GRADE 7

SUMMER MATH SKILLS PLAN

Florida B.E.S.T. Standards for Math are broken down into four 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 listed below is a link to the skill on 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	IXL SKILL NUMBER, NAME, SEARCH CODE	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 BFA	
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 8XE	
	O.2: Convert between percents, fractions, and decimals 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 7YN	
	J.7: Evaluate numerical expressions involving exponents D7P	
MA.7.NSO.2.2 Add, subtract, multiply and divide rational numbers with procedural fluency.	**B.24:** Add, subtract, multiply, and divide integers B8A	
	I.3: Add and subtract rational numbers GKU	
	I.9: Mulitply and divide rational numbers BXU	
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 TGN	
	P.1: Add, subtract, multiply, and divide money amounts; word problems 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 JJG	
	S.7: Add and subtract linear expressions 6BT	
MA.7.AR.1.2 Determine whether two linear expressions are equivalent.	**S.12:** Identify equivalent linear expressions 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 QWH	
	U.5: Graph solutions to one-step inequalities 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 QEB	

PROPORTIONAL REASONING AND RELATIONSHIPS

STANDARD	IXL SKILL NUMBER, NAME, SEARCH CODE	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 JS6	
	P.6: Percent of a number: tax, discount, and more SPN	
	P.8: Find the percent: tax, discount, and more PBM	
	P.12: Simple interest E7Y	
	O.10: Percent of change BL7	
MA.7.AR.3.2 Apply previous understanding of ratios to solve real-world problems involving proportions.	**L.11:** Solve proportions TDA	
	L.12: Solve proportions: word problems WB7	
MA.7.AR.3.3 Solve mathematical and real-world problems involving the conversion of units across different measurement systems.	**Q.4:** Convert between customary and metric systems E8Z	
MA.7.AR.4.1 Determine whether two quantities have a proportional relationship by examining a table, graph or written description.	**N.3:** Identify proportional relationships by graphing AAN	
	N.6: Identify proportional relationships from graphs and equations NB5	
MA.7.AR.4.2 Determine the constant of proportionality within a mathematical or real-world context given a table, graph or written description of a proportional relationship.	**N.1:** Find the constant of proportionality from a table LKZ	
MA.7.AR.4.3 Given a mathematical or real-world context, graph proportional relationships from a table, equation or a written description.	**N.8:** Complete a table and graph a proportional relationship 5DR	
MA.7.AR.4.4 Given any representation of a proportional relationship, translate the representation to a written description, table or equation.	**N.2:** Write equations for proportional relationships from tables 6GU	
MA.7.AR.4.5 Solve real-world problems involving proportional relationships.	**N.10:** Interpret graphs of proportional relationships RMH	

GEOMETRIC REASONING

STANDARD	IXL SKILL NUMBER, NAME, SEARCH CODE	SCORE
MA.7.GR.1.1 Apply formulas to find the areas of trapezoids, parallelograms and rhombi.	**BB.2:** Area of rectangles and parallelograms 62H	
	B.3: Area of triangles and trapezoids 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 JFR	
	BB.11: Area of compound figures made of rectangles NBA	
MA.7.GR.1.3 Explore the proportional relationship between circumferences and diameters of circles. Apply a formula for the circumference of a circle to solve mathematical and real-world problems.	**BB.5:** Circumference of circles KS7	
MA.7.GR.1.4 Explore and apply a formula to find the area of a circle to solve mathematical and real-world problems.	**BB.6:** Area of circles YA8	
	BB.7: Circles: word problems P56	
MA.7.GR.1.5 Solve mathematical and real-world problems involving dimensions and areas of geometric figures, including scale drawings and scale factors.	**DD.2:** Scale drawings: word problems 84H	
MA.7.GR.2.1 Given a mathematical or real-world context, find the surface area of a right circular cylinder using the figure's net.	**CC.3:** Surface area of cylinders CYQ	
MA.7.GR.2.3 Solve mathematical and real-world problems involving volume of right circular cylinders.	**CC.8:** Volume of cylinders FHC	

DATA ANALYSIS AND PROBABILITY

STANDARD	IXL SKILL NUMBER, NAME, SEARCH CODE	SCORE
MA.7.DP1.1 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 SKN	
	HH.1: Calculate mean, median, mode, and range U2A	
	HH.6: Calculate quartiles and interquartile range NZN	
MA.7.DP1.2 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 PCK	
MA.7.DP1.4 Use proportional reasoning to construct, display and interpret data in circle graphs.	**GG.11:** Interpret circle graphs SGL	
MA.7.DP1.5 Given a real-world numerical or categorical data set, choose and create an appropriate graphical representation.	**GG.2:** Create line plots 22B	
	GG.5: Create stem-and-leaf plots 8AP	
	GG.9: Create histograms LGG	
MA.7.DP2.2 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 ZZB	
MA.7.DP2.3 Find the theoretical probability of an event related to a simple experiment.	**II.2:** Probability of simple events and opposite events F88	
MA.7.DP2.4 Use a simulation of a simple experiment to find experimental probabilities and compare them to theoretical probabilities.	**II.4:** Experimental probability 9AA	