TEKSING TOWARD STAAR

MATHEMATICS ®

GRADE 7

TEKS/STAAR-BASED

LESSONS

TEACHER GUIDE

General Information

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TEACHER GUIDE
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Lessons Overview

Guidelines for Lesson Components in Grade 7 Lessons

Materials: Review the list of materials needed for each lesson and prepare materials prior to beginning a lesson. Make sure Grade 7 Math Notes sheets are available to all students.

Math Background
A small print version is provided for the teacher for each part of the lesson. These materials will be presented in a large print projection version for use with students. Students will take notes on these projection pages on the Math Notes page. They will be allowed to use their notes during lesson activities. This may be the first time students have experienced "note taking" . They are to record in their words and their own way. The information recorded may be words, symbols, or pictures.

As each page is projected, various students share what they think is important information on the page. The teacher does NOT read the math background to the students and students do NOT read the math background to the class. Each student reads the information himself or herself. After students share the information, they write their notes. Some pages may NOT need any notes taken by most or all students.

Problem-Solving
A Problem-Solving Model is in this lesson for use throughout the entire school year. This model addresses the Process Standards TEKS 7.1B. This model should be discussed during this lesson and a copy should be given to each student to keep in their math notebook.

A projection version of each Problem-Solving activity is provided and will follow each part of a lesson. A general set of questions that should be addressed by students as they solve the problems and during class discussion of the solution process for each problem is located before Problem-Solving Problem 1 in Lesson 1. Teachers should make a copy of these questions for each student and distribute prior to beginning Problem-Solving 1 in this lesson.

Teachers should discuss the questions and let students know they will be answering these questions for problem-solving activities during the entire school year. Each student should keep a copy of the questions in his/her math notebook.

Students work in partner pairs to answer the Problem-Solving questions. The teacher projects the problem, and then sets a time limit prior to the students beginning their work. Partner pairs are given specific "share" questions from 1-10 on the Problem-Solving Questions page. The process that should be followed by students for all Problem-Solving problems is to answer questions 1-3, then complete the solution to the problem, and then answer questions 4-10.

The teacher calls time and the partner pairs guide class discussion on their "share" assignments. Students who did not complete the solution to the problem prior to the time limit must complete recording in a different color.

Student Activity

A Student Activity follows a Problem-Solving Activity in each part of the lesson. Students work in pairs to complete a Student Activity, however, each student completes their own activity page(s). Math Notes are utilized to enable students to successfully complete the activity. If students did not take notes on materials they need to complete the activity, the teacher should invite them to view the Projection pages and take more detailed notes.

Various partner pairs should be assigned portions of the Student Activity for whole-class discussion. Before students begin the activity, the teacher should inform the class of time allotted for completion of the activity. Time should be called even if all partner pairs are not finished. Whole class discussion should begin with the partner pairs that had assignments leading the discussion. Partner pairs that did not complete the activity may complete the activity at this time by recording in a different color pencil or pen.

A Student Activity is **not** designed to be recorded as a grade, but should be recorded as a holistic score. A scale of 1-5 is appropriate as follows:

- 1 = little if any attempt
- 2 = no understanding evident
- 3 = minimal understanding evident
- 4 = mostly understood or slight mathematical errors
- 5 = complete understanding evident and no mathematical errors

Some lessons contain a Student Activity that is a hand-on activity. Teacher Notes prior to the student page(s) will contain questions that the teacher should ask before, during, and after the activity. It will also contain things for the teacher to look for during the activity.

Skills and Concepts Homework

Skills and Concepts Homework is provided for each lesson. More than one homework is provided if a lesson should be more than one instructional day in duration.

Each homework assignment includes 5 open-ended questions. The teacher should choose two or three questions to be scored by the teacher. The teacher should make written feedback comments for each student and should return the homework assignments within two days. Partial credit should be given if a student's work exhibits partial understanding, or if the student makes a minor mathematical mistake. Only ½ credit should be given for a correct answer if student work is not shown on the homework. The score on each Homework assignment may be recorded for each student. Periodically these scores should be combined and recorded as a grade.

Mini-Assessment

A lesson Mini-Assessment is completed by individual students and scored by the teacher. No assistance should be given during this time. Allow about 20 minutes for completion of the Mini-Assessment. The amount of time may vary for some assessments.

The teacher should score each Mini-Assessment with a score of 1-10. Partial credit may be given for each question if the student shows evidence of understanding but did not choose the correct answer due to minor mathematical error. Only ½ credit should be given for a correct answer if student work is not shown on the assessment. Scores should be periodically combined and recorded as a grade.

The teacher should record class data for this assessment in the Class Profile book. Students should record individual data in their Student Profile book.

