

ETA Cuisenaire - CenterStage Math

Grades: 5

States: California Content Standards

CenterStage(R) Math, Grade 5: Algebraic Thinking & Problem Solving Center
 Summary: This center addresses the following topics: locating and naming ordered pairs on a coordinate grid; finding the distance between two points on a vertical or horizontal line on a grid; evaluating algebraic expressions with one variable and one other number; solving word problems using problem-solving strategies; completing input/output tables for given rules; and solving addition, subtraction, multiplication, and division problems using positive and negative numbers. This center engages and motivates every student through developmentally appropriate activities that support the math curriculum with hands-on activities and manipulatives, allowing for collaborative and independent work. Click on the blue link above to view and read about the program components and manipulatives. (42255)

California Content Standards Mathematics Grade: 5

CONTENT STANDARD	CA.NS.	Number Sense
PERFORMANCE STANDARD	2.0.	Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.
GRADE LEVEL EXPECTATION	2.1.	Add, subtract, multiply, and divide with decimals; add with negative integers; subtract positive integers from negative integers; and verify the reasonableness of the results.
CONTENT STANDARD	CA.AF.	Algebra and Functions
PERFORMANCE STANDARD	1.0.	Students use variables in simple expressions, compute the value of the expression for specific values of the variable, and plot and interpret the results.
GRADE LEVEL EXPECTATION	1.2.	Use a letter to represent an unknown number; write and evaluate simple algebraic expressions in one variable by substitution.
GRADE LEVEL EXPECTATION	1.4.	Identify and graph ordered pairs in the four quadrants of the coordinate plane.
CONTENT STANDARD	CA.MR.	Mathematical Reasoning
PERFORMANCE STANDARD	2.0.	Students use strategies, skills, and concepts in finding solutions.
GRADE LEVEL EXPECTATION	2.4.	Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.
GRADE LEVEL EXPECTATION	2.6.	Make precise calculations and check the validity of the results from the context of the problem.
CONTENT STANDARD	CA.MR.	Mathematical Reasoning
PERFORMANCE STANDARD	3.0.	Students move beyond a particular problem by generalizing to other situations.
GRADE LEVEL EXPECTATION	3.1.	Evaluate the reasonableness of the solution in the context of the original situation.
GRADE LEVEL EXPECTATION	3.2.	Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems.

CenterStage(R) Math, Grade 5: Fractions, Decimals, Ratios & Percents Center
 Summary: This center addresses the following topics: comparing and ordering two or more fractions and/or mixed numbers (like and unlike denominators); interpreting decimals as parts of a hundred; identifying, comparing, and ordering two or more decimals, fractions, and/or percents; using models and drawings to represent the concept of ratio; adding and/or subtracting fractions and/or mixed numbers; and finding the decimal and percent equivalents for common fractions. This center engages and motivates every student through developmentally appropriate activities that support the math curriculum with hands-on activities and manipulatives, allowing for collaborative and independent work. Click on the blue link above to view and read about the program components and manipulatives. (42251)

California Content Standards
Mathematics
Grade: 5

CONTENT STANDARD	CA.NS.	Number Sense
PERFORMANCE STANDARD	1.0.	Students compute with very large and very small numbers, positive integers, decimals, and fractions and understand the relationship between decimals, fractions, and percents. They understand the relative magnitudes of numbers.
GRADE LEVEL EXPECTATION	1.2.	Interpret percents as a part of a hundred; find decimal and percent equivalents for common fractions and explain why they represent the same value; compute a given percent of a whole number. What is 40 percent of 250? (CST released test question, 2004)
CONTENT STANDARD	CA.NS.	Number Sense
PERFORMANCE STANDARD	2.0.	Students perform calculations and solve problems involving addition, subtraction, and simple multiplication and division of fractions and decimals.
GRADE LEVEL EXPECTATION	2.3.	Solve simple problems, including ones arising in concrete situations, involving the addition and subtraction of fractions and mixed numbers (like and unlike denominators of 20 or less), and express answers in the simplest form.
CONTENT STANDARD	CA.MR.	Mathematical Reasoning
PERFORMANCE STANDARD	2.0.	Students use strategies, skills, and concepts in finding solutions.
GRADE LEVEL EXPECTATION	2.4.	Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.
GRADE LEVEL EXPECTATION	2.6.	Make precise calculations and check the validity of the results from the context of the problem.
CONTENT STANDARD	CA.MR.	Mathematical Reasoning
PERFORMANCE STANDARD	3.0.	Students move beyond a particular problem by generalizing to other situations.
GRADE LEVEL EXPECTATION	3.1.	Evaluate the reasonableness of the solution in the context of the original situation.
GRADE LEVEL EXPECTATION	3.2.	Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems.

CenterStage(R) Math, Grade 5: Geometry Center

Summary: This center addresses the following topics: naming a 2-D figure given information about its properties; representing and visualizing two- and three-dimensional shapes and figures; identifying and modeling translations, reflections, and/or rotations; finding the surface area and volume of 3-D figures; finding the area and perimeter of polygons; identifying and drawing congruent and similar figures; and finding the lines of symmetry in plane figures. This center engages and motivates every student through developmentally appropriate activities that support the math curriculum with hands-on activities and manipulatives, allowing for collaborative and independent work. Click on the blue link above to view and read about the program components and manipulatives. (42252)

California Content Standards
Mathematics
Grade: 5

CONTENT STANDARD	CA.MG.	Measurement and Geometry
PERFORMANCE STANDARD	1.0.	Students understand and compute the volumes and areas of simple objects.
GRADE LEVEL EXPECTATION	1.1.	Derive and use the formula for the area of a triangle and of a parallelogram by comparing it with the formula for the area of a rectangle (i.e., two of the same triangles make a parallelogram with twice the area; a parallelogram is compared with a rectangle of the same area by pasting and cutting a right triangle on the parallelogram).
GRADE LEVEL EXPECTATION	1.2.	Construct a cube and rectangular box from two-dimensional patterns and use these patterns to compute the surface area for these objects.
CONTENT STANDARD	CA.MG.	Measurement and Geometry
PERFORMANCE STANDARD	2.0.	Students identify, describe, and classify the properties of, and the relationships between, plane and solid geometric figures.
GRADE LEVEL	2.1.	Measure, identify, and draw angles, perpendicular and parallel lines, rectangles, and triangles by using

EXPECTATION		appropriate tools (e.g., straightedge, ruler, compass, protractor, drawing software).
GRADE LEVEL EXPECTATION	2.2.	Know that the sum of the angles of any triangle is 180 degrees and the sum of the angles of any quadrilateral is 360 degrees and use this information to solve problems.
CONTENT STANDARD	CA.MR.	Mathematical Reasoning
PERFORMANCE STANDARD	2.0.	Students use strategies, skills, and concepts in finding solutions.
GRADE LEVEL EXPECTATION	2.4.	Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.
GRADE LEVEL EXPECTATION	2.6.	Make precise calculations and check the validity of the results from the context of the problem.
CONTENT STANDARD	CA.MR.	Mathematical Reasoning
PERFORMANCE STANDARD	3.0.	Students move beyond a particular problem by generalizing to other situations.
GRADE LEVEL EXPECTATION	3.1.	Evaluate the reasonableness of the solution in the context of the original situation.
GRADE LEVEL EXPECTATION	3.2.	Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems.

CenterStage(R) Math, Grade 5: Measurement Center

Summary: This center addresses the following topics: identifying the appropriate unit of length; converting units of weight; estimating, measuring, and comparing weight and capacity in customary units; and adding and/or subtracting customary and metric units of capacity. This center engages and motivates every student through developmentally appropriate activities that support the math curriculum with hands-on activities and manipulatives, allowing for collaborative and independent work. Click on the blue link above to view and read about the program components and manipulatives. (42253)

California Content Standards Mathematics Grade: 5

CONTENT STANDARD	CA.MG.	Measurement and Geometry
PERFORMANCE STANDARD	1.0.	Students understand and compute the volumes and areas of simple objects.
GRADE LEVEL EXPECTATION	1.4.	Differentiate between, and use appropriate units of measures for, two- and three-dimensional objects (i.e., find the perimeter, area, volume).
CONTENT STANDARD	CA.MR.	Mathematical Reasoning
PERFORMANCE STANDARD	2.0.	Students use strategies, skills, and concepts in finding solutions.
GRADE LEVEL EXPECTATION	2.4.	Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.
GRADE LEVEL EXPECTATION	2.6.	Make precise calculations and check the validity of the results from the context of the problem.
CONTENT STANDARD	CA.MR.	Mathematical Reasoning
PERFORMANCE STANDARD	3.0.	Students move beyond a particular problem by generalizing to other situations.
GRADE LEVEL EXPECTATION	3.1.	Evaluate the reasonableness of the solution in the context of the original situation.
GRADE LEVEL EXPECTATION	3.2.	Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems.

CenterStage(R) Math, Grade 5: Probability & Statistics Center

Summary: This center addresses the following topics: making and interpreting circle graphs using common fractions and/or percents; using a systematic way to conduct a simple survey and/or gather data; finding the number of possible combinations of items and displaying them in an organized way; using experimental results to make predictions; and finding the minimum, maximum, mean, median, mode, and range of a set of data. This center engages and motivates

every student through developmentally appropriate activities that support the math curriculum with hands-on activities and manipulatives, allowing for collaborative and independent work. Click on the blue link above to view and read about the program components and manipulatives. (42254)

California Content Standards
Mathematics
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CONTENT STANDARD	CA.SDAP.	Statistics, Data Analysis, and Probability
PERFORMANCE STANDARD	1.0.	Students display, analyze, compare, and interpret different data sets, including data sets of different sizes.
GRADE LEVEL EXPECTATION	1.1.	Know the concepts of mean, median, and mode; compute and compare simple examples to show that they may differ.
GRADE LEVEL EXPECTATION	1.2.	Organize and display single-variable data in appropriate graphs and representations (e.g., histogram, circle graphs) and explain which types of graphs are appropriate for various data sets.
GRADE LEVEL EXPECTATION	1.3.	Use fractions and percentages to compare data sets of different sizes.
GRADE LEVEL EXPECTATION	1.4.	Identify ordered pairs of data from a graph and interpret the meaning of the data in terms of the situation depicted by the graph.
CONTENT STANDARD	CA.MR.	Mathematical Reasoning
PERFORMANCE STANDARD	2.0.	Students use strategies, skills, and concepts in finding solutions.
GRADE LEVEL EXPECTATION	2.4.	Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.
GRADE LEVEL EXPECTATION	2.6.	Make precise calculations and check the validity of the results from the context of the problem.
CONTENT STANDARD	CA.MR.	Mathematical Reasoning
PERFORMANCE STANDARD	3.0.	Students move beyond a particular problem by generalizing to other situations.
GRADE LEVEL EXPECTATION	3.1.	Evaluate the reasonableness of the solution in the context of the original situation.
GRADE LEVEL EXPECTATION	3.2.	Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems.