	✔ T	▪ select an appropriate strategy or combination of strategies to solve addition problems using whole numbers. ▪ select an appropriate strategy or combination of strategies to solve subtraction problems using whole numbers. ▪ select an appropriate strategy or combination of strategies to solve addition problems using decimals. ▪ select an appropriate strategy or combination of strategies to solve subtraction problems using decimals. ▪ write and solve addition problems. ▪ write and solve subtraction problems. ▪ estimate the sum/difference before calculating the answer. ▪ compare the estimate and the answer for reasonableness.	Mathematics Toolkit Assessment Connection 5.3A Clarifying Lesson Textbook Everyday Mathematics 5th gr Lesson 2.2 Lesson 2.3 TexTeam Activities Other Resources Target the Question Software Exemplars

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Number, Operation, & Quantitative Reasoning								
5.3 The student adds, subtracts, multiplies, and divides to solve meaningful problems. **Focus Questions:** ▪ **When do you use multiplication to solve a problem?** ▪ **How does multiplication help you solve problems?**	A) use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology).	8	1	✔ T one-digit multiplier	✔ T 2-digit numbers	✔ T	▪ multiply numbers (3-digit by 2-digit). ▪ select an appropriate strategy or combination of strategies to solve multiplication problems using whole numbers. ▪ write and solve multiplication problems. ▪ estimate the product before calculating the answer. ▪ compare the estimate and the answer for reasonableness.	Mathematics Toolkit Assessment Connection 5.3B Clarifying Lesson: "Multiple Towers" or "Double Dipping" Textbook Everyday Mathematics 5th gr Lesson 1.2 Lesson 1.7 Lesson 2.8 Lesson 2.9 Everyday Mathematics 6th gr Lesson 2.2 Lesson 2.3 TexTeam Activities Other Resources Target the Question Software Exemplars

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Number, Operation, & Quantitative Reasoning								
5.3 The student adds, subtracts, multiplies, and divides to solve meaningful problems. **Focus Questions:** ▪ **When do you use division to solve a problem?** ▪ **How does division help you solve problems?** ▪ **How are multiplication and division alike/different?**	A)use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit dividends without technology).	9	1	✔ T models	✔ T 1-digit divisors	✔ T	▪ divide pairs of whole numbers with and without remainders. ▪ divide numbers with single and double-digit divisors. ▪ select an appropriate strategy or combination of strategies to solve division problems. ▪ write and solve division problems. ▪ estimate the quotient before calculating the answer. ▪ compare the estimate and the answer for reasonableness.	Mathematics Toolkit Assessment Connection 5.3C Clarifying Lesson Textbook Everyday Mathematics 5th gr Lesson 1.5 Lesson 4.1 Lesson 4.2 Lesson 4.5* Everyday Mathematics 6th gt Lesson 2.11* TexTeam Activities Other Resources Target the Question Software Exemplars

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Number, Operation, & Quantitative Reasoning								
5.3 The student adds, subtracts, multiplies, and divides to solve meaningful problems. **Focus Questions:** ▪ **How do you find the prime factors of a whole number?**	D)identify prime factors of a whole number and common factors of a set of whole numbers.	1	1			✔ T	▪ make a list of prime numbers up to 100. ▪ find the prime factors of a number using methods such as factor trees or factor pairs. ▪ find the common factors of two or more numbers.	Mathematics Toolkit Assessment Connection5.3D Clarifying Lesson "Multiple Towers" Textbook Everyday Mathematics 5th gr Lesson 1.3 Lesson 1.4 Lesson 1.9 Lesson 12.1 TexTeam Activities Other Resources Target the Question Software Exemplars

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Number, Operation, & Quantitative Reasoning								
5.4 The student estimates to determine reasonable results. **Focus Questions:** ▪ **When do you estimate?**	B)estimate to solve problems where exact answers are not required.	10	1	✔ T +/-	✔ T	✔ T	▪ round numbers before performing any computations using appropriate rounding rules. ▪ identify "friendly" numbers to use as compatible numbers. ▪ find the estimated answer that fits within a range of numbers. ▪ solve problems using estimates only.	Mathematics Toolkit Assessment Connection 5.5B Clarifying Lesson "Alphabet Frequency" "Springy Legs" Textbook Everyday Mathematics 5th gr Lesson 2.1 Lesson 2.7 TexTeam Activities Other Resources Target the Question Software Exemplars