Notes Page

Name _____ Date_____

Grade 7 Math Notes

Profile Booklets

GRADE 7 MATERIALS LIST - SIX WEEKS 1-6

SIX WEEKS	LESSON	ITEM	QUANTITY
1	1	Copies of Math Notes Page Copies of Problem-Solving Plan Copies of Problem-Solving Questions	2 per student 1 per student 1 per student
1	2	No Materials Needed	
1	3	blank 3 x 5 file cards	2 per pair of students
1	4	metric ruler protractor	1 per pair of students 1 per pair of students
1	5	Set of student name cards on cardstock in a baggie.	1 set per pair of students
1	6	Set of Equation/Inequality cards on cardstock in a baggie Set of Solution Set cards in a baggie. white paper	1 set per group of 4 1 set per pair of students 1 sheet per student
1	7	Student Height Data Record transparency (or copy to use on projection device) 1 sheet of poster size butcher paper or 1 sheet of poster size grid paper 1 set of colored markers 1 meter/yard stick	1 1 per group of 4 students 1 per group of 4 students 1 per group of 4 students
1	8	a sales advertisement flyer for a local department store. If this is not available, print one from a store's webpage.	1 per pair of students
1	9	No Materials Needed	
2	1	No materials needed	
2	2	Set of Equation/Inequality cards (copy on cardstock, cut apart, and put in baggie) Set of Number Line cards(copy on cardstock, cut apart, and put in baggie) White paper	1 set per pair of students 1 set per pair of students 2 sheet per student
2	3	No materials needed	
2	4	A set of objects that include a piece of ribbon, a rectangle, 1 vegetable can with ounces marked out and 1 vegetable can with grams marked out and 2 prisms. Calculator	1 set per pair of students 1 per student
2	5	3 by 5 file cards	3 per pair of students

GRADE 7 MATERIALS LIST - SIX WEEKS 1-6

SIX WEEKS	LESSON	ITEM	QUANTITY
2	6	A baggie of 20 or 25 colored tiles using 4 colors—different numbers of the colors in each bag. Each pair of students should have a different combination of colors). Some pairs will have 20 tiles and some will have 25 tiles. If colored tiles are not available, use strips of colored cardstock.)	1 bag per pair of students
		sheet of legal size paper	1 per pair of students
		set of colored markers	1 per pair of students
		ruler	1 per pair of students
2	7	A brown bag of 20 colored tiles -4 or 5 different colors	1 per pair of students
		A penny	1 per pair of students
		A number cube	1 per pair of students
2	8	No materials needed	
2	9	No materials needed	
3	1	Number cards (copy on cardstock, cut apart, and place in baggie)	1 set per pair of students
		Percent cards (copy on cardstock, cut apart, and place in baggie)	1 set per pair of students
3	2	No materials needed	
3	3	Centimeter grid paper	1 per pair of students
		0.5 centimeter grid paper	1 per pair of students
		Circle Pi circles (copy on cardstock, cut apart, and place in baggie)	1 set per group of 4 students
		Circular object	1 per group of 4 plus 3 extra
		Measuring tape	1 per student
		Safety compass	1 per student
		Centimeter ruler	1 per student
3	4	4 colored tiles using 4 colors in a bag	1 per pair of students
		Penny	1 per pair of students
		Number cube	1 per pair of students
3	5	No materials needed	
3	6	No materials needed	
3	7	Rectangular prism	1 per pair of students
		Metric ruler	1 per pair of students
		Butcher paper	2 sheets per pair of students
3	8	Number cubes	2 per pair of students
		Butcher paper	1 per pair of students
		Colored Markers	2 sheets per pair of students

GRADE 7 MATERIALS LIST - SIX WEEKS 1-6

SIX WEEKS	LESSON	ITEM	QUANTITY
3	9	No materials needed	
4	1	Butcher paper Colored markers meter/yard stick	1 sheet per group of 4 students 1 set per group of 4 students 1 per group of 4 students
4	2	No materials needed	
4	3	Nets for prism and pyramid (copy on regular paper) Meter ruler Scissors Glue stick	1 set per pair of students 1 per pair of students 1 per students 1 per pair of students
4	4	3 by 5 blank note cards	2 cards per pair of students
4	5	Protractor Calculator Map colors	1 per student 1 per student 1 set per pair of students
4	6	No materials needed	
4	7	No materials needed	
4	8	No materials needed	
4	9	No materials needed	
4	10	No materials needed	
5	1-7	No Materials needed	
6	1	No Materials needed	

