MAP to Khan Academy:
Khan Academy Practice Exercises Correlated to RIT for Common Core Math MAP for Primary Grades

About this Document

This document correlates MAP® sub-goals and RIT ranges to Khan Academy® 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 sub-goals.

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 9

**Operations and Algebraic Thinking**
- Properties of Operations P 10
- Represent and Solve Problems P 10
# Geometry

**Reason with Shapes and Their Attributes**

**Standards Alignment**

<table>
<thead>
<tr>
<th>RIT Range: &lt; 160</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparing shapes</strong></td>
</tr>
<tr>
<td><strong>Composing shapes</strong></td>
</tr>
<tr>
<td><strong>Naming shapes</strong></td>
</tr>
<tr>
<td><strong>Naming shapes 2</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 161-178</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Naming shapes 3</strong></td>
</tr>
<tr>
<td><strong>Halves and fourths</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 179-191</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Equal parts of circles and rectangles</strong></td>
</tr>
<tr>
<td><strong>Filling rectangles with same-sized squares</strong></td>
</tr>
<tr>
<td><strong>Naming shapes 4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 192-202</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Categorize quadrilaterals</strong></td>
</tr>
<tr>
<td><strong>Identifying unit fractions</strong></td>
</tr>
<tr>
<td><strong>That's not fair!</strong></td>
</tr>
</tbody>
</table>

## Measurement and Data

**Represent and Interpret Data**

**Standards Alignment**

<table>
<thead>
<tr>
<th>RIT Range: &lt; 160</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sort by count or category</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 161-178</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solving problems with bar graphs 1</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 179-191</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Making line plots, bar graphs, and picture graphs</strong></td>
</tr>
<tr>
<td><strong>Solving problems with bar graphs 2</strong></td>
</tr>
<tr>
<td><strong>Solving problems with line plots 1</strong></td>
</tr>
</tbody>
</table>
Measurement and Data

Represent and Interpret Data

RIT Range: 179-191

Solving problems with picture graphs 1

RIT Range: 192-202

Creating bar charts
Marking data on line plots
Creating picture and bar graphs 2
Reading bar charts 1
Reading bar charts 2
Reading pictographs 1
Reading pictographs 2
Solving problems with bar graphs 3
Solving problems with picture graphs 2

Measurement and Data

Solve Problems Involving Measurement

RIT Range: < 160

Comparing size

RIT Range: 161-178

Measuring lengths 1
Order by length

RIT Range: 179-191

Adding and subtracting on the number line word problems
Comparing lengths
Counting money (U.S.)
Estimating lengths
Length word problems
Measuring lengths 2
Measuring lengths with different units
# Measurement and Data

**Solve Problems Involving Measurement**

**RIT Range: 179-191**

- **Telling time without labels**
- **Telling time with a labeled clock**

**RIT Range: 192-202**

- **Area and the distributive property**
- **Comparing area and perimeter**
- **Comparing areas by multiplying**
- **Decompose shapes to find area**
- **Finding area by multiplying**
- **Arithmetic word problems with mass**
- **Measuring area with unit squares**
- **Perimeter 1**
- **Finding perimeter**
- **Perimeter 2**
- **Telling time word problems**
- **Telling time word problems with the number line**
- **Understanding area**
- **Arithmetic word problems with volume**

## Number and Operations

**Number and Operations: Base Ten and Fractions**

**RIT Range: < 160**

- **Addition within 5**
- **Making five**
- **Making ten**
- **Making ten 2**
- **Subtraction within 5**

**RIT Range: 161 - 178**

- **Addition within 20**

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Number and Operations

Number and Operations: Base Ten and Fractions

RIT Range: 161 - 178

Addition and subtraction within 10

RIT Range: 161-178

Adding 1s or 10s (no regrouping)

Adding 1 or 10

Adding two-digit numbers (no regrouping)

Breaking apart two-digit addition problems

Regrouping: two-digit number plus one-digit number

RIT Range: 179-191

Adding and subtracting within 1000 using a number line

Addition within 100

Adding and subtracting using a number line

Adding 10s and 100s (no regrouping)

Adding two- and three-digit numbers (no regrouping)

Breaking apart three-digit addition problems

Adding two-digit numbers by making tens

Adding two-digit numbers by making tens 2

Regrouping: two-digit number minus one-digit number

Select strategies for adding within 100

Subtracting 1s or 10s (no regrouping)

Subtraction within 20

Subtraction within 100

Subtracting 10s and 100s (no regrouping)

Subtracting two- and three-digit numbers (no regrouping)

Subtracting 1 or 10

Subtracting two-digit numbers (no regrouping)

