#### **High School Vocabulary Words**

Algebra I Math Words			
accuracy	explicit	functional notation	recursive
approximate solution	exponential expressions	geometric sequence	roots/zeros of a function
arithmetic sequence	function, absolute value	Inference	slope-intercept form (equation)
coefficient	function, exponential	inverse variation	standard form (equation)
correlation of data function, linear point		point-slope form (linear equation)	systems of equations
domain & range	function, piecewise	polynomials	systems of inequalities
exact solution	function, quadratic	reasonableness	univariate & bivariate data



Geometry Math Words			
altitude	converse	inductive reasoning	proof/prove
apothem	counterexample	inverse	ray
axiom	cross section	midpoint	superimpose
bisector	deductive reasoning	point symmetry	trigonometric ratios
circle (arc length, area of a sector, chord, secant, tangent)	degrees of precision of measurement	polygon	undefined terms
composition of transformations	equation of a circle	polyhedra	
contrapositive	geometric properties of a triangle (orthocenter, centroid, circumventer, median)	postulate	
Algebra II Math Words			
binomial Theorem	confidence interval	logarithmic functions	permutations
combinations	cubic polynomial functions	logarithms (natural, common)	polynomial division
complex numbers	curve fitting	margin of error	quadratic functions (vertex form and factored form)
complex roots	fundamental counting principle	measures of variability (range, interquartile range, standard deviation, symmetry)	transformations on functions
compound events	imaginary numbers	normal distribution	
conditional probability	infinite sums	partial sums	



Association of Educational Service Districts

Supporting Educational Communities in Washington State

#### Washington Educational Service Districts

ESD 101, Spokane ESD 105, Yakima ESD 112, Vancouver ESD 113, Olympia **ESD 114, Bremerton Puget Sound ESD 121, Renton** ESD 123, Pasco North Central ESD 171, Wenatchee Northwest ESD 189, Anacortes

*The ESD Assistant Superintendents extend a thank you to the Washington State math and science coordinators—along with representatives from* Marzano Research Labs—for their work in developing a standardsaligned academic vocabulary for school districts to consider as support to their instructional materials.



1601 R Avenue • Anacortes, WA 98221 • (360) 299-4000 www.nwesd.org

# **Mathematics**



# Math Vocabulary

"Teaching specific terms in a specific way is probably the strongest action a teacher can take to ensure that students have the academic background knowledge they need to understand the content they will encounter in school" Marzano & Pickering, 2005, p. 1).

Building Academic Vocabulary:

# Northwest Educational Service District 189 Together We Can

he following tables are examples of what a Washington State school district might produce using the state mathematics standards and other vocabulary lists. It is recommended that each district create its own list based on learning goals and adopted instructional materials.



## **K-2 Vocabulary Words**

	Kindergarte	en Math Words	
above	corner	near	triangle
behind	day	number	under
below	hour	outside	week
between	front	pattern	year
calendar	inside	rectangle	zero
circle	left	right	
clock	minute	size	
coin	money	square	
	1st Grade	Math Words	
add	extend	lists	solve
addition	graph	minus	subtract
chart	greater than	number line	subtraction
compare	greatest	order	sum
digit	grouping	pound	table
double	height	predict	temperature
equal	least	rhombus	whole number
equation	length	set	width
	2nd Grade	e Math Words	
chance	equation	grid	second (time)
cube	estimate	hundreds	side
decrease	face	inch	symmetry
difference	fewer than	increase	tens
direction	fewest	numeral	thousands
distance	foot (measurement)	ones	value
edge	fraction	ruler	



## **3-5 Vocabulary Words**

	3rd Grade Mat	th Words	
angle	angle explain multiplication		regrouping
Celsius	Celsius factor numerator		rounding
commutative property	Fahrenheit	parallel	strategy
denominator	graph (pictograph, frequency table, line plot, bar graph)	perimeter	vertex/vertices
division	intersect	perpendicular	weight
equality	line	product	
equivalent	line segment	quadrilateral	
estimate	multiple	quotient	
	4th Grade Mat	th Words	
algorithm	coordinate	likely	remainder
area	elapsed time	median	simplify
array	formula	mixed number	square units
associative property	hundredths	mode	tenths
common denominator	impossible	ordered pair (first quadrant)	verify
congruent	inequality	probability	
convert	inverse (operations)	range	
decimal	justify	reasonable	
	5th Grade Mat	th Words	
acute	geometric patterns	line of symmetry	rule
algebraic expressions	graph, line	mean	scalene
average	greatest common factor	numerical patterns	two dimensional
classify	improper fraction	obtuse	variable
distributive property	isosceles	parallelogram	
equilateral	least common multiple	prime number	
evaluate expression	line graph	proper fraction	

approximate axis circumference complement (probability) conclude/conclusio conjecture construct absolute value approximate bias cones cylinder exponent

adjacent angles, complementary angles, supplementary cluster

consecutive

event, dependent

event, independent

## **6-8 Vocabulary Words**

6th Grade Math Words			
diameter	percent	ratio	
event	рі	relationship/relation	
experimental probability	prism	solution	
frequency	proportion	surface area	
integer	pyramid	theoretical probability	
interval	radius	three dimensional	
order of operations	rate		
	event experimental probability frequency integer interval	eventpiexperimental probabilityprismfrequencyproportionintegerpyramidintervalradius	

#### 7th Grade Math Words

graph (histogram, circle graph)	proportional	scale factor
linear equation	quadrant	similar figures
measures of center (mean, median, mode)	rational number	slope
metric system	sample space	stem and leaf
outlier	scale (proportion)	U.S. Customary
prime factorization	scale drawing	variability



	oth Grade Math Words				
	event, mutually exclusive	intersect	quartile		
	function	irrational number	radical		
	graph (box and whisker, scatter, Venn diagram)	law of exponents	relevant/irrelevant		
	hypotenuse	linear inequality	square root		
	inequality	linear relationship	translations (dilations, translations, reflections, rotations)		
t	intercept	perfect squares	trend line		
nt	interquartile	Pythagorean Theorem	transversal		

#### 8th Grade Math Words