GRADE 6 ADV

SUMMER MATH SKILLS PLAN

Florida B.E.S.T. Standards for Math are broken down into three larger categories, with multiple standards for each category. Use this checklist to work on skills associated with each standard on IXL.com. Students can log in using their N# and SLApin. Each skill below is a direct link to IXL.

Please note the grade level of each skill in IXL. For each skill, work until to a SmartScore of at least 80 and record the final score on the checklist below. Each completed category will earn a casual day at the beginning of next school year!

NUMBER SENSE AND OPERATIONS AND ALGEBRAIC REASONING

STANDARD	7TH GRADE IXL SKILLS	SCORE
MA.7.NSO.1.1 Know and apply the Laws of Exponents to evaluate numerical expressions and generate equivalent numerical expressions, limited to whole-number exponents and rational number bases.	**J.1:** Understanding exponents (Search code BFA)	
	J.5: Exponents with decimal and fractional bases (Search code PFS)	
MA.7.NSO.1.2 Rewrite rational numbers in different but equivalent forms including fractions, mixed numbers, repeating decimals and percentages to solve mathematical and real-world problems.	**H.3:** Convert between decimals and fractions or mixed numbers (Search code 8XE)	
	O.2: Convert between percents, fractions, and decimals (Search code 2HW)	
MA.7.NSO.2.1 Solve mathematical problems using multi-step order of operations with rational numbers including grouping symbols, whole-number exponents and absolute value.	**B.25:** Evaluate numerical expressions involving integers (Search code 7YN)	
	J.7: Evaluate numerical expressions involving exponents (Search code D7P)	
MA.7.NSO.2.2 Add, subtract, multiply and divide rational numbers with procedural fluency.	**B.24:** Add, subtract, multiply, and divide integers (Search code B8A)	
	I.3: Add and subtract rational numbers (Search code GKU)	
	I.9: Multiply and divide rational numbers (Search code BXW)	
MA.7.NSO.2.3 Solve real-world problems involving any of the four operations with rational numbers.	**D.9:** Add, subtract, multiply, and divide decimals; word problems (Search code TGN)	
	P.1: Add, subtract, multiply, and divide money amounts; word problems (Search code HGN)	
MA.7.AR.1.1 Apply properties of operations to add and subtract linear expressions with rational coefficients.	**S.3:** Simplify expressions by combining like terms (Search code JJG)	
	S.7: Add and subtract linear expressions (Search code 6BT)	
MA.7.AR.1.2 Determine whether two linear expressions are equivalent.	**S.12:** Identify equivalent linear expressions (Search code DRB)	
MA.7.AR.2.1 Write and solve one-step inequalities in one variable within a mathematical context and represent solutions algebraically or graphically.	**U.4:** Solve one-step inequalities (Search code QWH)	
	U.5: Graph solutions to one-step inequalities (Search code TFK)	
MA.7.AR.2.2 Write and solve two-step equations in one variable within a mathematical or real-world context, where all terms are rational numbers.	**T.9:** Solve two-step equations (Search code QEB)	

NUMBER SENSE AND OPERATIONS AND ALGEBRAIC REASONING

STANDARD	6TH GRADE IXL SKILLS	SCORE
MA.6.NSO.3.1 Given a mathematical or real-world context, find the greatest common factor and least common multiple of two whole numbers.	**F.3:** Find all the factor pairs of a number (Search code VTM)	
	F.6: Greatest common factor (Search code AMB)	
	F.8: Least common multiple (Search code NGA)	
MA.6.NSO.3.4 Express composite whole numbers as a product of prime factors with natural number exponents.	**F.4:** Prime factorization (Search code 9CP)	
MA.6.NSO.3.5 Rewrite positive rational numbers in different but equivalent forms including fractions, terminating decimals and percentages.	**G.7:** Convert between decimals and fractions (Search code FL5)	
	U.4: Convert between percents, fractions, and decimals (Search code ZAV)	