TEKSING TOWARD STAAR

MATHEMATICS ®

Grade 7

Class Profile for Spiraled Practice

Teacher _____

Class _____

GRADE 7 TEKSING TOWARD STAAR MATHEMATICS CLASS PROFILE

STAAR REPORTING CATEGORY 1: NUMERICAL REPRESENTATIONS AND RELATIONSHIPS													
Standard	**TEKS**	**Student Expectation**	**Class Performance**										
Supporting	7.2(A)	extend previous knowledge of sets and subsets using visual representations to describe relationships between sets of rational numbers	6	27	57	67	87	106					
Supporting	7.6(A)	represent sample spaces for simple and compound events using lists and tree diagrams	26	78	90	110							
Supporting	7.6(C)	make predictions and determine solutions using experimental data for simple and compound events	5	56	86	105							
Supporting	7.6(D)	make predictions and determine solutions using theoretical probability for simple and compound events	10	23	41	75	81						
Supporting	7.6(E)	find the probabilities of a simple event and its complement and describe the relationship between the two	18	35	48	63	118						
Readiness	7.6(H)	solve problems using qualitative and quantitative predictions and comparisons from simple experiments	1	9	13	22	30	38	44	60	53	62	
			66	70	83	94	98	101	109	113			
Readiness	7.6(I)	determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces	2	11	17	24	34	39	42	47	51	64	
			74	79	91	92	97	102	111	117			

GRADE 7 TEKSING TOWARD STAAR MATHEMATICS CLASS PROFILE

STAAR REPORTING CATEGORY 2: COMPUTATIONS AND ALGEBRAIC RELATIONSHIPS												
Standard	**TEKS**	**Student Expectation**	**Class Performance**									
Supporting	7.3(A)	add, subtract, multiply, and divide rational numbers fluently	8	20	21	50	59	61	77	96	108	
Readiness	7.3(B)	apply and extend previous understanding of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers	1	5	13	26	30	38	44	53	56	66
			78	83	86	94	101	105				
Readiness	7.4(A)	represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical and algebraic representations, including $d = rt$	12	14	31	36	43	45	52	54	71	82
			93	95	112							
Supporting	7.4(B)	calculate unit rates from rates in mathematical and real-world problems	5	26	30	56	66	88	105			
Supporting	7.4(C)	determine the constant of proportionality ($k = y/x$) within mathematical and real-world problems	2	39	73	79	99	102	120			
Readiness	7.4(D)	solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems	3	4	9	19	22	25	36	49	60	62
			65	76	89	90	103	106	109	119		
Readiness	7.7(A)	represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form $y = mx + b$	17	29	34	47	68	70	74	97	113	117
			119									
Supporting	7.10(A)	write one-variable equations and inequalities to represent constraints or conditions within problems	11	19	24	42	49	51	64	76	85	111
Supporting	7.10(B)	represent solutions for one-variable, two step equations and inequalities on number lines	5	13	27	44	77	67	69	83	94	104
Supporting	7.10(C)	write a corresponding real-world problem given a one-variable, two-step equation or inequality	20	37	40	50	99	100	114	120		
Readiness	7.11(A)	model and solve one-variable, two-step equations and inequalities	10	15	23	32	41	55	72	75	80	81
			91	110	115							
Supporting	7.11(B)	determine if the given value(s) make(s) one-variable, two step equations and inequalities true	16	33	37	46	92	100	113	116		

GRADE 7 TEKSING TOWARD STAAR MATHEMATICS CLASS PROFILE

STAAR REPORTING CATEGORY 3: GEOMETRY AND MEASUREMENT												
Standard	**TEKS**	**Student Expectation**	**Class Performance**									
Supporting	7.4(E)	convert between measurement systems, including the use of proportions and the use of unit rates	4	25	69	79						
Supporting	7.5(A)	generalize the critical attributes of similarity, including ratios within and between similar shapes	11	24	42	51	88	92				
Supporting	7.5(B)	describe π as the ratio of the circumference of a circle to its diameter	12	48	43	52	82	93	95			
Readiness	7.5(C)	solve mathematical and real-world problems involving similar shapes and scale drawings	3	7	17	28	34	40	47	58	70	74
			80	81	97							
Readiness	7.9(A)	solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramid	7	9	20	22	28	37	50	58	60	63
			65	77	86	90	100					
Readiness	7.9(B)	determine the circumference and area of circles	14	15	19	31	32	36	45	49	54	55
			71	72	76	84	98	99				
Readiness	7.9(C)	determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles	1	8	16	21	32	33	38	46	59	61
			78	85	89	96						
Supporting	7.9(D)	solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism and triangular pyramid by the determining the area of the shape's net	2	18	35	39	48	63	98			
Supporting	7.11(C)	write and solve equations using geometry concepts including the sums of angles in a triangle, and angle relationships	4	25	57	65	68	87				