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Patterns, Relationships, & Algebraic Thinking								
5.5 The student makes generalizations based on observed patterns and relationships. **Focus Questions:** ▪ **How are prime numbers different from composite numbers?**	C)identify prime and composite numbers using [concrete] models and patterns in factor pairs.	2	2			✔ T	▪ generate a list of all the prime numbers 1-100. ▪ generate a list of all the composite numbers 1-100. ▪ use manipulatives to build examples, such as arrays, to determine if a number is prime or composite. ▪ identify patterns in factor pairs, such as the number of factor pairs for square, prime, or composite numbers. ▪ select the list of factors for composite numbers.	Mathematics Toolkit Assessment Connection 5.5C Clarifying Lesson "Multiple Towers" Textbook Everyday Mathematics 5th gr Lesson 1.6 TexTeam Activities Other Resources Target the Question Software Exemplars

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Patterns, Relationships, & Algebraic Thinking								
5.6 The student describes relationships mathematically. **Focus Questions:** 1. **How do diagrams and number sentences help you solve everyday problems?**	A)select from and use diagrams and numbers sentences to represent real-life situations.	12	2			✔ T	▪ match problem situations with number sentences. ▪ write number sentences with one or more variables to match problem situation. ▪ match problem situations with diagrams. ▪ connect a real-life situation with an appropriate number sentence and diagram.	Mathematics Toolkit Assessment Connection 5.6A Clarifying Lesson Textbook Everyday Mathematics 5th gr Lesson 2.4 Lesson 4.6 Lesson 10.1 Lesson 10.2 Lesson 10.3 TexTeam Activities Other Resources Target the Question Software Exemplars

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Probability & Statistics								
5.12 The student describes and predicts the results of a probability experiment. **Focus Questions:** ▪ **How do you predict the results of an experiment?**	B)use experimental results to make predictions.	5	5			✔ T	▪ record the findings of an experiment, such as listing the number of times a number comes up after rolling the die 20 times. ▪ make appropriate predictions based on the finding from the experiments.	Mathematics Toolkit Assessment Connection 5.12A Clarifying Lesson "Alphabet Frequency" Textbook Everyday Mathematics 5th gr Lesson 2.6 Lesson 8.1 Lesson 12.8 TexTeam Activities Other Resources Target the Question Software Exemplars

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Probability & Statistics								
5.13 The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to: **Focus Questions:** ▪ **How do graphs help you understand information?** ▪ **How do the range and median help you interpret data?**	B)describe characteristics of data presented in tables and graphs including the shape and spread of the data and the middle number.	5	5			✔ T	▪ gather, organize, and display data so that it is easy to understand. ▪ determine the median (middle number) of data. ▪ determine the range (spread) of data. ▪ describe characteristics of the data in word form or in number form, such as how many more or how many less. ▪ interpret the data represented in a graph.	Mathematics Toolkit Assessment Connection 5.13B Clarifying Lesson "Springy Legs" Textbook Everyday Mathematics 5th gr Lesson 2.5 TexTeam Activities Other Resources Target the Question Software Exemplars

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Underlying Processes and Mathematical Tools								
5.14 The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school. **Focus Questions:** ▪ **Can you explain your plan for solving the problem?** ▪ **Could you solve your problem in another way?** ▪ **Did your solution to the problem make sense?**	A)identify the mathematics in everyday situations.		6	✔ T	✔ T	✔ T	▪ determine which operation to use in a word problem. ▪ use everyday situations such as grocery store ads, newspapers, party planning, etc., to write and solve math problems. ▪ collect samples of math situations to show math in everyday life, such as can labels, geometric patterns, etc. ▪ identify and restate the question in own words to demonstrate understanding of the problem. ▪ implement a plan and communicate why it is an appropriate choice. ▪ solve problems in more than one way to evaluate for reasonableness. ▪ select an expression or number sentence that represents the problem situation or will solve the problem. ▪ solve problems requiring multiple steps. ▪ solve problems that may have extraneous information. ▪ identify information that is needed to solve a problem. ▪ solve problems that may involve a range of numbers. ▪ use the inverse operation to check for accuracy of arithmetic. ▪ use available manipulatives, calculators, measurement tools, etc., to solve problems. ▪ describe the next step or a missing step that would be more appropriate.	Mathematics Toolkit Assessment Connection 5.15A and B Clarifying Lesson Textbook Everyday Mathematics 5th gr **5.14A** Lesson 1.1, 5.9, 8.11 **5.14B** Lesson 10.5 **5.14C** Lesson 6.5, 12.9 **5.14D** Lesson 1.8, 3.4, 3.5, 6.8, 7.9, 8.4* 6th grade – 4.5 TexTeam Activities Other Resources Target the Question Software Exemplars
	B)use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.		6	✔ T	✔ T	✔ T		
	C)select or develop an appropriate problem-solving strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.		6	✔ T	✔ T	✔ T		
	D)use tools such as real objects, manipulatives; and technology to solve problems.	not tested	not tested	✔	✔	✔		

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Underlying Processes and Mathematical Tools								
5.15 The student communicates about Grade 5 mathematic using informal language. **Focus Questions:** ▪ **How could you teach someone to solve the problem?** ▪ **How could you teach others about your solution to this problem?**	A)explain and record observations using objects, words, pictures, numbers, and technology.	not tested	not tested	✔	✔	✔	▪ explain verbally and in writing your understanding of the problem situation. ▪ illustrate word problems and explain strategies to solve the problem. ▪ identify words to describe mathematical concepts and actions. ▪ understand and demonstrate varied ways to express the same thing (such as, half past one and 1:30; quarter after 2 and 2:15, etc.). ▪ write and understand mathematical symbols such as $, $.00, +, -.	Mathematics Toolkit Assessment Connection 5.16 A and B Clarifying Lesson Textbook Everyday Mathematics 5th gr 5.15A Lesson 5.9 5.15B Lesson 6.7 TexTeam Activities Other Resources Target the Question Software Exemplars
	B)relate informal language to mathematical language and symbols.		6	✔ T	✔ T	✔ T		

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Underlying Processes and Mathematical Tools								
5.16 The student uses logical reasoning to make sense of his or her world. **Focus Questions:** ▪ **How do you decide what information you need/do not need to solve the problem?** ▪ **How do you prove that an answer is/is not reasonable?**	A)make generalizations from patterns or sets of examples and nonexamples.		6	✔ T	✔ T	✔ T	▪ identify similarities and differences in sets of examples. ▪ group numbers or objects according to the commonalties and justify the groups. ▪ draw conclusions from given data. ▪ explain reasonableness of an answer such as using addition to check subtraction, checking if your solution matches your estimate or using T-charts to recognize and continue patterns.	Mathematics Toolkit Assessment Connection Clarifying Lesson Textbook Everyday Mathematics 5th gr 5.16A Lesson 6.6 5.16B Lesson 5.12 TexTeam Activities Other Resources Target the Question Software Exemplars
	B)justify why an answer is reasonable and explain the solution process.	not tested	not tested	✔	✔	✔		

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TEKS **Knowledge & Skills**	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Number, Operation, & Quantitative Reasoning								
7.2 The student adds, subtracts, multiplies, or divides to solve problems and justify solutions.	A) Represent multiplication and division situations involving fractions and decimals with concrete models, pictures, words, and numbers.						▪	Mathematics Toolkit Assessment Connection Textbook Everyday Mathematics 6th gr Lesson 2.2 Lesson 2.3 TexTeam Activities Software

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TEKS Knowledge & Skills	**Student Expectations** The student is expected to…	TAAS Objective	TAKS Objective	Grade 3	Grade 4	Grade 5	**Observable Behaviors** The student will...	**Resources and Activities**
Number, Operation, & Quantitative Reasoning								
7.2 The student adds, subtracts, multiplies, or divides to solve problems and justify solutions.	B) Use addition, subtraction, multiplication, and division to solve problems involving fractions and decimals.						▪	Mathematics Toolkit Assessment Connection Textbook Everyday Mathematics Lesson 2.11 Lesson 4.3 Lesson 4.4 Lesson 4.5 Lesson 4.6 Lesson 4.7 Lesson 6.1 Lesson 6.2 TexTeam Activities Software Ex

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