Dear Parent,

I am pleased to tell you that we will be using a website called IXL in our classroom this year. IXL is a comprehensive learning program offering unlimited math and language arts practice problems in thousands of skills—all of which are aligned to New York Standards. One of the best things about IXL is that your child can access it from home, so you have a chance to see your child's progress!

To get your child started on your home computer, please follow these easy steps:

1. Go to https://www.IXL.com/signin/riverton

2. Enter your child's username and password in the upper right corner and click the button to sign in. (Note: If the username and password are not listed below, they will be provided separately.)

   Username_____

   Password__riverton_____

3. Click on the name of the subject (math) you'd like to work on at the top of the page and navigate to your child's grade level.

4. Please complete the following standards listed below by September 1st, 2017.

For Grade 6 going into grade 7:

Number theory

- **A.1** Prime or composite
- **A.2** Prime factorization
- **A.3** Multiplicative inverses
- **A.4** Divisibility rules
- **A.5** Greatest common factor
- **A.6** Least common multiple
- **A.7** GCF and LCM: word problems
- **A.8** Scientific notation
- **A.9** Compare numbers written in scientific notation
- **A.10** Classify numbers

Proportional relationships

- **K.1** Find the constant of proportionality from a table
- **K.2** Write equations for proportional relationships from tables
- **K.3** Identify proportional relationships by graphing
- **K.4** Find the constant of proportionality from a graph
- **K.5** Write equations for proportional relationships from graphs
- **K.6** Identify proportional relationships
- **K.7** Interpret graphs of proportional relationships
- **K.8** Write and solve equations for proportional relationships

Linear functions

- **V.1** Find the slope from a graph
- **V.2** Find the slope from two points
- **V.3** Find a missing coordinate using slope
- **V.4** Find the slope from an equation
- **V.5** Graph a line using slope
- **V.6** Write a linear function
- **V.7** Identify linear and nonlinear functions

Integers

- **B.1** Understanding integers
- **B.2** Integers on number lines
- **B.3** Graph integers on horizontal and vertical number lines
- **B.4** Absolute value and opposite integers
- **B.5** Compare and order integers
- **B.6** Integer inequalities with absolute values

Operations with integers

- **C.1** Integer addition and subtraction rules
- **C.2** Add and subtract integers using counters
- **C.3** Add and subtract integers
- **C.4** Complete addition and subtraction equations with integers
- **C.5** Add and subtract integers: word problems
- **C.6** Integer multiplication and division rules
- **C.7** Multiply and divide integers
- **C.8** Complete multiplication and division equations with integers
- **C.9** Evaluate numerical expressions involving integers

Decimals

- **D.1** Decimal numbers review
- **D.2** Compare and order decimals
- **D.3** Decimal number lines
- **D.4** Round decimals

Operations with decimals

- **E.1** Add and subtract decimals
- **E.2** Add and subtract decimals: word problems
- **E.3** Multiply decimals
- **E.4** Multiply decimals and whole numbers: word problems
- **E.5** Divide decimals
- **E.6** Divide decimals by whole numbers: word problems
- **E.7** Estimate sums, differences, and products of decimals
- **E.8** Add, subtract, multiply, and divide decimals: word problems
- **E.9** Multi-step inequalities with decimals
- **E.10** Maps with decimal distances
- **E.11** Evaluate numerical expressions involving decimals

Percents

- **L.1** What percentage is illustrated?
- **L.2** Convert between percents, fractions, and decimals
- **L.3** Compare percents to fractions and decimals
- **L.4** Estimate percents of numbers
- **L.5** Percents of numbers and money amounts
- **L.6** Percents of numbers: word problems
- **L.7** Solve percent equations
- **L.8** Solve percent equations: word problems
- **L.9** Percent of change
- **L.10** Percent of change: word problems

Consumer math

- **M.1** Add, subtract, multiply, and divide money amounts: word problems
- **M.2** Price lists
- **M.3** Unit prices
- **M.4** Unit prices with unit conversions
- **M.5** Unit prices: find the total price
- ★ **M.6** Percent of a number: tax, discount, and more
- **M.7** Find the percent: tax, discount, and more
- **M.8** Sale prices: find the original price
- **M.9** Multi-step problems with percents
- **M.10** Estimate tips
- **M.11** Simple interest
- **M.12** Compound interest

