## MIDDLE SCHOOL SUMMER MATH Incoming 8<sup>th</sup> grade:

Group 1: Please log on to IXL and complete the following skills with at least a score of 80%.

Rational numbers: D.8: Put rational numbers in order

Operations with rational numbers: E.9: Evaluate numerical expressions involving rational numbers

Percents: J.9: Solve percent equations

Units of measurement: L.3: Mixed customary units

Problem solving: M.1: Multi-step word problems

Coordinate plane: N.4: Find the distance between two points

Two-dimensional figures: 0.9: Interior angles of polygons

Transformations and symmetry: Q.2: Dilations: graph the image

Pythagorean theorem: R.4: Pythagorean theorem: word problems

Expressions and properties:

V.13: Write equivalent expressions using properties

V.15: Add, subtract and multiply linear expressions

One-variable equations:

W.8: Solve multi-step equations

W.11: Solve equations: mixed review

One-variable inequalities: X.9: Graph solutions to multi-step inequalities Group 2: Please log on to IXL on Level J and complete the following skills with at least a score of 80%:

Number Theory: A.8: Classify numbers

Operations with integers: C.3: Add and subtract integers C.7: Multiply and divide integers

Rational numbers: D.4: Convert between decimals and fractions or mixed numbers D.7: Compare rational numbers

Operations with rational numbers: E.5: Multiply and divide rational numbers

Percents: J.8: Compare percents of numbers

Consumer math:

K.5: Percent of a number: tax, discount, and more

Units of measurement:

L.3: Mixed customary units

Problem solving:

M.1: Multi-step word problems

Coordinate plane: N.2: Quadrants and axes

Pythagorean Theorem: R.1: Pythagorean theorem: find the length of the hypotenuse

Expressions and properties: V.11: Properties of addition and multiplication One-variable equations: W.2: Write an equation from words

Statistics: DD.1: Calculate mean, median, mode and range

## Incoming 7<sup>th</sup> grade:

**Group 1:** Please log on to IXL on Level J and complete the following skills with at least a score of 80%:

Rational numbers: D.8: Put rational numbers in order

Operations with rational numbers: E.9: Evaluate numerical expressions involving rational numbers

Percents: J.9: Solve percent equations

Units of measurement: L.3: Mixed customary units

Problem solving: M.1: Multi-step word problems

Coordinate plane: N.4: Find the distance between two points

Two-dimensional figures: 0.9: Interior angles of polygons

Transformations and symmetry: Q.2: Dilations: graph the image

Pythagorean theorem:

R.4: Pythagorean theorem: word problems

Expressions and properties:

V.13: Write equivalent expressions using properties

V.15: Add, subtract and multiply linear expressions

One-variable equations: W.8: Solve multi-step equations W.11: Solve equations: mixed review

One-variable inequalities:

X.9: Graph solutions to multi-step inequalities

**Group 2:** Please log on to IXL on Level I and complete the following skills with at least a score of 80%:

Number Theory: A.4: Divisibility rules A.8: Scientific notation

Integers: B.5: Compare and order integers

Decimals: D.2: Compare and order decimals

Operations with decimals:

E.8: Add, subtract, multiply, and divide decimal: word problems

Fractions and mixed numbers:

- F.3: Write fractions in lowest terms
- F.4: Fractions: word problems with graphs and tables
- F.8: Convert between mixed numbers and improper fractions

Operations with fractions:

- G.4: Add and subtract mixed numbers: word problems
- G.11: Multiply fractions and mixed numbers: word problems

Rational Numbers:

- H.1: Convert between decimals and fractions or mixed numbers
- H.5: Put rational numbers in order

Percents:

- L.3: Compare percents to fractions and decimals
- L.4: Estimate percents of numbers

## Incoming 6<sup>th</sup> grade:

Please log on to IXL on Level H and complete the starred skills with at least a score of 80%.