RIT Range: 192 - 203

Meaning of division
## Number and Operations

### Number and Operations: Base Ten and Fractions

<table>
<thead>
<tr>
<th>RIT Range: 192 - 203</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning of multiplication</td>
<td>3.OA.A.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 192-202</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Addition within 1000</strong></td>
<td>3.NBT.A.2</td>
</tr>
<tr>
<td><strong>Comparing fractions with the same numerator or denominator</strong></td>
<td>3.NF.A.3</td>
</tr>
<tr>
<td><strong>Comparing fractions with the same denominator</strong></td>
<td>3.NF.A.3</td>
</tr>
<tr>
<td><strong>Comparing fractions with the same numerator</strong></td>
<td>3.NF.A.3</td>
</tr>
<tr>
<td><strong>Visually comparing fractions 1</strong></td>
<td>3.NF.A.3</td>
</tr>
<tr>
<td><strong>Identifying unit fractions</strong></td>
<td>3.NF.A.1</td>
</tr>
<tr>
<td><strong>Equivalent fractions on the number line</strong></td>
<td>3.NF.A.3</td>
</tr>
<tr>
<td><strong>Equivalent fraction models</strong></td>
<td>3.NF.A.3</td>
</tr>
<tr>
<td><strong>Finding 1 on the number line</strong></td>
<td>3.NF.A.2</td>
</tr>
<tr>
<td><strong>Fractions on the number line</strong></td>
<td>3.NF.A.2</td>
</tr>
<tr>
<td><strong>Unit fractions on the number line</strong></td>
<td>3.NF.A.2</td>
</tr>
<tr>
<td><strong>Recognizing fractions 2</strong></td>
<td>3.NF.A.1</td>
</tr>
<tr>
<td><strong>Addition using groups of 10 and 100</strong></td>
<td>3.NBT.A.2</td>
</tr>
<tr>
<td><strong>Multiply by tens</strong></td>
<td>3.NBT.A.3</td>
</tr>
<tr>
<td><strong>Multiply by tens word problems</strong></td>
<td>3.NBT.A.3</td>
</tr>
<tr>
<td><strong>Comparing fractions of different wholes</strong></td>
<td>3.NF.A.3d</td>
</tr>
<tr>
<td><strong>Identifying numerators and denominators</strong></td>
<td>3.NF.A.1</td>
</tr>
<tr>
<td><strong>Recognizing fractions 1</strong></td>
<td>3.NF.A.1</td>
</tr>
<tr>
<td><strong>Rounding to the nearest ten or hundred</strong></td>
<td>3.NBT.A.1</td>
</tr>
<tr>
<td><strong>Subtraction within 1000</strong></td>
<td>3.NBT.A.2</td>
</tr>
<tr>
<td><strong>That's not fair!</strong></td>
<td>3.NF.A.1</td>
</tr>
<tr>
<td><strong>Writing fractions as whole numbers</strong></td>
<td>3.NF.A.3c</td>
</tr>
</tbody>
</table>
Number and Operations

Understand Place Value, Counting, and Cardinality

RIT Range: < 160

Comparing numbers of objects  K.CC.C.6
Less and greater  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  K.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  K.NBT.A.1

RIT Range: 161 - 178

Numbers to 120  1.NBT.A.1

RIT Range: 161-178

Comparing two-digit numbers  1.NBT.B.3
Groups of ten objects  1.NBT.B.2 | 1.NBT.B.2c
Two-digit place value challenge  1.NBT.B.2

RIT Range: 179-191

Comparing three-digit numbers  2.NBT.A.4
Counting money (U.S.)  2.NBT.A.2
Hundreds, tens, and ones  2.NBT.A.1 | 2.NBT.A.1a | 2.NBT.A.1b
Skip-counting by 100s  2.NBT.A.2
Skip-counting by 10s  2.NBT.A.2
Skip-counting by 5s  2.NBT.A.2
Three-digit place value challenge  2.NBT.A.3
Operations and Algebraic Thinking

Properties of Operations

RIT Range: 161-178

Addition within 20
Addition and subtraction within 10
The equals sign
Relate addition and subtraction

Standards Alignment
1.OA.C.6
1.OA.C.6
1.OA.D.8
1.OA.D.7
1.OA.B.4

RIT Range: 179-191

Repeated addition

Standards Alignment
2.OA.C.4

RIT Range: 192-203

Meaning of division
Multiplication using place value understanding

Standards Alignment
3.OA.A.2
3.OA.B.5

RIT Range: 192-202

Whole numbers on the number line
Properties of multiplication
Relate division to multiplication
Relate division to multiplication word problems

Standards Alignment
3.OA.C.7
3.OA.B.5
3.OA.B.6
3.OA.B.6

Operations and Algebraic Thinking

Represent and Solve Problems

RIT Range: < 160

Addition within five
Addition word problems within 10
Making five
Making 10 (using grids)
Making 10
Making small numbers in different ways
Put together
Subtraction within five
Subtraction word problems within 10

Standards Alignment
K.OA.A.5
K.OA.A.2
K.OA.A.4
K.OA.A.4
K.OA.A.4
K.OA.A.3
K.OA.A.1
K.OA.A.5
K.OA.A.2
Operations and Algebraic Thinking

Represent and Solve Problems

RIT Range: < 160

Take apart

K.OA.A.1

RIT Range: 161-178

Adding three numbers
Addition and subtraction word problems 1
Addition and subtraction word problems 2
Word problems with "more" and "fewer" 1
Word problems with "more" and "fewer" 2

RIT Range: 179 - 191

Repeated addition

RIT Range: 179-191

Addition and subtraction within 100 word problems 1
Addition and subtraction within 100 word problems 2
Word problems within 100 with "more" and "fewer" 1
Word problems within 100 with "more" and "fewer" 2
Comparing lengths
Find the missing number (addition and subtraction within 100)
Length word problems
Solving problems with picture graphs 1

RIT Range: 192-202

Basic division
1-digit division
Meaning of division
Meaning of multiplication
Multiplying 1-digit numbers
Math patterns 1
Patterns in multiplication tables
Operations and Algebraic Thinking

Represent and Solve Problems

RIT Range: 192-202

- Solving basic multiplication and division equations
- Two-step word problems with addition, subtraction, multiplication, and division

Standards Alignment

3.OA.A.4
3.OA.D.8