MATH / 6th Grade

Expressions & Equations

DIGITAL GAMES	
Write and evaluate numerical expressions involving whole-number exponents	CCSS.MATH.6.EE.A.1
Write, read, and evaluate expressions in which letters stand for numbers	CCSS.MATH.6.EE.A.2
Apply the properties of operations to generate equivalent expressions	CCSS.MATH.6.EE.A.3
Identify when two expressions are equivalent	CCSS.MATH.6.EE.A.4
Use substitution to determine whether a given number in a specified set makes an equation or inequality true.	CCSS.MATH.6.EE.B.5
Understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set	CCSS.MATH.6.EE.B.6
Solve real-world and mathematical problems by writing and solving equations of the form x + p = q and px = q	CCSS.MATH.6.EE.B.7
Recognize that inequalities of the form x > c or x < c have infinitely many solutions; represent solutions of such inequalities on number line diagrams	CCSS.MATH.6.EE.B.8
Use variables to represent two quantities in a real-world problem that change in relationship to one another; analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation	CCSS.MATH.6.EE.C.9
KIT-REQUIRED GAME	
Write and evaluate expressions and equations with a single variable	CCSS.MATH.6.EE

Geometry

DIGITAL GAMES	
Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes	CCSS.MATH.6.G.A.1
Understand and apply the formulas v = l w h and v = b h to find volumes of right rectangular prisms	CCSS.MATH.6.G.A.2
Draw and measure polygons in the coordinate plane given coordinates for the vertices	CCSS.MATH.6.G.A.3
Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures	CCSS.MATH.6.G.A.4
KIT-REQUIRED GAME	
Find the volume and area of polygons and prisms	CCSS.MATH.6.G.A

The Number System

DIGITAL GAMES	
Interpret and compute quotients of fractions, including the division of fractions by fractions	CCSS.MATH.6.NS.A.1
Fluently divide multi-digit numbers using the standard algorithm	CCSS.MATH.6.NS.B.2
Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm	CCSS.MATH.6.NS.B.3
Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12	CCSS.MATH.6.NS.B.4
Understand that positive and negative numbers are used together to describe quantities having opposite directions or values in mathematical and real-life scenarios	CCSS.MATH.6.NS.C.5
Understand a rational number (positives and negatives) as a point on the number line	CCSS.MATH.6.NS.C.6
Understand ordering and absolute value of rational numbers	CCSS.MATH.6.NS.C.7
Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane; find distances between points with the same first coordinate or the same second coordinate	CCSS.MATH.6.NS.C.8
KIT-REQUIRED GAME	
Multiply and divide fractions by fractions	CCSS.MATH.6.NS

Ratios & Proportional Relationships

DIGITAL GAMES	
Use ratio language to describe a ratio relationship between two quantities	CCSS.MATH.6.RP.A.1
Understand the concept of a unit rate a/b associated with a ratio a:b with b ≠ 0, and use rate language in the context of a ratio relationship	CCSS.MATH.6.RP.A.2
Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations	CCSS.MATH.6.RP.A.3
KIT-REQUIRED GAME	
Understand and calculate ratios and rates	CCSS.MATH.6.RP.A

Statistics & Probability

DIGITAL GAMES	
Recognize a statistical question as one that anticipates variability in the data	CCSS.MATH.6.SP.A.1
Understand that data has a distribution which can be described by center, spread, and overall shape	CCSS.MATH.6.SP.A.2
Understand and recognize the difference between a measure of center and a measure of variation	CCSS.MATH.6.SP.A.3
Display numerical data using dot plots, histograms, and box plots	CCSS.MATH.6.SP.B.4
Summarize numerical data sets in relation to their context	CCSS.MATH.6.SP.B.5
KIT-REQUIRED GAMES	
Develop understanding of statistics and variability	CCSS.MATH.6.SP.A
Visualize data and data sets	CCSS.MATH.6.SP.B

VIEW ADDITIONAL RELATED GAMES