Problem solving and estimation

- **N.1** Estimate to solve word problems
- **N.2** Multi-step word problems
- **N.3** Guess-and-check word problems
- **N.4** Use Venn diagrams to solve problems
- **N.5** Find the number of each type of coin
- **N.6** Elapsed time word problems

Units of measurement

- **O.1** Estimate customary measurements
- **O.2** Estimate metric measurements
- **O.3** Compare and convert customary units
- **O.4** Mixed customary units
- **O.5** Compare and convert metric units
- **O.6** Convert between customary and metric systems
- **O.7** Precision
- **O.8** Celsius and Fahrenheit temperatures

Two-dimensional figures

- **W.1** Identify and classify polygons
- **W.2** Name, measure, and classify angles
- ★ **W.3** Classify triangles
- **W.4** Identify trapezoids
- **W.5** Classify quadrilaterals
- **W.6** Graph triangles and quadrilaterals
- **W.7** Find missing angles in triangles
- **W.8** Find missing angles in quadrilaterals
- **W.9** Interior angles of polygons
- **W.10** Lines, line segments, and rays

- **W.16** Parts of a circle

Geometric measurement

- **AA.1** Perimeter
- **AA.2** Area of rectangles and parallelograms
- **AA.3** Area of triangles and trapezoids
- **AA.4** Area and perimeter: word problems
- **AA.5** Circles: calculate area, circumference, radius, and diameter
- **AA.6** Circles: word problems
- **AA.7** Volume
- **AA.8** Surface area
- **AA.9** Perimeter, area, and volume: changes in scale
- **AA.10** Semicircles: calculate area, perimeter, radius, and diameter
- **AA.11** Quarter circles: calculate area, perimeter, and radius
- **AA.12** Area of compound figures with triangles, semicircles, and quarter circles
- **AA.13** Area between two shapes

Fractions and mixed numbers

- **F.1** Understanding fractions: word problems
- **F.2** Equivalent fractions
- **F.3** Write fractions in lowest terms
- **F.4** Fractions: word problems with graphs and tables
- **F.5** Least common denominator
- **F.6** Compare and order fractions
- **F.7** Compare fractions: word problems
- **F.8** Convert between mixed numbers and improper fractions
- **F.9** Compare mixed numbers and improper fractions
- **F.10** Round mixed numbers

Operations with fractions

- **G.1** Add and subtract fractions
- **G.2** Add and subtract fractions: word problems
- **G.3** Add and subtract mixed numbers
- **G.4** Add and subtract mixed numbers: word problems
- **G.5** Inequalities with addition and subtraction of fractions and mixed numbers
- **G.6** Estimate sums and differences of mixed numbers
- **G.7** Multiply fractions and whole numbers
- **G.8** Multiply two fractions using models
- **G.9** Multiply fractions
- **G.10** Multiply mixed numbers
- **G.11** Multiply fractions and mixed numbers: word problems
- **G.12** Divide fractions
- **G.13** Divide mixed numbers
- **G.14** Divide fractions and mixed numbers: word problems
- **G.15** Estimate products and quotients of fractions and mixed numbers
- **G.16** Add, subtract, multiply, and divide fractions and mixed numbers: word problems
- **G.17** Maps with fractional distances
- **G.18** Evaluate numerical expressions involving fractions

Rational numbers

- **H.1** Convert between decimals and fractions or mixed numbers
- **H.2** Identify rational numbers
- **H.3** Absolute value of rational numbers
- **H.4** Compare rational numbers
- **H.5** Put rational numbers in order
- **H.6** Add and subtract rational numbers
- **H.7** Apply addition and subtraction rules
- **H.8** Multiply and divide rational numbers
- **H.9** Apply multiplication and division rules

Coordinate plane

- **P.1** Coordinate plane review
- **P.2** Quadrants and axes
- **P.3** Follow directions on a coordinate plane
- **P.4** Distance between two points

Number sequences

- **Q.1** Identify arithmetic and geometric sequences
- **Q.2** Arithmetic sequences
- **Q.3** Geometric sequences
- **Q.4** Number sequences: mixed review
- **Q.5** Number sequences: word problems
- **Q.6** Evaluate variable expressions for number sequences
- **Q.7** Write variable expressions for arithmetic sequences

Expressions and properties

- **R.1** Write variable expressions
- **R.2** Write variable expressions: word problems
- **R.3** Evaluate linear expressions
- **R.4** Evaluate multi-variable expressions
- **R.5** Evaluate absolute value expressions
- **R.6** Evaluate nonlinear expressions
- **R.7** Identify terms and coefficients
- **R.8** Sort factors of expressions
- **R.9** Properties of addition and multiplication
- **R.10** Multiply using the distributive property
- **R.11** Solve equations using properties
- **R.12** Write equivalent expressions using properties
- **R.13** Add and subtract like terms
- **R.14** Add, subtract, and multiply linear expressions
- **R.15** Factors of linear expressions
- **R.16** Identify equivalent linear expressions

Statistics

- **CC.1** Calculate mean, median, mode, and range
- **CC.2** Interpret charts to find mean, median, mode, and range
- **CC.3** Mean, median, mode, and range: find the missing number
- **CC.4** Changes in mean, median, mode, and range
- **CC.5** Calculate mean absolute deviation
- **CC.6** Identify representative, random, and biased samples

Probability

- **DD.1** Probability of simple events
- **DD.2** Probability of opposite, mutually exclusive, and overlapping events
- **DD.3** Experimental probability
- **DD.4** Make predictions
- **DD.5** Compound events: find the number of outcomes
- **DD.6** Identify independent and dependent events
- **DD.7** Probability of independent and dependent events
- **DD.8** Factorials
- **DD.9** Permutations
- **DD.10** Counting principle
- **DD.11** Combination and permutation notation

Ratios, rates, and proportions

- **J.1** Understanding ratios
- **J.2** Identify equivalent ratios
- **J.3** Write an equivalent ratio
- **J.4** Equivalent ratios: word problems
- **J.5** Unit rates
- **J.6** Compare ratios: word problems
- **J.7** Scale drawings: word problems
- **J.8** Do the ratios form a proportion?
- **J.9** Do the ratios form a proportion: word problems
- **J.10** Solve proportions
- **J.11** Solve proportions: word problems
- **J.12** Estimate population size using proportions
- **J.13** Rate of change
- **J.14** Constant rate of change

One-variable equations

- **S.1** Which x satisfies an equation?
- **S.2** Write an equation from words
- **S.3** Model and solve equations using algebra tiles
- **S.4** Write and solve equations that represent diagrams
- **S.5** Solve one-step equations
- **S.6** Solve two-step equations
- **S.7** Solve equations: word problems
- **S.8** Solve equations involving like terms
- **S.9** Solve equations: complete the solution

One-variable inequalities

- **T.1** Solutions to inequalities
- **T.2** Graph inequalities on number lines
- **T.3** Write inequalities from number lines
- **T.4** Solve one-step inequalities
- **T.5** Graph solutions to one-step inequalities
- **T.6** Solve two-step inequalities
- **T.7** Graph solutions to two-step inequalities

Two-variable equations

- **U.1** Does (x, y) satisfy the equation?
- **U.2** Identify independent and dependent variables
- **U.3** Find a value using two-variable equations
- **U.4** Solve word problems involving two-variable equations
- **U.5** Complete a table for a two-variable relationship
- **U.6** Write a two-variable equation
- **U.7** Identify the graph of an equation
- **U.8** Graph a two-variable equation
- **U.9** Interpret a graph: word problems
- **U.10** Write an equation from a graph using a table

For extra credit, the scholars can begin working on the ***eighth grade standards.*** Also, this summer assignment will be posted on the school website.

In addition to making practice exciting, IXL is designed to help your child learn at his or her own pace. The program is adaptive and will adjust based on your child's demonstrated understanding of the material. All of your child's results will be saved, so you can monitor his or her progress anytime by clicking on the *Analytics* tab at the top of the page. For on-the-go practice, you can download IXL's free tablet apps for iPad, Android, or Kindle and sign in with your child's username and password.

I hope you'll encourage your son or daughter to use IXL regularly. Here's to a year of working together to make learning fun for your child!

Sincerely,
Ms. Napolitano