



Trinity Episcopal School

Galveston, Texas

Mathematics

Overview

Mathematics as a discipline helps people think in abstract sequential ways and to apply that thinking to real-world problems. At Trinity Episcopal School we want our students to become confident problem solvers. We recognize that some aspects of mathematical learning require drill and repetition in order to be acquired, and that problem solving requires both rote skill as well as disciplined thought. Our students learn that alternate algorithms may be used to find the same answers. Alternate algorithms are valuable because they promote conceptual understanding and mental flexibility, both of which are essential for effective problem solving. A key cognitive skill is the translation of prose descriptions of problems into the language of operations. From the introduction of number sense to the use of algebraic equations, our curriculum is carefully sequenced in level of difficulty and spiraled to provide enough challenge and repetition without being dull. The stress throughout the math curriculum is on how math is used for practical purposes. Being able to set up a problem mathematically may require the ability to perform various types of measurements, to organize data graphically, and always to think logically. We strive to make Trinity's problem-based approach to Mathematics both challenging and enjoyable.

Student Objectives

begins:

number sense

count to 100 and higher using different degrees of skip counting	PK4-yr-olds
convert between mixed numbers with fractions and numbers with decimals	3 rd Grade
utilize negative numbers as a way of expressing numbers smaller than 0	4 th Grade
use exponents including scientific notation	4 th Grade

computation

add and subtract whole numbers	Kindergarten
multiply and divide whole numbers	2 nd Grade
perform operations using fractions and decimals	4 th Grade

express percentages, ratios, and proportions 4th Grade

algebra and functions

identify and describe number patterns Kindergarten

solve equations with variables and using order of operations 3rd Grade

place coordinates correctly on a graph 2nd Grade

geometry

identify and classify basic shapes, lines, and angles PK3-yr-olds

perform transformations 4th Grade

describe and use the Pythagorean Theorem 6th Grade

measurement

measure time, length, temperature, mass, and money in different units Kindergarten

measure area and volume 1st Grade

convert standard measures 2nd Grade

data analysis and probability

create and use tables and graphs PK3-yr-olds

describe and demonstrate probability 2nd Grade

measure central tendency in different ways 2nd Grade

problem solving

demonstrate strategy and reasoning 1st Grade

check results and calculations 1st Grade

use both exact and approximate solutions Kindergarten