

ETA Cuisenaire - CenterStage Math

Grade: 5

States: Texas Essential Knowledge and Skills (TEKS)

Subjects: Mathematics

Texas Essential Knowledge and Skills (TEKS)
Mathematics
Grade 5

TEKS	TX.111.17 (5.1)	Number, operation, and quantitative reasoning. The student uses place value to represent whole numbers and decimals.
STUDENT EXPECTATION	(5.1) (A)	The student is expected to use place value to read, write, compare, and order whole numbers through the 999,999,999,999.
STUDENT EXPECTATION	(5.1) (B)	The student is expected to use place value to read, write, compare, and order decimals through the thousandths place. <ul style="list-style-type: none"> • CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251)
TEKS	TX.111.17 (5.2)	Number, operation, and quantitative reasoning. The student uses fractions in problem-solving situations.
STUDENT EXPECTATION	(5.2) (A)	The student is expected to generate a fraction equivalent to a given fraction such as $\frac{1}{2}$ and $\frac{3}{6}$ or $\frac{4}{12}$ and $\frac{1}{3}$. <ul style="list-style-type: none"> • CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251)
STUDENT EXPECTATION	(5.2) (B)	The student is expected to generate a mixed number equivalent to a given improper fraction or generate an improper fraction equivalent to a given mixed number.
STUDENT EXPECTATION	(5.2) (C)	The student is expected to compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators. <ul style="list-style-type: none"> • CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251)
STUDENT EXPECTATION	(5.2) (D)	The student is expected to use models to relate decimals to fractions that name tenths, hundredths, and thousandths. <ul style="list-style-type: none"> • CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251)
TEKS	TX.111.17 (5.3)	Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve meaningful problems.
STUDENT EXPECTATION	(5.3) (A)	The student is expected to use addition and subtraction to solve problems involving whole numbers and decimals.
STUDENT EXPECTATION	(5.3) (B)	The student is expected to use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology).
STUDENT	(5.3) (C)	The student is expected to use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit

EXPECTATION		dividends without technology) , including interpreting the remainder within a given context.
STUDENT EXPECTATION	(5.3) (D)	The student is expected to identify common factors of a set of whole numbers.
STUDENT EXPECTATION	(5.3) (E)	The student is expected to model situations using addition and/or subtraction involving fractions with like denominators using concrete objects, pictures, words, and numbers. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251)
TEKS	TX.111.17 (5.4)	Number, operation, and quantitative reasoning. The student estimates to determine reasonable results.
STUDENT EXPECTATION	(5.4) (A)	The student is expected to use strategies, including rounding and compatible numbers to estimate solutions to addition, subtraction, multiplication, and division problems.
TEKS	TX.111.17 (5.5)	Patterns, relationships, and algebraic thinking. The student makes generalizations based on observed patterns and relationships.
STUDENT EXPECTATION	(5.5) (A)	The student is expected to describe the relationship between sets of data in graphic organizers such as lists, tables, charts, and diagrams. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center (42255)
STUDENT EXPECTATION	(5.5) (B)	The student is expected to identify prime and composite numbers using concrete objects, pictorial models , and patterns in factor pairs.
TEKS	TX.111.17 (5.6)	Patterns, relationships, and algebraic thinking. The student describes relationships mathematically.
STUDENT EXPECTATION	(5.6) (A)	The student is expected to select from and use diagrams and equations such as $y = 5 + 3$ to represent meaningful problem situations. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center (42255)
TEKS	TX.111.17 (5.7)	Geometry and spatial reasoning. The student generates geometric definitions using critical attributes.
STUDENT EXPECTATION	(5.7) (A)	The student is expected to identify essential attributes including parallel, perpendicular, and congruent parts of two- and three-dimensional geometric figures. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Geometry Center (42252)
TEKS	TX.111.17 (5.8)	Geometry and spatial reasoning. The student models transformations.
STUDENT EXPECTATION	(5.8) (A)	The student is expected to sketch the results of translations, rotations, and reflections on a Quadrant I coordinate grid.
STUDENT EXPECTATION	(5.8) (B)	The student is expected to identify the transformation that generates one figure from the other when given two congruent figures on a Quadrant I coordinate grid.
TEKS	TX.111.17	Geometry and spatial reasoning. The student recognizes the connection between ordered pairs of numbers and locations of

	(5.9)	points on a plane.
STUDENT EXPECTATION	(5.9) (A)	The student is expected to locate and name points on a coordinate grid using ordered pairs of whole numbers. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center (42255)
TEKS	TX.111.17 (5.10)	Measurement. The student applies measurement concepts involving length (including perimeter), area, capacity/volume, and weight/mass to solve problems.
STUDENT EXPECTATION	(5.10) (A)	The student is expected to perform simple conversions within the same measurement system (SI (metric) or customary). <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Measurement Center (42253)
STUDENT EXPECTATION	(5.10) (B)	The student is expected to connect models for perimeter, area, and volume with their respective formulas. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Geometry Center (42252)
STUDENT EXPECTATION	(5.10) (C)	The student is expected to select and use appropriate units and formulas to measure length, perimeter, area, and volume. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Geometry Center (42252) CenterStage(R) Math, Grade 5: Measurement Center (42253)
TEKS	TX.111.17 (5.11)	Measurement. The student applies measurement concepts. The student measures time and temperature (in degrees Fahrenheit and Celsius).
STUDENT EXPECTATION	(5.11) (A)	The student is expected to solve problems involving changes in temperature.
STUDENT EXPECTATION	(5.11) (B)	The student is expected to solve problems involving elapsed time.
TEKS	TX.111.17 (5.12)	Probability and statistics. The student describes and predicts the results of a probability experiment.
STUDENT EXPECTATION	(5.12) (A)	The student is expected to use fractions to describe the results of an experiment. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
STUDENT EXPECTATION	(5.12) (B)	The student is expected to use experimental results to make predictions. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
STUDENT EXPECTATION	(5.12) (C)	The student is expected to list all possible outcomes of a probability experiment such as tossing a coin. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
TEKS	TX.111.17 (5.13)	Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data.

STUDENT EXPECTATION	(5.13) (A)	The student is expected to use tables of related number pairs to make line graphs; <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
STUDENT EXPECTATION	(5.13) (B)	The student is expected to describe characteristics of data presented in tables and graphs including median, mode, and range. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
STUDENT EXPECTATION	(5.13) (C)	The student is expected to graph a given set of data using an appropriate graphical representation such as a picture or line graph. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
TEKS	TX.111.17 (5.14)	Underlying processes and mathematical tools. The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school.
STUDENT EXPECTATION	(5.14) (A)	The student is expected to identify the mathematics in everyday situations. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center (42255) CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251) CenterStage(R) Math, Grade 5: Geometry Center (42252) CenterStage(R) Math, Grade 5: Measurement Center (42253) CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
STUDENT EXPECTATION	(5.14) (B)	The student is expected to solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center (42255) CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251) CenterStage(R) Math, Grade 5: Geometry Center (42252) CenterStage(R) Math, Grade 5: Measurement Center (42253) CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
STUDENT EXPECTATION	(5.14) (C)	The student is expected to 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. <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center (42255) CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251) CenterStage(R) Math, Grade 5: Geometry Center (42252) CenterStage(R) Math, Grade 5: Measurement Center (42253) CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
STUDENT EXPECTATION	(5.14) (D)	The student is expected to use tools such as real objects, manipulatives, and technology to solve problems.

		<ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center (42255) CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251) CenterStage(R) Math, Grade 5: Geometry Center (42252) CenterStage(R) Math, Grade 5: Measurement Center (42253) CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
TEKS	TX.111.17 (5.15)	Underlying processes and mathematical tools. The student communicates about Grade 5 mathematics using informal language.
STUDENT EXPECTATION	(5.15) (A)	<p>The student is expected to explain and record observations using objects, words, pictures, numbers, and technology.</p> <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center (42255) CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251) CenterStage(R) Math, Grade 5: Geometry Center (42252) CenterStage(R) Math, Grade 5: Measurement Center (42253) CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
STUDENT EXPECTATION	(5.15) (B)	<p>The student is expected to relate informal language to mathematical language and symbols.</p> <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center (42255) CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251) CenterStage(R) Math, Grade 5: Geometry Center (42252) CenterStage(R) Math, Grade 5: Measurement Center (42253) CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)
TEKS	TX.111.17 (5.16)	Underlying processes and mathematical tools. The student uses logical reasoning.
STUDENT EXPECTATION	(5.16) (A)	The student is expected to make generalizations from patterns or sets of examples and non-examples.
STUDENT EXPECTATION	(5.16) (B)	<p>The student is expected to justify why an answer is reasonable and explain the solution process.</p> <ul style="list-style-type: none"> CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center (42255) CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center (42251) CenterStage(R) Math, Grade 5: Geometry Center (42252) CenterStage(R) Math, Grade 5: Measurement Center (42253) CenterStage(R) Math, Grade 5: Probability & Statistics Center (42254)