## MAP to Khan Academy: <br> Khan Academy Practice Exercises Correlated to RIT <br> for Common Core Math MAP for Primary Grades

## About this Document

This document correlates MAP ${ }^{\circledR}$ sub-goals and RIT ranges to Khan Academy ${ }^{\circledR}$ exercises. The Khan exercises are interactive problems for students with instant feedback:


Having these exercises correlated to RIT ranges means you can use them in conjunction with your flexible student groupings that are also informed by RIT score results. The exercises are also useful for targeting learning in each student's zone of proximal development (Vygotsky).

The correlation between MAP RIT scores and the Khan Academy exercises was determined by using our 2011 norms data to approximate grade levels, which were then matched to the corresponding Common Core State Standards (CCSS). Teachers in states that have not adopted the CCSS may still find these resources valuable by relating goals or sub-goals that are similar to CCSS goals and subgoals.

NWEA plans to work with Khan Academy to update these links twice a year as new exercises are developed.

## How to Use

1. Use MAP reports to find the RIT scores for a given sub-goal.
2. In this document, locate that same goal, approximate RIT range, and sub-goals.
3. To choose appropriate Khan Academy exercises:
a. Consider both the name of the exercise and the CCSS standard.
b. Click the link and try the exercise yourself.

Note: When you're in Khan Academy, the links to videos and other resources add context to the actual exercise but are not necessarily correlated to MAP.
4. In the browser window where the exercise opened, note or copy the Web address URL.
5. Optionally deliver exercises to students. For example:

- Paste the URL into an online document for students to access.
- Present the exercise in the classroom.
- Use for parent-teacher conference discussion.


## Limitations

The instructional suggestions presented in this document are intended to provide supplementary resources based on available Khan Academy exercises and are not intended to replace other options. MAP/MPG data should be used as one of many data points for instructional decisions rather than as a placement guide.

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## Common Core MAP Mathematics Khan Academy Practice Exercises Correlation Common Core Mathematics MPG

Geometry
Reason with Shapes and Their Attributes ..... P 4
Measurement and Data
Represent and Interpret Data ..... P 4
Solve Problems Involving Measurement ..... P 5
Number and Operations
Number and Operations: Base Ten and Fractions ..... P 6
Understand Place Value, Counting, and Cardinality ..... P 8
Operations and Algebraic Thinking
Properties of Operations ..... P 9
Represent and Solve Problems ..... P 10

## Geometry

Reason with Shapes and Their Attributes Standards Alignment
RIT Range: < 160
Comparing shapes ..... K.G.B. 4
Composing shapes ..... K.G.B. 6
Naming shapes ..... K.G.A. 1
Naming shapes 2 ..... K.G.A. 2
RIT Range: 161-178
Attributes of shapes ..... 1.G.A. 1
Halves and fourths ..... 1.G.A. 3
RIT Range: 179-191
Equal parts of circles and rectangles ..... 2.G.A. 3
Filling rectangles with same-sized squares ..... 2.G.A. 2
Recognizing shapes ..... 2.G.A. 1
RIT Range: 192-203
Categorize quadrilaterals ..... 3.G.A. 1
Cutting shapes into equal parts ..... 3.G.A. 2
Measurement and Data
Represent and Interpret Data Standards Alignment
RIT Range: < 160
Sort by count or category ..... K.MD.B. 3
RIT Range: 161-178
Solving problems with bar graphs 1 ..... 1.MD.C. 4
RIT Range: 179-191
Making line plots, bar graphs, and picture graphs ..... 2.MD.D. 9
Solving problems with bar graphs 2 ..... 2.MD.D. 10
Solving problems with line plots 1 ..... 2.MD.D. 9
Solving problems with picture graphs 1 ..... 2.MD.D. 10

## Measurement and Data

Represent and Interpret Data
RIT Range: 192-203
Marking data on line plots ..... 3.MD.B. 4
Creating picture and bar graphs 2 ..... 3.MD.B. 3
Solving problems with bar graphs 3 ..... 3.MD.B. 3
Solving problems with picture graphs 2 ..... 3.MD.B. 3Standards Alignment
Measurement and Data
Solve Problems Involving Measurement Standards Alignment
RIT Range: < 160
Comparing size ..... K.MD.A. 2
RIT Range: 161-178
Measuring lengths 1 ..... 1.MD.A. 2
Order by length ..... 1.MD.A. 1
RIT Range: 179-191
Adding and subtracting on the number line word problems ..... 2.MD.B. 6
Comparing lengths ..... 2.MD.A. 4
Counting money (U.S.) ..... 2.MD.C. 8
Estimating lengths ..... 2.MD.A. 3
Length word problems ..... 2.MD.B. 5
Measuring lengths 2 ..... 2.MD.A. 1
Measuring lengths with different units ..... 2.MD.A. 2
Telling time without labels ..... 2.MD.C. 7
Telling time with a labeled clock ..... 2.MD.C. 7
RIT Range: 192-203
Area and the distributive property ..... 3.MD.C. 7 | 3.MD.C.7c
Comparing area and perimeter ..... 3.MD.D. 8
Comparing areas by multiplying ..... 3.MD.C. 7 | 3.MD.C.7b
Decompose shapes to find area ..... 3.MD.C. 7 | 3.MD.C.7d