GRADE 7 TEKSING TOWARD STAAR MATHEMATICS CLASS PROFILE

STAAR REPORTING CATEGORY 4: DATA ANALYSIS AND FINANCIAL LITERACY											
Standard	**TEKS**	**Student Expectation**	**Class Performance**								
Readiness	7.6(G)	solve problems using data represented in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents	6	10	15	23	27	32	41	55	57	67
			72	75	85	87	91					
Readiness	7.12(A)	compare two groups of numeric data using comparative dot plots or box plots by comparing their shapes, centers, and spreads	7	14	16	28	31	33	45	46	54	61
			68	73	84	95	96					
Supporting	7.12(B)	use data from random sample to make inferences about a population	3	58	88							
Supporting	7.12(C)	compare two populations bases on data in random samples from these populations, including informal comparative inferences about differences between the two populations	29	69								
Supporting	7.13(A)	calculate the sales tax for a given purchase and calculate income tax for earned wages	8	59	89							
Supporting	7.13(B)	identify the components of a personal budget, including income; planned savings for college, retirement, and emergencies; and fixed and variable expenses, and calculate what percentage each category comprises of the total budget	12	43	82							
Supporting	7.13(C)	create and organize a financial assets and liabilities record and construct a net worth statement	18	48	93							
Supporting	7.13(D)	use a family budget estimator to determine the minimum household budget and average hourly wage needed for a family to meet its basic needs in the student's city or another large city nearby	40	80								
Supporting	7.13(E)	calculate and compare simple interest and compound interest earnings	21	71								
Supporting	7.13(F)	analyze and compare monetary incentives, including sales, rebates, and coupons	35	63								

TEKSING TOWARD STAAR

MATHEMATICS ®

Grade 7

Student Profile for Spiraled Practice

Student _____

Teacher _____

GRADE 7 TEKSING TOWARD STAAR MATHEMATICS STUDENT PROFILE

STAAR REPORTING CATEGORY 1: NUMERICAL REPRESENTATIONS AND RELATIONSHIPS												
Standard	**TEKS**	**Student Expectation**	**Student Performance**									
Supporting	7.2(A)	extend previous knowledge of sets and subsets using visual representations to describe relationships between sets of rational numbers	6	27	57	67	87	106				
Supporting	7.6(A)	represent sample spaces for simple and compound events using lists and tree diagrams	26	78	90	110						
Supporting	7.6(C)	make predictions and determine solutions using experimental data for simple and compound events	5	56	86	105						
Supporting	7.6(D)	make predictions and determine solutions using theoretical probability for simple and compound events	10	23	41	75	81					
Supporting	7.6(E)	find the probabilities of a simple event and its complement and describe the relationship between the two	18	35	48	63	118					
Readiness	7.6(H)	solve problems using qualitative and quantitative predictions and comparisons from simple experiments	1	9	13	22	30	38	44	60	53	62
			66	70	83	94	98	101	109	113		
Readiness	7.6(I)	determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces	2	11	17	24	34	39	42	47	51	64
			74	79	91	92	97	102	111	117		

GRADE 7 TEKSING TOWARD STAAR MATHEMATICS STUDENT PROFILE

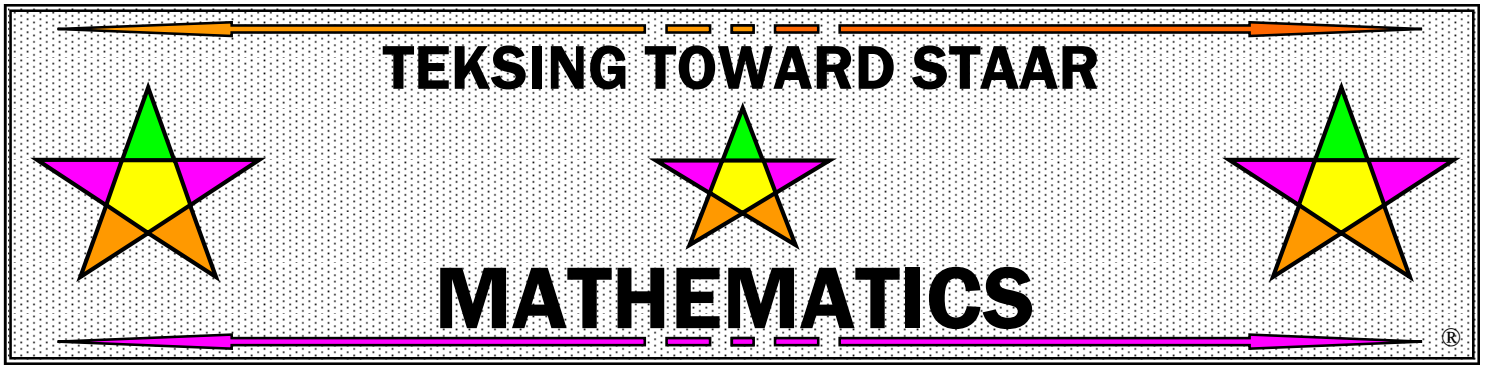
STAAR REPORTING CATEGORY 2: COMPUTATIONS AND ALGEBRAIC RELATIONSHIPS												
Standard	**TEKS**	**Student Expectation**	**Student Performance**									
Supporting	7.3(A)	add, subtract, multiply, and divide rational numbers fluently	8	20	21	50	59	61	77	96	108	
Readiness	7.3(B)	apply and extend previous understanding of operations to solve problems using addition, subtraction, multiplication, and division of rational numbers	1	5	13	26	30	38	44	53	56	66
			78	83	86	94	101	105				
Readiness	7.4(A)	represent constant rates of change in mathematical and real-world problems given pictorial, tabular, verbal, numeric, graphical and algebraic representations, including $d = rt$	12	14	31	36	43	45	52	54	71	82
			93	95	112							
Supporting	7.4(B)	calculate unit rates from rates in mathematical and real-world problems	5	26	30	56	66	88	105			
Supporting	7.4(C)	determine the constant of proportionality ($k = y/x$) within mathematical and real-world problems	2	39	73	79	99	102	120			
Readiness	7.4(D)	solve problems involving ratios, rates, and percents, including multi-step problems involving percent increase and percent decrease, and financial literacy problems	3	4	9	19	22	25	36	49	60	62
			65	76	89	90	103	106	109	119		
Readiness	7.7(A)	represent linear relationships using verbal descriptions, tables, graphs, and equations that simplify to the form $y = mx + b$	17	29	34	47	68	70	74	97	113	117
			119									
Supporting	7.10(A)	write one-variable equations and inequalities to represent constraints or conditions within problems	11	19	24	42	49	51	64	76	85	111
Supporting	7.10(B)	represent solutions for one-variable, two step equations and inequalities on number lines	5	13	27	44	77	67	69	83	94	104
Supporting	7.10(C)	write a corresponding real-world problem given a one-variable, two-step equation or inequality	20	37	40	50	99	100	114	120		
Readiness	7.11(A)	model and solve one-variable, two-step equations and inequalities	10	15	23	32	41	55	72	75	80	81
			91	110	115							
Supporting	7.11(B)	determine if the given value(s) make(s) one-variable, two step equations and inequalities true	16	33	37	46	92	100	113	116		

