

Lesson Correlation to the Grade 5 Texas Essential Knowledge and Skills

This worktext is customized to the *Texas Essential Knowledge and Skills* and will help you prepare for the *State of Texas Assessments of Academic Readiness (STAAR®)* in Mathematics for Grade 5.

Mathematical process standards are not listed under separate lessons. Because application of mathematical process standards is part of each knowledge statement, these standards are incorporated into instruction and practice throughout the lessons.

Texas Essential Knowledge and Skills	Measuring Up Lessons
TEKS 5.2 Number and operations. The student applies mathematical process standards to represent, compare, and order positive rational numbers and understand relationships as related to place value.	
(A) represent the value of the digit in decimals through the thousandths using expanded notation and numerals	1
(B) compare and order two decimals to thousandths and represent comparisons using the symbols $>$, $<$, or $=$	2
(C) round decimals to tenths or hundredths	3
TEKS 5.3 Number and operations. The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy.	
(A) estimate to determine solutions to mathematical and real-world problems involving addition, subtraction, multiplication, or division	4
(B) multiply with fluency a three-digit number by a two-digit number using the standard algorithm	7
(C) solve with proficiency for quotients of up to a four-digit dividend by a two-digit divisor using strategies and the standard algorithm	8
(D) represent multiplication of decimals with products to the hundredths using objects and pictorial models, including area models	9
(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	10
(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	11
(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	12
(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	13, 14
(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	17, 18
(J) represent division of a unit fraction by a whole number and the division of a whole number by a unit fraction such as $\frac{1}{3} \div 7$ and $7 \div \frac{1}{3}$ using objects and pictorial models, including area models	19
(K) add and subtract positive rational numbers fluently	5, 6, 15, 16
(L) divide whole numbers by unit fractions and unit fractions by whole numbers	20
TEKS 5.4 Algebraic reasoning. The student applies mathematical process standards to develop concepts of expressions and equations.	
(A) identify prime and composite numbers	21
(B) represent and solve multi-step problems involving the four operations with whole numbers using equations with a letter standing for the unknown quantity	22
(C) generate a numerical pattern when given a rule in the form $y = ax$ or $y = x + a$ and graph	23
(D) recognize the difference between additive and multiplicative numerical patterns given in a table or graph	24
(E) describe the meaning of parentheses and brackets in a numeric expression	25
(F) simplify numerical expressions that do not involve exponents, including up to two levels of grouping	25
(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 $V = Bh$)	27
(H) represent and solve problems related to perimeter and/or area and related to volume	26, 27

Texas Essential Knowledge and Skills	<i>Measuring Up Lessons</i>
TEKS 5.5 Geometry and measurement. The student applies mathematical process standards to classify two-dimensional figures by attributes and properties.	
(A) classify two-dimensional figures in a hierarchy of sets and subsets using graphic organizers based on their attributes and properties	28
TEKS 5.6 Geometry and measurement. The student applies mathematical process standards to understand, recognize, and quantify volume.	
(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	29
(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	30
TEKS 5.7 Geometry and measurement. The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving measurement.	
(A) solve problems by calculating conversions within a measurement system, customary or metric	31, 32
TEKS 5.8 Geometry and measurement. The student applies mathematical process standards to identify locations on a coordinate plane.	
(A) describe the key attributes of the coordinate plane, including perpendicular number lines (axes) where the intersection (origin) of the two lines coincides with zero on each number line and the given point $(0, 0)$; the x -coordinate, the first number in an ordered pair, indicates movement parallel to the x -axis starting at the origin; and the y -coordinate, the second number, indicates movement parallel to the y -axis starting at the origin	33
(B) describe the process for graphing ordered pairs of numbers in the first quadrant of the coordinate plane	33
(C) graph in the first quadrant of the coordinate plane ordered pairs of numbers arising from mathematical and real-world problems, including those generated by number patterns or found in an input-output table	33, 34
TEKS 5.9 Data analysis. The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data.	
(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	35, 36
(B) represent discrete paired data on a scatterplot	39
(C) solve one- and two-step problems using data from a frequency table, dot plot, bar graph, stem-and-leaf plot, or scatterplot	37, 38, 39
TEKS 5.10 Personal financial literacy. The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security.	
(A) define income tax, payroll tax, sales tax, and property tax	40
(B) explain the difference between gross income and net income	40
(C) identify the advantages and disadvantages of different methods of payment, including check, credit card, debit card, and electronic payments	41
(D) develop a system for keeping and using financial records	42
(E) describe actions that might be taken to balance a budget when expenses exceed income	42
(F) balance a simple budget	42