PROPORTIONAL REASONING AND RELATIONSHIPS/DATA ANALYSIS AND PROBABILITY

STANDARD	7TH GRADE IXL SKILLS	SCORE
MA.7.AR.3.1 Apply previous understanding of percentages and ratios to solve multi-step real-world percent problems.	**O.9:** Solve percent equations: word problems (Search code JS6)	
	P.6: Percent of a number: tax, discount, and more (Search code SPN)	
	P.8: Find the percent: tax, discount, and more (Search code PBM)	
	P.12: Simple interest (Search code E7Y)	
	O.10: Percent of change (Search code BL7)	
MA.7.AR.3.2 Apply previous understanding of ratios to solve real-world problems involving proportions.	**L.11:** Solve proportions (Search code TDA)	
	L.12: Solve proportions: word problems (Search code WB7)	
MA.7.DP.1.1 Determine an appropriate measure of center or measure of variation to summarize numerical data, represented numerically or graphically, taking into consideration the context and any outliers.	**GG.13:** Box plots (Search code SKN)	
	HH.1: Calculate mean, median, mode, and range (Search code U2A)	
	HH.6: Calculate quartiles and interquartile range (Search code NZN)	
MA.7.DP.1.2 Given two numerical or graphical representations of data, use the measure(s) of center and measure(s) of variability to make comparisons, interpret results and draw conclusions about the two populations.	**HH.9:** Compare populations using measures of center and spread (Search code PCK)	
MA.7.DP.1.3 Given categorical data from a random sample, use proportional relationships to make predictions about a population.	**L.13:** Estimate population size using proportions (Search code 3C9)	
MA.7.DP.1.5 Given a real-world numerical or categorical data set, choose and create an appropriate graphical representation.	**GG.2:** Create line plots (Search code 22B)	
	GG.5: Create stem-and-leaf plots (Search code 8AP)	
	GG.9: Create histograms (Search code LGG)	
MA.7.DP.2.2 Given the probability of a chance event, interpret the likelihood of it occurring. Compare the probabilities of chance events.	**II.1:** Probability of simple events (Search code ZZB)	
MA.7.DP.2.3 Find the theoretical probability of an event related to a simple experiment.	**II.2:** Probability of simple events and opposite events (Search code F88)	
MA.7.DP.2.4 Use a simulation of a simple experiment to find experimental probabilities and compare them to theoretical probabilities.	**II.4:** Experimental probability (Search code 9AA)	

GEOMETRIC REASONING

STANDARD	7TH GRADE IXL SKILLS	SCORE
MA.7.GR.1.1 Apply formulas to find the areas of trapezoids, parallelograms and rhombi.	**BB.2:** Area of rectangles and parallelograms (Search code 62H)	
	BB.3: Area of triangles and trapezoids (Search code ENE)	
MA.7.GR.1.2 Solve mathematical or real-world problems involving the area of polygons or composite figures by decomposing them into triangles or quadrilaterals.	**BB.4:** Area and perimeter: word problems (Search code JFR)	
	BB.11: Area of compound figures made of rectangles (Search code NBA)	

STANDARD	6TH GRADE IXL SKILLS	SCORE
MA.6.GR.1.1 Extend previous understanding of the coordinate plane to plot rational number ordered pairs in all four quadrants and on both axes. Identify the x- or y-axis as the line of reflection when two ordered pairs have an opposite x-or y-coordinate.	**R.2:** Objects on a coordinate plane (Search code GFN)	
	R.3: Graph points on a coordinate plane (Search code VHQ)	
MA.6.GR.1.2 Find distances between ordered pairs, limited to the same x-coordinate or the same y-coordinate, represented on the coordinate plane.	**R.7:** Distance between two points (Search code A7P)	
MA.6.GR.1.3 Solve mathematical and real-world problems by plotting points on a coordinate plane, including finding the perimeter or area of a rectangle.	**R.9:** Area and perimeter of squares and rectangles on the coordinate plane (Search code UCD)	
MA.6.GR.2.3 Solve mathematical and real-world problems involving the volume of right rectangular prisms with positive rational number edge lengths using a visual model and a formula.	**HH.1:** Volume of cubes and rectangular prisms (Search code XHF)	
MA.6.GR.2.4 Given a mathematical or real-world context, find the surface area of right rectangular prisms and right rectangular pyramids using the figure's net.	**HH.4:** Surface area of cubes and rectangular prisms (Search code RMG)	