GRADE 7 TEKSING TOWARD STAAR MATHEMATICS STUDENT PROFILE

STAAR REPORTING CATEGORY 3: GEOMETRY AND MEASUREMENT												
Standard	**TEKS**	**Student Expectation**	**Student Performance**									
Supporting	7.4(E)	convert between measurement systems, including the use of proportions and the use of unit rates	4	25	69	79						
Supporting	7.5(A)	generalize the critical attributes of similarity, including ratios within and between similar shapes	11	24	42	51	88	92				
Supporting	7.5(B)	describe π as the ratio of the circumference of a circle to its diameter	12	48	43	52	82	93	95			
Readiness	7.5(C)	solve mathematical and real-world problems involving similar shapes and scale drawings	3	7	17	28	34	40	47	58	70	74
			80	81	97							
Readiness	7.9(A)	solve problems involving the volume of rectangular prisms, triangular prisms, rectangular pyramids, and triangular pyramid	7	9	20	22	28	37	50	58	60	63
			65	77	86	90	100					
Readiness	7.9(B)	determine the circumference and area of circles	14	15	19	31	32	36	45	49	54	55
			71	72	76	84	98	99				
Readiness	7.9(C)	determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles	1	8	16	21	32	33	38	46	59	61
			78	85	89	96						
Supporting	7.9(D)	solve problems involving the lateral and total surface area of a rectangular prism, rectangular pyramid, triangular prism and triangular pyramid by the determining the area of the shape's net	2	18	35	39	48	63	98			
Supporting	7.11(C)	write and solve equations using geometry concepts including the sums of angles in a triangle, and angle relationships	4	25	57	65	68	87				

GRADE 7 TEKSING TOWARD STAAR MATHEMATICS STUDENT PROFILE

STAAR REPORTING CATEGORY 4: DATA ANALYSIS AND FINANCIAL LITERACY											
Standard	**TEKS**	**Student Expectation**	**Student Performance**								
Readiness	7.6(G)	solve problems using data represented in bar graphs, dot plots, and circle graphs, including part-to-whole and part-to-part comparisons and equivalents	6	10	15	23	27	32	41	55	57	67
			72	75	85	87	91					
Readiness	7.12(A)	compare two groups of numeric data using comparative dot plots or box plots by comparing their shapes, centers, and spreads	7	14	16	28	31	33	45	46	54	61
			68	73	84	95	96					
Supporting	7.12(B)	use data from random sample to make inferences about a population	3	58	88							
Supporting	7.12(C)	compare two populations bases on data in random samples from these populations, including informal comparative inferences about differences between the two populations	29	69								
Supporting	7.13(A)	calculate the sales tax for a given purchase and calculate income tax for earned wages	8	59	89							
Supporting	7.13(B)	identify the components of a personal budget, including income; planned savings for college, retirement, and emergencies; and fixed and variable expenses, and calculate what percentage each category comprises of the total budget	12	43	82							
Supporting	7.13(C)	create and organize a financial assets and liabilities record and construct a net worth statement	18	48	93							
Supporting	7.13(D)	use a family budget estimator to determine the minimum household budget and average hourly wage needed for a family to meet its basic needs in the student's city or another large city nearby	40	80								
Supporting	7.13(E)	calculate and compare simple interest and compound interest earnings	21	71								
Supporting	7.13(F)	analyze and compare monetary incentives, including sales, rebates, and coupons	35	63								



TEKS/STAAR-BASED

LESSONS

Grade 7

Scope and Sequence

TEKSING TOWARD STAAR SCOPE AND SEQUENCE
Grade 7 Mathematics

SIX WEEKS 1

Lesson	TEKS-BASED LESSON	STAAR Category Standard	Spiraled Practice	Student Activity	Problem Solving	Skills and Concepts Homework
Lesson 1 _____ days	**7.2A**/extend previous knowledge of sets and subsets using a visual representation to describe relationships between sets of rational numbers.	Category 1 Supporting	SP 1 SP 2	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 2 _____ days	**7.3A/**add, subtract multiply and divide rational numbers fluently	Category 2 Supporting	SP 3 SP 4	SA 1 SA 2 SA 3 SA 4	PS 1 PS 2 PS 3 PS 4	Homework 1 Homework 2 Homework 3 Homework 4
Lesson 3 _____ days	**7.3B/**apply and extend previous understandings of operations to solve problems using addition, subtraction, multiplication and division of rational numbers	Category 2 Readiness	SP 5 SP 6	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 4 _____ days	**7.5A/**generalize the critical attributes of similarity, including ratios within and between similar shapes **7.5C/**solve mathematical and real-world problems involving similar shapes and scale drawings	Category 3 Supporting Category 3 Readiness	SP 7 SP 8	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 5 _____ days	**7.6A/**represent sample spaces for simple and compound events using lists and diagrams **7.6E**/find the probabilities of a simple even and its complement and describe the relationship between the two.	Category 1 Supporting Category 1 Supporting	SP 9 SP 10	SA 1 SA 2 SA 3 SA 4	PS 1 PS 2 PS 3	Homework 1 Homework 2
Lesson 6 _____ days	**7.10A/**write one-variable, two-step equations and inequalities to represent constraints or conditions within problems **7.11A/**model and solve one-variable, two-step equations and inequalities **7.11B/**determine if the given value(s) make(s) one-variable, two-step equations and inequalities true	Category 2 Supporting Category 2 Readiness Category 2 Supporting	SP 11 SP 12 SP 13	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 7 _____ days	**7.12A/**compare two groups of numeric data using comparative dot plots….by comparing their shapes, centers and spreads	Category 4 Supporting	SP 14 SP 15	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 8 _____ days	**7.13A/**calculate the sales tax for a given purchase and calculate income tax for earned wages	Category 4 Supporting	SP 16 SP 17	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2

SIX WEEKS 1

Lesson	TEKS-BASED LESSON	STAAR Category Standard	Spiraled Practice	Student Activity	Problem Solving	Skills and Concepts Homework
Lesson 9 _____ days	**7.13B/**identify the components of a personal budget, including income, planned savings for college, retirement, and emergencies; taxes; fixed and variable expenses, and calculate what percentage each category comprises of the total budget	Category 4 Supporting Category 4 Supporting	SP 18 SP 19 SP 20	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Review Assessment 2 days	**Six Weeks 1 Open-Ended Review** **Six Weeks 1 Assessment**					

TEACHER NOTES:

TEKSING TOWARD STAAR SCOPE AND SEQUENCE
Grade 7 Mathematics

SIX WEEKS 2

Lesson	TEKS-BASED LESSON	STAAR Category Standard	Spiraled Practice	Student Activity	Problem Solving	Skills and Concepts Homework
Lesson 1 _____ days	**7.4A/**represent constant rates of change in mathematical and real-world problems given pictorial, verbal, or numeric ….representations, including $d = rt$ **7.4B/**calculate unit rates from rates in mathematical and real-world problems **7.4C/**determine the constant of proportionality ($k = y/x$) within mathematical and real-world problems	Category 2 Readiness Category 2 Supporting Category 2 Supporting	SP 21 SP 22 SP 23	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 2 _____ days	**7.10B**/represent solutions for one-variable, two-step equations and inequalities on a number line	Category 2 Supporting	SP 24 SP 25	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 3 _____ days	**7.8A/**model the relationship between the volume of a rectangular prism and rectangular pyramid having both congruent bases and heights and connect that relationship to the formulas **7.9A/**solve problems involving the volume of rectangular prisms and… rectangular pyramids	Not Tested Category 3 Readiness	SP 26 SP 27 SP 28	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 4 _____ days	**7.4E/**convert between measurement system, including use of proportions and the use of unit rates	Category 3 Supporting	SP 29 SP 30	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 5 _____ days	**7.4D/**solve problems using ratios, rates and percents, …	Category 2 Readiness	SP 31 SP 32	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 6 _____ days	**7.6G/**solve problems using data represented in bar graphs,…,including part-to-whole and part-to part comparisons and equivalents	Category 4 Readiness	SP 33 SP 34	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 7 _____ days	**7.6C/**make predictions and determine solutions using experimental data for simple and compound events **7.6D/**make predictions and determine solutions using theoretical probability for simple and compound events **7.6H/**solve problems using qualitative and quantitative predictions and comparisons from simple experiments	Category 1 Supporting Category 1 Supporting Category 1 Readiness	SP 35 SP 36 SP 37	SA 1 SA 2 SA 3 SA 4	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3

