TTUISD - TEKS Tracker

Author _____ Submission Date _____/_____/_____

Evaluator_____ Evaluation Date _____/_____/_____

TTU Course: MATH 3B, Grade 3 (v.3.0), Second Semester

TEKS: §111.15. Mathematics, Grade 3.

TEKS Requirement (Elementary)		Sem. B	Lesson & Assignment Number	Textbook Chapter/Page #	Bloom's Taxonomy
§111.15. Mathematics, Grade 3.					
(a) Introduction.					
(1) Within a well-balanced mathematics curriculum, the primary focal points at Grade 3 are multiplying and dividing whole numbers, connecting fraction symbols to fractional quantities, and standardizing language and procedures in geometry and measurement.					
(2) Throughout mathematics in Grades 3-5, students build a foundation of basic understandings in number, operation, and quantitative reasoning; patterns, relationships, and algebraic thinking; geometry and spatial reasoning; measurement; and probability and statistics. Students use algorithms for addition, subtraction, multiplication, and division as generalizations connected to concrete experiences; and they concretely develop basic concepts of fractions and decimals. Students use appropriate language and organizational structures such as tables and charts to represent and communicate relationships, make predictions, and solve problems. Students select and use formal language to describe their reasoning as they identify, compare, and classify two- or three-dimensional geometric figures; and they use numbers, standard units, and measurement tools to describe and compare objects, make estimates, and solve application problems. Students organize data, choose an appropriate method to display the data, and interpret the data to make decisions and predictions and solve problems.					
(3) Throughout mathematics in Grades 3-5, students develop numerical fluency with conceptual understanding and computational accuracy. Students in Grades 3-5 use knowledge of the base-ten place value system to compose and decompose numbers in order to solve problems requiring precision, estimation, and reasonableness. By the end of Grade 5, students know basic addition, subtraction, multiplication, and division facts and are using them to work flexibly, efficiently, and accurately with numbers during addition, subtraction, multiplication, and division computation.					
(4) Problem solving, language and communication, connections within and outside mathematics, and formal and informal reasoning underlie all content areas in mathematics. Throughout mathematics in Grades 3-5, students use these processes together with technology and other mathematical tools such as manipulative materials to develop conceptual understanding and solve meaningful problems as they do mathematics.					
(b) Knowledge and skills.					
(1) Number, operation, and quantitative reasoning. The student uses place value to communicate about increasingly large whole numbers in verbal and written form, including money. The student is expected to:					
(A) use place value to read, write (in symbols and words), and describe the value of whole numbers through 999,999;					Understand
(B) use place value to compare and order whole numbers through 9,999; and		B	109	Ch. 11 474-477	Analyze
(C) determine the value of a collection of coins and bills.		B	141, 145	Ch. 14 584-587, 598-601	Analyze
(2) Number, operation, and quantitative reasoning. The student uses fraction names and symbols (with denominators of 12 or less) to describe fractional parts of whole objects or sets of objects. The student is expected to:					
(A) construct concrete models of fractions;		B	127	Ch. 13 535-536	Create
(B) compare fractional parts of whole objects or sets of objects in a problem situation using concrete models;		B	130, 133, 134, 135	Ch. 13 548-550, 556-557, 558-561, 564-567	Evaluate
(C) use fraction names and symbols to describe fractional parts of whole objects or sets of objects; and		B	127, 128	Ch. 13 537-539, 540-543	Evaluate
(D) construct concrete models of equivalent fractions for fractional parts of whole objects.		B	130	Ch. 13 546-547, 548-550, 551	Create
(3) Number, operation, and quantitative reasoning. The student adds and subtracts to solve meaningful problems involving whole numbers. The student is expected to:					

(A) model addition and subtraction using pictures, words, and numbers; and		B	77	Ch. 9 358-361	Analyze
(B) select addition or subtraction and use the operation to solve problems involving whole numbers through 999.		B	76	Ch. 9 355-357	Apply
(4) Number, operation, and quantitative reasoning. The student recognizes and solves problems in multiplication and division situations. The student is expected to:					
(A) learn and apply multiplication facts through 12 by 12 using concrete models and objects;		B	76, 77, 80, 81, 118, 144	Chs. 9, 12 355-357, 358-361, 358-361, 372-375, 378-381, 512-515, 594-597	Apply
(B) solve and record multiplication problems (up to two digits times one digit); and		B	139, 141, 144, 144, 145	Ch. 14 579-581, 584-587, 592-593, 594-597, 598-601	Apply
(C) use models to solve division problems and use number sentences to record the solutions.		B	76, 83	Ch. 9 355-357, 388-391	Apply
(5) Number, operation, and quantitative reasoning. The student estimates to determine reasonable results. The student is expected to:					
(A) round whole numbers to the nearest ten or hundred to approximate reasonable results in problem situations; and					Understand
(B) use strategies including rounding and compatible numbers to estimate solutions to addition and subtraction problems.		B	92	Ch. 10 422-425	Understand
(6) Patterns, relationships, and algebraic thinking. The student uses patterns to solve problems. The student is expected to:					
(A) identify and extend whole-number and geometric patterns to make predictions and solve problems;		B	87, 91, 103	Chs. 10, 11 405-408, 418-421, 458-461	Evaluate
(B) identify patterns in multiplication facts using concrete objects, pictorial models, or technology; and					Analyze
(C) identify patterns in related multiplication and division sentences (fact families) such as 2 x 3 = 6, 3 x 2 = 6, 6 ¸ 2 = 3, 6 ¸ 3 = 2.					Analyze
(7) Patterns, relationships, and algebraic thinking. The student uses lists, tables, and charts to express patterns and relationships. The student is expected to:					
(A) generate a table of paired numbers based on a real-life situation such as insects and legs; and					Create
(B) identify and describe patterns in a table of related number pairs based on a meaningful problem and extend the table.					Evaluate
(8) Geometry and spatial reasoning. The student uses formal geometric vocabulary. The student is expected to identify, classify, and describe two- and three-dimensional geometric figures by their attributes. The student compares two- dimensional figures, three-dimensional figures, or both by their attributes using formal geometry vocabulary.		B	100, 101, 102 144	Chs. 11, 14 447-451, 452-455, 458-461, 594-597	Evaluate
(9) Geometry and spatial reasoning. The student recognizes congruence and symmetry. The student is expected to:					
(A) identify congruent two-dimensional figures;		B	105	Ch. 11 464-465	Understand
(B) create two-dimensional figures with lines of symmetry using concrete models and technology; and		B	107, 109	Ch. 11 468-470, 471, 474-477	Create
(C) identify lines of symmetry in two-dimensional geometric figures.		B	107	Ch. 11 468-470, 471	Understand
(10) Geometry and spatial reasoning. The student recognizes that a line can be used to represent numbers and fractions and their properties and relationships. The student is expected to locate and name points on a number line using whole numbers and fractions, including halves and fourths.		B	108, 109, 135	Chs. 11, 13 472-473, 474-477, 564-567	Analyze
(11) Measurement. The student directly compares the attributes of length, area, weight/mass, and capacity, and uses comparative language to solve problems and answer questions. The student selects and uses standard units to describe length, area, capacity/volume, and weight/mass. The student is expected to:					
(A) use linear measurement tools to estimate and measure lengths using standard units;		B	76, 77, 79, 134	Chs. 9, 13 353-354, 355-357, 358-361, 364-365, 366-369, 558-561	Understand

(B) use standard units to find the perimeter of a shape;		B	80, 81	Ch. 9 372-375, 378-381	Apply
(C) use concrete and pictorial models of square units to determine the area of two-dimensional surfaces;		B	80, 81, 83, 100	Chs. 9, 11 376-377, 378-381, 388-391, 447-451	Analyze
(D) identify concrete models that approximate standard units of weight/mass and use them to measure weight/mass;		B	87, 91, 92, 95	Ch. 10 403-404, 418-421, 422-425, 430-433	Apply
(E) identify concrete models that approximate standard units for capacity and use them to measure capacity; and		B	87, 88	Ch. 10 403-404, 405-408, 412-414	Apply
(F) use concrete models that approximate cubic units to determine the volume of a given container or other three-dimensional geometric figure.		B	94, 95, 100	Chs. 10, 11 428-429, 430-433, 447-451	Apply
(12) Measurement. The student reads and writes time and measures temperature in degrees Fahrenheit to solve problems. The student is expected to:					
(A) use a thermometer to measure temperature; and		B	82, 83	Ch. 9 386-387, 388-391	Apply
(B) tell and write time shown on analog and digital clocks.		B	96, 100	Chs. 10, 11 434-435, 447-451	Apply
(13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to:					
(A) collect, organize, record, and display data in pictographs and bar graphs where each picture or cell might represent more than one piece of data;		B	113, 114, 117 120	Ch. 12 493-494, 495-497, 498-501, 506-507, 508-511, 518-521	Create
(B) interpret information from pictographs and bar graphs; and		B	113, 114, 118, 120	Ch. 12 495-497, 498-501, 512-515, 518-521	Evaluate
(C) use data to describe events as more likely than, less likely than, or equally likely as.		B	120	Ch. 12 518-521	Evaluate
(14) Underlying processes and mathematical tools. The student applies Grade 3 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:					
(A) identify the mathematics in everyday situations;		B	All lessons	All lessons	Understand
(B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;		B	All Problem Solving lessons	All Problem Solving lessons	Create
(C) select or develop an appropriate problem-solving plan or 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; and		B	All Problem Solving lessons	All Problem Solving lessons	Create
(D) use tools such as real objects, manipulatives, and technology to solve problems.		B	All lessons	All lessons	Apply
(15) Underlying processes and mathematical tools. The student communicates about Grade 3 mathematics using informal language. The student is expected to:					
(A) explain and record observations using objects, words, pictures, numbers, and technology; and		B	All lessons	All lessons	Create
(B) relate informal language to mathematical language and symbols.		B	All lessons	All lessons	Evaluate
(16) Underlying processes and mathematical tools. The student uses logical reasoning. The student is expected to:					
(A) make generalizations from patterns or sets of examples and nonexamples; and		B	All lessons	All lessons	Understand
(B) justify why an answer is reasonable and explain the solution process.		B	All lessons	All lessons	Evaluate
Source: The provisions of this §111.15 adopted to be effective September 1, 1998, 22 TexReg 7623; amended to be effective August 1, 2006, 30 TexReg 7471.					