

Mathematics Vocabulary List

*This list is compiled from the grade level math TEKS/SE's. Additional words may be added as needed for mathematics instruction.

Kindergarten

More than	same as	less than	set
Before	after	first, second, third, etc.	
Whole	equal	half	addition
Subtraction	prediction	next	over
Under	above	below	alike
Different	describe	identify	compare
Attributes	two-dimensional	three-dimensional	circle
Triangle	rectangle	square	length
Longer	shorter	area	capacity
Weight	mass	temperature	duration
Sequence	day	week	month
Graph	plan	problem solving	pattern

Grade 1

Whole number	less than	greater than	equal to
Set	describe	compare	order
Penny	nickel	dime	quarter
Addition	subtraction	pattern	prediction
Two	five	ten	odd
Even	place value	two-dimensional	three-dimensional
Circle	triangle	rectangle	square
Sphere	rectangular prism	cube	cylinder
Cone	attribute	nonstandard unit	length
Longest	shortest	relationship	area
Capacity	weight/mass	temperature	duration
Hour	half-hour	analog	digital
Data	picture graph	bar graph	real-object graph
Plan	problem solving	evaluating	

Grade 2

Hundreds	tens	ones	whole number
Place value	number	symbol	fraction
Fractional part	addition	subtraction	two-digit
Regrouping	penny	dime	nickel
Quarter	dollar	cent symbol	dollar symbol
Decimal point	equivalent set	concrete object	pattern
Relationship	fact family	repeating	additive pattern
Prediction	attributes	vertices	faces
Edges	sides	alike	different
Length	area	weight/mass	capacity
Metric	customary	two-dimensional	non-standard unit
Standard unit	estimate	Fahrenheit	analog
Digital	second	minute	hour
Picture graph	bar-type graph	interpret	conclusion
Problem solving	evaluating	reasonableness	less than
Greater than	equal to	expanded form	plain shapes-2D
Solid shapes-3D	spheres	cones	cylinders
Prisms	pyramids		

Grade 3

Place value	compare	order	whole numbers
Value	fraction names	one-fourth	one-half
one-third	(one-? through 12)	addition	subtraction
multiplication	division	estimate	reasonableness
rounding	strategies	geometric patterns	patterns
related	fact families	paired numbers	congruence
symmetry	two-dimensional	properties	relationship
halves	fourths	capacity	length
area	weight/mass	volume	perimeter
cubic units	three-dimensional	thermometer	temperature
analog	digital	pictographs	bar graphs
more likely than	less likely than	equally likely as	problem solving
evaluation	reasonableness	sum	difference
quotient	product		

Grade 4

Place value	numbers	decimals	tenths
Hundredths	equivalent fractions	fraction quantities	multiplication
Division	array	divisor	dividend
Tens	hundreds	thousands	rounding/estimate
Relationship	pattern	strategy	fact family
Attributes	geometric figures	right angle	acute angle
Obtuse angle	parallel	intersecting	perpendicular
Two-dimensional	three-dimensional	congruence	symmetry
Translations	reflections	rotations	halves
Fourths	tenths	length	perimeter
Area	capacity/volume	weight/mass	metric unit
Customary unit	standard cube unit	Fahrenheit	Celsius
Thermometer	temperature	elapsed time	generalization
Bar graph	problem solving	evaluating	reasonableness
Strategy	observation	sum	difference
Product	quotient	factor	

Grade 5

Place value	whole number	decimal	compare
Order	thousandths	fractions	mixed number
Improper fraction	equivalent	common denominator	tenths
Hundredths	common factors	estimate	reasonableness
Strategies	generalizations	patterns	relationships
List	table	graph	diagram
Prime number	composite number	factor pairs	equation
Critical attribute	parallel	perpendicular	congruent
Two-dimensional	three-dimensional	transformation	translations
Reflections	coordinate grid	ordered pairs	length
Perimeter	area	capacity/volume	weight/mass
Conversions	metric	customary	perimeter
Formula	Fahrenheit	Celsius	elapsed time
Prediction	possible outcome	probability	interpreting
Line graph	characteristics	median	mode
Range	problem solving	evaluating	reasonableness
Strategy	solution		

Grade 6

Rational number	equivalent forms	non-negative integers	
Prime factorization	exponents	positive integer	common factor
Greatest common factor		set	multiples
Common multiple	least common multiple	justify	fraction
Decimal	equivalent ratio	rate	estimate
Rounding	reasonableness	expressions	direct proportional relationship
Ratio	variable	conversion	arithmetic sequence
Perimeter	area	formula	linear relationship
Angle	polygon	circle	acute
Obtuse	right	triangle	quadrilateral
Radius	diameter	circumference	coordinate geometry
Two-dimension	coordinate plane	estimation	length
Perimeter	area	time	temperature
Volume	weight	convert	customary
Metric	relationship	experimental/theoretical	probability
Prediction	list diagram	tree diagram	analyze
Line plot	line graph	bar graph	stem plot
Leaf plot	stem plot	mean	median
Mode	Range	circle graph	data
problem solving	Strategy	systematic guessing	effectiveness
logical reasoning	conjectures	verify	equation
evaluate	model	fraction	order of operations
percent	valid	identify	vertical
horizontal	quadrant	quantity	value
<u>Not</u>	simplify the expression		simplify the fraction

Grade 7

Integer	positive rational numbers	conversion	square root
Geometric model justify	fraction	decimal	
Model	algorithm	unit rate	ratio
Proportional relationship		numerical expression	order of operation
Exponents	reasonableness	similarity	
Unit cost	related measurement unit formula		unit conversion
Perimeter	area	circumference	volume
Scaling	arithmetic sequence	rate of change	equation
Formulate	two-dimensional	three-dimensional	classify
Complementary	supplementary	triangle	quadrilateral
Pyramid	cone	prism	cylinder
Critical attribute	similarity	ordered pairs of integers	
Reflections	horizontal axis	vertical axis	translations
Coordinate plane net	surface area	length	Perimeter
prism	cylinder	Experimental probability	theoretical probability
Independent event	interpretation	line plot	line graph
Bar graph	stem and leaf plot	circle graph	Venn diagram
Inference	analysis	mean	median
Mode	range	problem solving	evaluate
Strategy	effectiveness	conjecture	validate
Ascending	Descending	whole number	square
real number system	algebraic		

Grade 8

Rational number	integer	percent	positive fraction
Negative fraction	decimal	proportional relationship	
Scientific notation	negative exponent	justify	evaluate
Reasonableness	conversion	linear relationship	similarity
Rate	arithmetic sequence	constant rate of change	
Transformational geometry	spatial sense	dilations	enlargements
Reductions	reflections	translations	
Perspectives	Pythagorean Theorem		coordinate plane
Lateral area	total surface area	prism	pyramid
Cylinder	nets	sphere	cone
Volume	dependent event	independent event	
theoretical probabilities	experimental results	simulate	variability
central tendency	scatterplot	line plot	line graph
stem and leaf plot	circle graph	bar graph	box and whisker plot
histogram	Venn diagram	statistical data	sampling
validity	inference	data analysis	problem solving
logical reasoning	conjectures	scale factor	square root
real number	constant factor	two-dimensional	three-dimensional
non-proportional linear relationship		verbal description	algebraic equation
algebraic expression	perimeter	area	trends

Algebra I

Independent quantities	dependent quantities	functional relationships
Linear parent functions	quadratic parent functions	mathematical domains
Mathematical ranges	reasonable domain	range values
Scatterplot	critical judgment	unknowns
Variables	patterns	generalizations
Function values	polynomial expressions	transform equations
Factor	commutative property	associative property
Distributive property	equation notation	function notation
Linear function	domain	range
Slope	intercepts	parameter
y-intercept	Direct variation	proportional change
quadratic function	horizontal intercept (x-intercept)	inverse variation
exponential growth and decay		

Algebra II

Domain values	range values	continuous situations
Discrete situations	equations	inequalities
Factoring	properties of exponents	complex numbers
Parent functions	linear	quadratic
Exponential	logarithmic	absolute value
Square root	reciprocal	parameter changes
Inverse	conic sections	algebraic descriptions
Tabular descriptions	graphical descriptions	verbal descriptions
Discriminant	quadratic formula	quotients of polynomials
Asymptotic behavior	direct formula	inverse variation
Logarithms	asymptotes	polynomials

Geometry

Axiomatic system	postulates	logical reasoning
Theorems	Euclidean geometries	non-Euclidean geometries
Conjectures	coordinate	transformational
Conditional statement	converse	inverse
Contrapositive	inductive reasoning	deductive reasoning
Properties of polygons	ratios	angle relationships
Transformations	compositions	tessellations
Special right triangles	Pythagorean triples	orthographic views
Isometric views	coordinate systems	slopes
Equations of lines	sectors	arc lengths
Proportional reasoning	Pythagorean Theorem	attributes of polygons
Attributes of circles	polyhedral	congruence transformations
Triangle congruence relationships	triangle similarity relationships	
Trigonometric ratios	Pythagorean triples	x-intercept
y-intercept	hypothesis	conclusions

Pre-Calculus

Polynomial	rational	power
Exponential	logarithmic	trigonometric
Piecewise-defined functions	continuity	end behavior
Asymptotes	limits	logarithmic properties
Trigonometric identities	exponential properties	trigonometric functions
Sine	cosine	tangent
Polynomial functions	regression	Law of Sines
Law of Cosines	radian measure	sums
Binomial expansion	parametric forms of functions	
Rectangular forms of functions	vectors	magnitude
Direction	stretch	compression (shrink)
VT-vertical translation	HT-horizontal translation	std position
Reference	period	amplitude
Complex numbers	Pascal's triangle	fractionals
Permutation	combinations	arithmetic series/sequence
Geometric series/sequence	discrete	continuous
Function notation	composites	inverses
Domain	range	critical points
Increasing function	decreasing function	SET notation
Interval notation	restrictions on domain	Odd function
Even function	zero	x-intercepts
Roots	local extremes	maximumpnt

Minimumpt

jump discontinuity

removable discontinuity

Infinite discontinuity

parent functions

linear

Quadratic

cubic

square root

Cube root

absolute value

exponential growth/decay