Academic Vocabulary

CONTENT BUILDER FOR THE PLC

MATH
GRADE 5

Representation and Comparison of Whole Numbers and Decimals

5.2 **Number and operations.** The student applies mathematical process standards to represent, compare, and order positive rational numbers and understand relationships as related to place value.

		important words for concept development	
subcluster	standards	new to grade level	previously introduced
Representation	5.2(A)	thousandths	billion expanded notation* hundreds/hundredths million place value tens/tenths thousands
Comparison	5.2(B)	thousandths	< (less than)* = (equal to)* > (greater than)* greatest to least inequality* least to greatest*

Whole Number Operations

5.3 **Number and operations.** The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy.

5.4 **Algebraic reasoning.** The student applies mathematical process standards to develop concepts of expressions and equations.

		important words for concept development	
subcluster	**standards**	**new to grade level**	**previously introduced**
Estimation	5.3(A)		compatible number estimate* estimation language (about, a little more/less than, close to, approximately) round
Addition/ Subtraction	5.3(K)		difference sum
Multiplication/ Division	5.3(B), 5.3(C)		dividend factor divisible* product* divisor quotient
All Operations	5.4(B)		unknown quantity/variable
Numerical Expressions	5.4(E), 5.4(F)	bracket parentheses* equivalent expression* simplify order of operations	

Decimals Operations

5.2 **Number and operations.** The student applies mathematical process standards to represent, compare, and order positive rational numbers and understand relationships as related to place value.

5.3 **Number and operations.** The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy.

		important words for concept development	
subcluster	standards	new to grade level	previously introduced
Estimation	5.2(C), 5.3(A)		compatible number estimate* estimation language (about, a little more/less than, close to, approximately) round*
Addition/ Subtraction	5.3(K)		difference sum
Multiplication	5.3(D), 5.3(E)		(area) model* factor product
Division	5.3(F), 5.3(G)		(area) model* dividend* divisor quotient*

All Operations with Fractions

5.3 **Number and operations.** The student applies mathematical process standards to develop and use strategies and methods for positive rational number computations in order to solve problems with efficiency and accuracy.

5.4 **Algebraic reasoning.** The student applies mathematical process standards to develop concepts of expressions and equations.

		important words for concept development			
subcluster	standards	new to grade level		previously introduced	
Estimation	5.3(A)			benchmark fraction estimate* estimation language (about, a little more/less than, close to, approximately)	
Addition/ Subtraction	5.3(H), 5.3(K), 5.4(A)	common denominator composite number* improper fraction	mixed number prime number*	denominator difference equal parts/equal shares equivalent fraction	factor pairs* numerator simplified form sum
Multiplication	5.3(I)			(area) model* factor product	
Division	5.3(J), 5.3(L)			(area) model* dividend division divisor	equal parts*/equal shares quotient unit fraction

Graphing on Coordinate Plane

5.4 **Algebraic reasoning.** The student applies mathematical process standards to develop concepts of expressions and equations.

5.8 **Geometry and measurement.** The student applies mathematical process standards to identify locations on a coordinate plane.

		important words for concept development		
subcluster	standards	new to grade level		previously introduced
Coordinate Plane	5.8(A), 5.8(B), 5.8(C)	axis/axes coordinate* coordinate plane/ grid*/graph* ordered pair* origin (0, 0)* point* quadrant	to the right/up from (directional language/ translation from given points)* *x*-axis* *x*-coordinate *y*-axis* *y*-coordinate	input-output table north/east*/south*/west* vertex/vertices*
Graphing Numerical Patterns	5.4(C), 5.4(D)	*x*-coordinate* *x*-values* *y*-coordinate* *y*-values*		additive pattern* numerical pattern* graph* rule* input-output table table* multiplicative pattern*

Geometry and Measurement

5.4 **Algebraic reasoning.** The student applies mathematical process standards to develop concepts of expressions and equations.

5.5 **Geometry and measurement.** The student applies mathematical process standards to classify two-dimensional figures by attributes and properties.

5.6 **Geometry and measurement**. The student applies mathematical process standards to understand, recognize, and quantify volume.

5.7 **Geometry and measurement.** The student applies mathematical process standards to select appropriate units, strategies, and tools to solve problems involving measurement.

		important words for concept development			
subcluster	standards	new to grade level		previously introduced	
Two-Dimensional Relationships	5.5(A)	isosceles*, equilateral*, scalene* triangle		congruent parallel/perpendicular lines polygon*/rhombus*/pentagon*/square*/quadrilateral*/ parallelogram*/rectangle*/trapezoid* right*/obtuse*/acute* angle vertex/vertices	
Perimeter/Area/ Volume	5.4(G), 5.4(H), 5.6(A), 5.6(B)	area of the base* cubic unit formulas (volume): • V= l x w x h • V = s x s x s (cube) • V = Bh	height* number of layers volume*	area* dimensions* edge*/side length length*	perimeter* rectangular prism* square unit* width*
Conversions	5.7(A)			customary (mile/yard/feet/inch; gallon/quart/pint/cup/fluid ounce; ton/pound/ounce) metric (kilometer/meter/centimeter/millimeter; liter/milliliter; kilogram/gram/milligram)	

Data Analysis

5.9 **Data analysis.** The student applies mathematical process standards to solve problems by collecting, organizing, displaying, and interpreting data.

		important words for concept development		
subcluster	standards	new to grade level	previously introduced	
Representation	5.9(A), 5.9(B)	line plot* scatterplot*	bar graph* data* dot plot*	frequency table scaled intervals stem-and-leaf plot*
Interpretation	5.9(C)	scatterplot	comparative language (more than*/less than/ equal to, sum*/difference*, least*/most*, greatest*) joining/separating/comparing	

Personal Financial Literacy

5.10 **Personal financial literacy.** The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security.

		important words for concept development		
subcluster	standards	new to grade level		previously introduced
Budgets	5.10(C), 5.10(D), 5.10(E), 5.10(F)	balanced budget* budget* check credit card	debit card electronic payment financial records net income*	expense* income*
Taxes	5.10(A), 5.10(B)	deduction* employer/employee gross income* income tax* net income*	payroll tax* property tax* sales tax* wages*	retail cost/product*