## Measurement and Data

Solve Problems Involving Measurement Standards Alignment
RIT Range: 192-203
Finding area by multiplying
Arithmetic word problems with mass 3.MD.A. 23.MD.C.7 | 3.MD.C.7a
Measuring area with unit squares ..... 3.MD.C. 6
Perimeter 1 ..... 3.MD.D. 8
Finding perimeter ..... 3.MD.D. 8
Perimeter 2 ..... 3.MD.D. 8
Telling time word problems ..... 3.MD.A. 1
Telling time word problems with the number line ..... 3.MD.A. 1
Understanding area 3.MD.C.5 | 3.MD.C.5a | 3.MD.C.5b
Arithmetic word problems with volume ..... 3.MD.A. 2
Number and Operations
Number and Operations: Base Ten and Fractions Standards Alignment
RIT Range: < 160
Addition within 5 ..... K.OA.A. 5
Making five K.OA.A. 4
Making ten ..... K.OA.A. 4
Making ten 2 ..... K.OA.A. 4
Put together K.OA.A. 1
Subtraction within 5 ..... K.OA.A. 5
Take apart ..... K.OA.A. 1
RIT Range: 161-178
Addition within 20 ..... 1.OA.C. 6
Addition and subtraction within 10 ..... 1.OA.D. 8
Add within 100: Level 1 ..... 1.NBT.C. 4
Add within 100: Level 2 ..... 1.NBT.C. 4
Subtract tens ..... 1.NBT.C. 6

## Number and Operations

Number and Operations: Base Ten and FractionsStandards Alignment
RIT Range: 179-191
Add within 1000: Level 1
Add within 1000: Level 22.NBT.B. 7
Addition using groups of 10: Level 1 2.NBT.B. 52.NBT.B. 7
Addition using groups of 10: Level 2 ..... 2.NBT.B. 5
Subtraction within 20 ..... 2.NBT.B. 5
Subtract within 1000: Level 1 ..... 2.NBT.B. 7
Subtract within 1000: Level 2 ..... 2.NBT.B. 7
Subtract within 100: Level 1 ..... 2.NBT.B. 5
Subtract within 100: Level 2 ..... 2.NBT.B. 5
RIT Range: 192-203
Addition within 1003.NBT.A. 2
Addition within 1000 3.NBT.A. 2
Comparing fractions with the same numerator or denominator
Comparing fractions with the same denominator
3.NF.A. 3 | 3.NF.A.3d
3.NF.A. 3 | 3.NF.A.3d
Comparing fractions with the same numerator 3.NF.A.3 | 3.NF.A.3d
Equivalent fractions on the number line
Equivalent fraction models
Finding 1 on the number line
Fractions on the number line 1
Fractions on the number line 2
Recognizing fractions 2
3.NF.A. 3 | 3.NF.A.3a | 3.NF.A.3b
3.NF.A.3 | 3.NF.A.3a | 3.NF.A.3b
3.NF.A.2 | 3.NF.A.2a | 3.NF.A.2b | 3.NF.A.3c
3.NF.A. 2
3.NF.A.2 | 3.NF.A.2a | 3.NF.A.2b
3.NF.A. 1
Addition using groups of 10 and 100 ..... 3.NBT.A. 2
Meaning of division ..... 3.OA.A. 2
Meaning of multiplication ..... 3.OA.A. 1
Multiply by tens ..... 3.NBT.A. 3
Multiply by tens word problems ..... 3.NBT.A. 3
Naming the whole ..... 3.NF.A.3d
Identifying numerators and denominators ..... 3.NF.A. 1

## Number and Operations

Number and Operations: Base Ten and Fractions Standards Alignment
RIT Range: 192-203
Recognizing fractions 1 ..... 3.NF.A. 1
Rounding to the nearest ten or hundred ..... 3.NBT.A. 1
Subtraction within 100 ..... 3.NBT.A. 2
Subtraction within 1000 ..... 3.NBT.A. 2
Number and Operations
Understand Place Value, Counting, and Cardinality Standards Alignment
RIT Range: < 160
Compare groups through 10 ..... к.cc.c. 6
Comparing numbers through 10 ..... K.CC.C. 7
Count from any number ..... K.CC.A. 2
Counting in scenes ..... K.CC.B. 4
Counting in the right order ..... K.CC.B.4a
Counting with small numbers ..... к.CC.B. 5
Count to 100 ..... K.CC.A. 1
How many objects 1 ..... K.CC.B. 5
How many objects 2 ..... K.CC.B. 5
One more, one less ..... K.CC.B.4c
Teen numbers 1 ..... K.NBT.A. 1
RIT Range: 161-178
Comparing whole numbers
Comparing two-digit numbers 1
1.NBT.B.3 | 2.NBT.A. 4
Groups of tens
1.NBT.B. 3
Numbers to 1201.NBT.B. 2 | 1.NBT.B.2c
Teen numbers 2 ..... 1.NBT.B. 2 | 1.NBT.B.2b
Teen numbers 3 ..... 1.NBT.B.2 | 1.NBT.B.2b
Understanding 2-digit numbers ..... 1.NBT.B. 2

## Number and Operations

Understand Place Value, Counting, and Cardinality Standards Alignment
RIT Range: 179-191Comparing whole numbers
Comparing numbers within 10001.NBT.B. 3 | 2.NBT.A. 4
Counting money (U.S.) ..... 2.NBT.A. 2
Hundreds, tens, and ones
Skip-counting by 100s
2.NBT.A. 2
Skip-counting by 10s ..... 2.NBT.A. 2
Skip-counting by 5s ..... 2.NBT.A. 2
Writing numbers to 1000 ..... 2.NBT.A. 3
Operations and Algebraic Thinking
Properties of Operations Standards Alignment
RIT Range: 161-178
Addition within 20 ..... 1.OA.C. 6
Addition and subtraction within 10 ..... 1.OA.D. 8
The equals sign ..... 1.OA.D. 7
Relate addition and subtraction ..... 1.OA.B. 4
RIT Range: 179-191
$\underline{\text { Repeated addition }}$ ..... 2.OA.C. 4
RIT Range: 192-203
Meaning of division ..... 3.OA.A. 2
Multiplication using place value understanding ..... 3.OA.B. 5
Whole numbers on the number line ..... 3.OA.C. 7
Properties of multiplication ..... 3.OA.B. 5
Relate division to multiplication ..... 3.OA.B. 6
Relate division to multiplication word problems ..... 3.OA.B. 6

## Operations and Algebraic Thinking

Represent and Solve Problems Standards Alignment
RIT Range: < 160
Addition within 5 ..... K.OA.A. 5
Addition word problems within 10 ..... K.OA.A. 2
Making five ..... K.OA.A. 4
Making ten ..... K.OA.A. 4
Making ten 2 ..... K.OA.A. 4
Making totals in different ways within 10 ..... K.OA.A. 3
Put together ..... K.OA.A. 1
Subtraction within 5 ..... K.OA.A. 5
Subtraction word problems within 10 ..... K.OA.A. 2
Take apart ..... K.OA.A. 1
RIT Range: 161-178
Adding three numbers ..... 1.OA.A. 2
Addition and subtraction word problems within 20: Level 1
Addition and subtraction word problems within 20: Level 2 ..... 1.OA.A. 1
Addition and subtraction word problems within 20: Level 3 1.OA.A. 1
Addition and subtraction word problems within 20: Level 41.OA.A. 1
RIT Range: 179-191
Addition and subtraction word problems within 100: Level 12.OA.A. 1
Addition and subtraction word problems within 100: Level 2 2.OA.A. 1
Addition and subtraction word problems within 100: Level 3
Addition and subtraction word problems within 100: Level 4
2.OA.A. 1
Comparing lengths2.OA.A. 1
Length word problems 2.OA.A. 1
Repeated addition ..... 2.OA.C. 4
Solving problems with picture graphs 1 ..... 2.OA.A. 1
RIT Range: 192-203
Basic division3.OA.A. 4

## Operations and Algebraic Thinking

Represent and Solve Problems Standards Alignment
RIT Range: 192-203
1-digit division ..... 3.OA.A. 4
Meaning of division ..... 3.OA.A. 2
Meaning of multiplication ..... 3.OA.A. 1
Multiplying 1-digit numbers ..... 3.OA.A. 4
Math patterns 1 ..... 3.OA.D. 9
Patterns in multiplication tables ..... 3.OA.D. 9
Solving basic multiplication and division equations ..... 3.OA.A. 4
Two-step word problems with addition, subtraction, multiplication, and ..... 3.OA.D. 8
division

