

Westwood Public Schools Mathematics Learning Standards: Grade 4

Problem Solving:

- Select and use a variety of strategies to estimate quantities, measurements and reasonableness of answers.
- Recognize real world connections of math concepts and operations.
- Select and use appropriate operation(s) to solve a problem.
- Use multiple strategies including conventional algorithms, pictures, models, words, etc. to interpret and solve math problems.
- Explain problem-solving strategies through discussion, writing, pictures, models, etc.

Number Sense and Operations	Patterns, Relations and Algebra	Geometry	Measurement	Data Analysis, Statistics and Probability
Represent whole numbers through 100,000 using various forms, including expanded notation	Create, describe, extend and explain numeric and geometric patterns	Describe, compare and classify two and three dimensional shapes using appropriate vocabulary	Estimate and select appropriate units of measure for length, area weight, volume etc.	Organize, classify, represent and interpret data using a variety of methods
Demonstrate understanding of fractions as parts of whole, collections and the number line	Use symbols or letter variables to represent unknowns	Demonstrate understanding of symmetry	Convert simple units of measurement (ie: hours to minutes, cents to dollars, inches to feet)	Make predictions, inferences and conclusions from organized data
Demonstrate understanding of equivalent fractions, mixed numbers, and decimals	Solve problems involving proportional relationships including map interpretation	Demonstrate understanding of intersecting, parallel and perpendicular lines	Estimate and find area and perimeter of two dimensional shapes using diagrams, models and measurements	Represent the possible outcomes for a simple probability situation
Read, name and write decimals between zero and one up to hundredths	Determine how change in one variable affects a second (input, output)	Use ordered pairs to locate, place and identify points (first quadrant)	Identify and use appropriate measurement tools (Metric and English)	
Use objects and models to add and subtract common fractions	Skip count by all single digit numbers (forward and backwards)	Identify angles as acute, right or obtuse		
Understand and apply mathematical language (odds, evens, factors, multiples, squares)				

Westwood Public Schools Mathematics Learning Standards: Grade 4 (page two)

Demonstrate understanding of multiplication and division, including inverse relationship between them				
Select, use, and explain the commutative, associative, and identity properties				
Know multiplication facts through 12x12 and related division facts. Use facts to solve related problems (clusters)				
Multiply (up to three digits by two digits) and divide (up to three digits by one digit) accurately and efficiently				
Round whole numbers through 100,000				
Make change by counting on for amounts greater than \$1.00				