TEKSING TOWARD STAAR SCOPE AND SEQUENCE
Grade 7 Mathematics

SIX WEEKS 2

Lesson	TEKS-BASED LESSON	STAAR Category Standard	Spiraled Practice	Student Activity	Problem Solving	Skills and Concepts Homework
Lesson 8 _____ days	**7.11C/**write and solve equations using geometry concepts, including the sum of the angles in a triangle and angle relationships	Category 3 Supporting	SP 38 SP 39	SA 1 SA 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 9 _____ days	**7.13C/**create and organize a financial assets and liabilities record and construct a net worth statement	Category 4 Supporting	SP 40	SA 1 SA 2	PS 1	Homework 1 Homework 2
Review Assessment 2 days	**Six Weeks 2 Open-Ended Review** **Six Weeks 2 Assessment**					

TEACHER NOTES:

TEKSING TOWARD STAAR SCOPE AND SEQUENCE
Grade 7 Mathematics

SIX WEEKS 3

Lesson	TEKS-BASED LESSON	STAAR Category Standard	Spiraled Practice	Student Activity	Problem Solving	Skills and Concepts Homework
Lesson 1 _____ days	**7.4D/** solve problems involving….percents of decrease and percent of decrease and financial literacy problems	Category 2 Readiness	SP 41 SP 42	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 2 _____ days	**7.7A/**represent linear relationships using verbal descriptions, tables, ….,that simplify to the form $y = mx + b$.	Category 2 Readiness	SP 43 SP 44	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 3 _____ days	**7.8C/**use models to determine the approximate formulas for the circumference and area of a circle and connect the models to the actual formulas **7.5B/**describe π as the ratio of the circumference of a circle and its diameter **7.9B/**determine the circumference and area of circles	Not Tested Category 3 Supporting Category 3 Readiness	SP 45 SP 46 SP 47	SA 1 SA 2	PS 1	Homework 1 Homework 2
Lesson 4 _____ days	**7.6I/**determine experimental and theoretical probabilities related to simple and compound events using data and sample spaces	Category 1 Readiness	SP 48 SP 49	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 5 _____ days	**7.8B/**explain verbally and symbolically the relationship between the volume of a triangular prism and a triangular pyramid having both congruent bases and heights and connect that relationship to the formulas **7.9A/** solve problems involving the volume of ….triangular prisms and triangular pyramids	Not Tested Category 3 Readiness	SP 50 SP 51	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 6 _____ days	**7.9C/**determine the area of composite figures containing combinations of rectangles, squares, parallelograms, trapezoids, triangles, semicircles, and quarter circles	Category 3 Readiness	SP 52 SP 53	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 7 _____ days	**7.9D/**solve problems involving the lateral and total surface area of a rectangular prism,…rectangular pyramid,..by determining the area of the shape's net	Category 3 Supporting	SP 54 SP 55 SP 56	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2

TEKSING TOWARD STAAR SCOPE AND SEQUENCE
Grade 7 Mathematics

SIX WEEKS 3

Lesson	TEKS-BASED LESSON	STAAR Category Standard	Spiraled Practice	Student Activity	Problem Solving	Skills and Concepts Homework
Lesson 8 _____ days	**7.6G/**solve problems using data represented in…dot plots, including part-to-whole and part-to-part comparisons and equivalents	Category 4 Readiness	SP 57 SP 58	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 9 _____ days	**7.12B/**use data from a random sample to make inferences about a population **7.6F/**use data from a random sample to make inferences about a population	Category 4 Supporting Not Tested	SP 59 SP 60	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Review Assessment 2 days	**Six Weeks 3 Open-Ended Review** **Six Weeks 3 Assessment**					

TEACHER NOTES:

TEKSING TOWARD STAAR SCOPE AND SEQUENCE
Grade 7 Mathematics

SIX WEEKS 4

Lesson	TEKS-BASED LESSON	STAAR Category Standard	Spiraled Practice	Student Activity	Problem Solving	Skills and Concepts Homework
Lesson 1 _____ days	**7.12A/**compare two groups of numeric data using comparative box plots….by comparing their shapes, centers and spreads	Category 4 Readiness	SP 61 SP 62	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 2 _____ days	**7.12C/**compare two populations based on data in random samples from these populations including informal inferences about differences between the two populations	Category 4 Supporting	SP 63 SP 64	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 3 _____ days	**7.9D/**solve problems involving the lateral and total surface area of a triangular prism,…triangular pyramid,..by determining the area of the shape's net	Category 3 Supporting	SP 65 SP 66	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 4 _____ days	**7.10C/** write a corresponding real-world problem given a one-variable, two-step equation or inequality	Category 2 Supporting	SP 67 SP 68	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 5 _____ days	**7.6G/**solve problems using data represented in ….circle graphs, including part-to-whole and part-to-part comparisons and equivalents	Category 4 Readiness	SP 69 SP 70	SA 1 SA 2 SA 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 6 _____ days	**7.7A/**represent linear relationships using … graphs, and equations that simplify to the form $y = mx + b$	Category 2 Readiness	SP 71 SP 72	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 7 _____ days	**7.13D/**use a family budget estimator to determine the minimum household budget and average hourly wage needed for a family to meet its basic needs in the student's city or another large city nearby	Category 4 Supporting	SP 73 SP 74	SA 1 SA 2	PS 1	Homework 1 Homework 2
Lesson 8 _____ days	**7.13E/**calculate and compare simple interest and compound interest earnings	Category 4 Supporting	SP 75 SP 76	SA 1 SA 2	PS 1	Homework 1 Homework 2
Lesson 9 _____ days	**7.13F/**anayze and compare monetary incentives, including sales, rebates, and coupons	Category 4 Supporting	SP 77 SP 78	SA 1 SA 2	PS 1	Homework 1 Homework 2
Lesson 10 _____ days	**7.4A/**represent constant rates of change in mathematical and real-world problems given …tabular, graphical or, algebraic representations, including $d = rt$	Category 4 Supporting	SP 79 SP 80	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Review Assessment 2 days	**Six Weeks 4 Open-Ended Review** **Six Weeks 4 Assessment**					

TEACHER NOTES:

TEKSING TOWARD STAAR SCOPE AND SEQUENCE
Grade 7 Mathematics

SIX WEEKS 5

Lesson	TEKS-BASED LESSON	STAAR Category Standard	Spiraled Practice	Student Activity	Skills and Concepts Homework
Lesson 1 _____ days	**7.1A/**apply mathematics to problems arising in everyday life, society, and the workplace	Category 1-4 Review of TEKS	SP 81 SP 82	SA 1 SA 2 SA 3 SA 4	Homework 1 Homework 2 Homework 3 Homework 4
Lesson 2 _____ days	**7.1B/**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	Category 1-4 Review of TEKS	SP 83 SP 84 SP 85	SA 1 SA 2 SA 3 SA 4	Homework 1 Homework 2 Homework 3 Homework 4
Lesson 3 _____ days	**7.1C/**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	Category 1-4 Review of TEKS	SP 86 SP 87 SP 88 SP 89	SA 1 SA 2 SA 3 SA 4	Homework 1 Homework 2 Homework 3 Homework 4
Lesson 4 _____ days	**7.1D/**communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	Category 1-4 Review of TEKS	SP 90 SP 91 SP 92	SA 1 SA 2 SA 3 SA 4	Homework 1 Homework 2 Homework 3 Homework 4
Lesson 5 _____ days	**7.1E/**create and use representations to organize, record, and communicate mathematical ideas	Category 1-4 Review of TEKS	SP 93 SP 94 SP 95	SA 1 SA 2 SA 3 SA 4	Homework 1 Homework 2 Homework 3 Homework 4
Lesson 6 _____ days	**7.1F/**analyze mathematical relationships to connect and communicate mathematical ideas	Category 1-4 Review of TEKS	SP 96 SP 97 SP 98	SA 1 SA 2 SA 3 SA 4	Homework 1 Homework 2 Homework 3 Homework 4
Lesson 7 _____ days	**7.1G/**display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication	Category 1-4 Review of TEKS	SP 99 SP 100	SA 1 SA 2 SA 3 SA 4	Homework 1 Homework 2 Homework 3 Homework 4
Assessment 1 day	**Six Weeks 5 Assessment**				

SIX WEEKS 6

Lesson	TEKS-BASED LESSON	STAAR Category Standard	Spiraled Practice	Student Activity	Problem Solving	Skills and Concepts Homework
	NOTE: Begin the Six Weeks with Spiraled Practice 101-120 as a tool to review all TEKS – students should answer the problems on these spirals individually and should follow all testing rules in effect during the administration of the actual STAAR – sharing of student work on these problems should continue the procedure used throughout the school year	Category 1-4 Review of TEKS	SP 101-SP 120			
Lesson 1 ____ days	**7.6B/**select and use different simulations to represent simple and compound events with and without technology	NOT TESTED		SA 1		Homework 1

TEACHER NOTES: