MAP Growth Mathematics to Khan Academy
Khan Academy Practice Exercises Correlated to RIT
Common Core MAP Growth Math 2-5

About this Document

This document correlates MAP® Growth™ test sub-goals and RIT ranges to Khan Academy® exercises. The Khan Academy 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 Growth RIT scores and the Khan Academy exercises was determined by using our 2015 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 Growth 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:
   - Consider both the name of the exercise and the CCSS standard.
   - 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 Growth.
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 Growth data should be used as one of many data points for instructional decisions rather than as a placement guide.

Terms of Use

These Terms of Use permit you to use this document for your personal, non-commercial use only. You must not reproduce, distribute, modify, create derivative works of, publicly display, publicly perform, republish, download, store or transmit any of the material on this document, except you may print or download one copy of a reasonable number of pages of this document for your own personal, non-commercial use and not for further reproduction, publication or distribution. You must not modify copies of this document. You must not delete or alter any copyright, trademark or other proprietary rights notices from this document. If you breach the Terms of Use your right to use the document will cease immediately and you must, at the option of NWEA®, return or destroy any copies of the document you have made. No right, title or interest in or to the document or any content on the document is transferred to you, and all rights not expressly granted are reserved by NWEA or their respective owner (see below). Any use of the document not expressly permitted by these Terms of Use is a breach of these Terms of Use and may violate copyright, trademark and other laws.

This document contains links to Khan Academy sites, materials and/or resources (“Khan Materials”). The use of the Khan Materials by NWEA is by license. Khan Academy is the respective owner of the Khan Materials. Use of the Khan Materials by NWEA in no way represents or suggests that Khan Academy endorses NWEA. All Khan Academy content is available for free at www.khanacademy.org.

The Khan Materials are provided for your convenience only. NWEA has no control over the contents of the Khan Materials and accepts no responsibility for them or for any loss or damage that may arise from your use of them. The information contained in this document, including the Khan Materials, are provided “as-is” and “as available” without any warranty of any kind, express or implied. NWEA does not warrant the accuracy, completeness or usefulness of the Khan Materials or any other information in this document and NWEA expressly disclaims all liability and responsibility arising from any reliance placed on the Khan Materials and/or any other information in this document. If you decide to access any of the Khan Materials, you do so entirely at your own risk and subject to the terms and conditions of use for the Khan Materials.

NWEA disclaims all warranties of any kind, whether express or implied, statutory or otherwise, including but not limited to any warranties of merchantability, non-infringement and fitness for particular purpose. In no event will NWEA be liable for damages of any kind, under any legal theory, arising out of or in connection with your use, or inability to use, this document and/or the information contained within it, including any direct, indirect, special, consequential, incidental or punitive damages. Any dispute or claim arising from or related to this document shall be governed and construed with the laws of the State or Oregon and any suit or action arising out of this document shall be instituted exclusively in the court of the State of Oregon and County of Multnomah.

The Khan Academy® is a registered trademark of Khan Academy. MAP® is a registered trademark of NWEA. You must not use such marks without the prior written permission of their respective owners. NWEA may update the content on this document from time to time, but its content is not necessarily complete or up-to-date. Any of the material in this document may be out of date at any given time, and NWEA is under no obligation to update such material. However, in the event NWEA, in its sole discretion updates this document, your continued use of it following the posting of revised Terms of Use means that you accept and agree to the changes.
Operations and Algebraic Thinking
  Represent and Solve Problems  Pg. 4
  Analyze Patterns and Relationships  Pg. 9

Number and Operations
  Understand Place Value, Counting, and Cardinality  Pg. 11
  Number and Operations in Base Ten  Pg. 14
  Number and Operations - Fractions  Pg. 19

Measurement and Data
  Geometric Measurement and Problem Solving  Pg. 23
  Represent and Interpret Data  Pg. 27

Geometry
  Reason with Shapes, Attributes, & Coordinate Plane  Pg. 29
## Operations and Algebraic Thinking
### Represent and Solve Problems

### Standards Alignment

#### RIT Range: <160
- **Add within 10**
- **Subtract within 10**
- **Addition word problems within 10**
- **Subtraction word problems within 10**
- **Making small numbers in different ways**
- **Make 10**
- **Make 10 (grids and number bonds)**
- **Making 5**
- **Add within 5**
- **Subtract within 5**

#### Standards
- K.OA.A.1
- K.OA.A.1
- K.OA.A.2
- K.OA.A.2
- K.OA.A.3
- K.OA.A.4
- K.OA.A.4
- K.OA.A.4
- K.OA.A.4
- K.OA.A.5
- K.OA.A.5

#### RIT Range: 161-178
- **Addition and subtraction word problems 1**
- **Addition and subtraction word problems 2**
- **Word problems with "more" and "fewer"**
- **Word problems with "more" and "fewer" 1**
- **Word problems with "more" and "fewer" 2**
- **Add 3 numbers**
- **Relate addition and subtraction**
- **Add within 20**
- **Subtract within 20**
- **Equal sign**
- **Find missing number (add and subtract within 20)**

#### Standards
- 1.OA.A.1
- 1.OA.A.1
- 1.OA.A.1
- 1.OA.A.1
- 1.OA.A.1
- 1.OA.A.2
- 1.OA.B.4
- 1.OA.C.6
- 1.OA.C.6
- 1.OA.D.7
- 1.OA.D.8

#### RIT Range: 179-191
- **Add and subtract within 100 word problems 1**
- **Add and subtract within 100 word problems 2**

#### Standards
- 2.OA.A.1
- 2.OA.A.1
## Operations and Algebraic Thinking

### Represent and Solve Problems

**RIT Range: 179-191**

- **Add and subtract within 100 word problems**
  - 2.OA.A.1

- **Challenging add and subtract word problems (within 100)**
  - 2.OA.A.1

- **Find the missing number (add and subtract within 100)**
  - 2.OA.A.1

- **Length word problems**
  - 2.OA.A.1

- **Solve problems with picture graphs**
  - 2.OA.A.1

- **Repeated addition**
  - 2.OA.C.4

**RIT Range: 192-202**

- **Meaning of multiplication**
  - 3.OA.A.1

- **Multiply with arrays**
  - 3.OA.A.1

- **Divide with visuals**
  - 3.OA.A.2

- **Meaning of division**
  - 3.OA.A.2

- **Multiplication and division word problems (within 100)**
  - 3.OA.A.3

- **Relate division to multiplication word problems**
  - 3.OA.A.3 | 3.OA.B.6

- **Letters and symbols in multiplication and division equations**
  - 3.OA.A.4

- **Basic multiplication**
  - 3.OA.A.4 | 3.OA.C.7

- **Find missing divisors and dividends (1-digit division)**
  - 3.OA.A.4 | 3.OA.C.7

- **Find missing factors (1-digit multiplication)**
  - 3.OA.A.4 | 3.OA.C.7

- **Associative property of multiplication**
  - 3.OA.B.5

- **Commutative property of multiplication**
  - 3.OA.B.5

- **Distributive property of multiplication**
  - 3.OA.B.5

- **Relate division to multiplication**
  - 3.OA.B.6

- **Basic division**
  - 3.OA.C.7

- **Divide by 1**
  - 3.OA.C.7

- **Divide by 10**
  - 3.OA.C.7

- **Divide by 2**
  - 3.OA.C.7
Operations and Algebraic Thinking

Represent and Solve Problems

Standards Alignment

RIT Range: 192-202

- Divide by 3
- Divide by 4
- Divide by 5
- Divide by 6
- Divide by 7
- Divide by 8
- Divide by 9
- Multiply by 0 or 1
- Multiply by 2
- Multiply by 3
- Multiply by 4
- Multiply by 5
- Multiply by 6
- Multiply by 7
- Multiply by 8
- Multiply by 9
- Relate repeated addition to multiplication
- Whole numbers on the number line
- 2-step estimation word problems
- 2-step word problems
- Represent 2-step word problems with equations

RIT Range: 203-212

- Compare with multiplication
- Compare with multiplication word problems
- Multiplication and division word problems
Operations and Algebraic Thinking

Represent and Solve Problems

RIT Range: 203-212

- Multi-step estimation word problems
- Multi-step word problems with whole numbers
- Represent multi-step word problems using equations

RIT Range: 213-219

- Evaluate expressions with parentheses
- Create expressions with parentheses
- Translate expressions with parentheses

RIT Range: 220-223

- Writing expressions word problems
- Testing solutions to inequalities
- Testing solutions to inequalities (basic)
- Identify equations from visual models (hanger diagrams)
- Identify equations from visual models (tape diagrams)
- Solve equations from visual models
- Testing solutions to equations
- Model with one-step equations
- Model with one-step equations and solve
- Translate one-step equations and solve
- Find the mistake in one-step equations
- One-step addition & subtraction equations
- One-step addition & subtraction equations: fractions & decimals
- One-step multiplication & division equations
- One-step multiplication & division equations: fractions & decimals
- Inequalities word problems
- Interpreting negative numbers

Standards Alignment

- 4.OA.A.3
- 5.OA.A.1
- 5.OA.A.2
- 6.EE.A.2
- 6.EE.B.5
- 6.EE.B.6
- 6.EE.B.7
- 6.NS.C.5
Operations and Algebraic Thinking

Represent and Solve Problems

RIT Range: 224-227

- **Interpreting linear expressions**
  - Standards Alignment: 7.EE.A.2

- **Find the mistake: two-step equations**
  - Standards Alignment: 7.EE.B.4

- **Interpret two-step equation word problems**
  - Standards Alignment: 7.EE.B.4

- **One-step inequalities**
  - Standards Alignment: 7.EE.B.4

- **Two-step equations word problems**
  - Standards Alignment: 7.EE.B.4

- **Two-step inequalities**
  - Standards Alignment: 7.EE.B.4

- **Two-step inequality word problems**
  - Standards Alignment: 7.EE.B.4

- **Interpreting negative number statements**
  - Standards Alignment: 7.NS.A.3
Operations and Algebraic Thinking
Analyze Patterns and Relationships

RIT Range: 192-202

Math patterns 1
Patterns in multiplication tables
Patterns with even and odd

RIT Range: 203-212

Factor pairs
Identify composite numbers
Identify factors and multiples
Identify prime numbers
Math patterns 2

RIT Range: 213-219

Graphs of rules that relate 2 variables
Identify points on a line
Relationships between 2 patterns
Tables from rules that relate 2 variables
Write rules that relate 2 variables

RIT Range: 220-223

Independent versus dependent variables
Match equations to coordinates on a line
Relationships between quantities in equations and graphs
Tables from equations with 2 variables
GCF & LCM word problems
Greatest common factor
Least common multiple
Unit rates
Comparing rates

Standards Alignment

3.OA.D.9
4.OA.B.4
4.OA.B.4
4.OA.B.4
4.OA.B.4
4.OA.C.5
5.OA.B.3
5.OA.B.3
5.OA.B.3
5.OA.B.3
5.OA.B.3
6.EE.C.9
6.EE.C.9
6.EE.C.9
6.EE.C.9
6.NS.B.4
6.NS.B.4
6.NS.B.4
6.RP.A.2
6.RP.A.2 | 6.RP.A.3
## Operations and Algebraic Thinking

### Analyze Patterns and Relationships

<table>
<thead>
<tr>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.RP.A.2</td>
</tr>
<tr>
<td>6.RP.A.3</td>
</tr>
<tr>
<td>6.RP.A.3</td>
</tr>
<tr>
<td>6.RP.A.3</td>
</tr>
<tr>
<td>6.RP.A.3</td>
</tr>
<tr>
<td>6.RP.A.3</td>
</tr>
</tbody>
</table>

- **RIT Range: 220-223**
  - Rate problems
  - Equivalent ratio word problems
  - Ratio tables
  - Ratios and units of measurement
  - Ratios on coordinate plane
  - Ratios with double number lines
  - Ratios with tape diagrams

- **RIT Range: 224-227**
  - Rates with fractions

- **7.RP.A.1**
Number and Operations
Understand Place Value, Counting, and Cardinality

Standards Alignment

RIT Range: <160

- Count tens
- Numbers to 100
- Missing numbers
- Count in pictures
- Count objects 1
- Count objects 2
- Count with small numbers
- Compare numbers of objects 1
- Comparing numbers to 10
- Teen numbers

RIT Range: 161-178

- Numbers to 120
- 2-digit place value challenge
- Groups of ten objects
- Compare 2-digit numbers
- Compare 2-digit numbers 2

RIT Range: 179-191

- Hundreds, tens, and ones
- Count money (U.S.)
- Skip-count by 10s
- Skip-count by 5s
- Skip-counting by 100s
- 3-digit place value challenge
- Compare 3-digit numbers
Number and Operations
Understand Place Value, Counting, and Cardinality

RIT Range: 192-202

- Round to nearest 10 or 100
- Round to nearest 10 or 100 on the number line
- Rounding challenge

RIT Range: 203-212

- Creating largest or smallest number
- Divide whole numbers by 10
- Multiply and divide by 10
- Multiply whole numbers by 10
- Place value blocks
- Place value when multiplying and dividing by 10
- Compare multi-digit numbers
- Compare multi-digit numbers word problems
- Compare numbers: place value challenge
- Intro to place value
- Whole number place value challenge
- Write numbers in written form
- Write whole numbers in expanded form
- Regroup whole numbers
- Round whole numbers
- Round whole numbers challenge
- Round whole numbers word problems

RIT Range: 213-219

- Regroup whole numbers
- Compare decimal place value
- Value of a digit

Standards Alignment

3.NBT.A.1
4.NBT.A.1
5.NBT.A.1
4.NBT.A.2
4.NBT.A.2
4.NBT.A.2
4.NBT.A.2
4.NBT.A.2
4.NBT.A.2
4.NBT.A.3
4.NBT.A.3
5.NBT.A.1
5.NBT.A.1
5.NBT.A.1
Number and Operations
Understand Place Value, Counting, and Cardinality

Standards Alignment

RIT Range: 213-219

- **Multiply and divide by powers of 10**
- **Multiply and divide decimals by 10**
- **Multiply and divide decimals by 10, 100, and 1000**
- **Multiply and divide whole numbers by 10, 100, and 1000**
- **Powers of ten**
- **Understanding moving the decimal**
- **Compare decimals challenge**
- **Compare decimals through thousandths**
- **Compare decimals word problems**
- **Decimals in expanded form**
- **Decimals in written form**
- **Order decimals**
- **Place value names**
- **Regroup decimals**
- **Round decimals**
- **Round decimals challenge**
- **Round decimals using a number line**
- **Round decimals word problems**

RIT Range: 220-223

- **Missing numbers on the number line**
- **Negative numbers, variables, number line**
- **Ordering negative numbers**

5.NBT.A.2
5.NBT.A.2
5.NBT.A.2
5.NBT.A.2
5.NBT.A.2
5.NBT.A.2
5.NBT.A.2
5.NBT.A.3
5.NBT.A.3
5.NBT.A.3
5.NBT.A.3
5.NBT.A.3
5.NBT.A.3
5.NBT.A.3
5.NBT.A.4
5.NBT.A.4
5.NBT.A.4
6.NS.C.6
6.NS.C.7
6.NS.C.7
## Number and Operations

### Number and Operations in Base Ten

**Standards Alignment**

<table>
<thead>
<tr>
<th>RIT Range: 161-178</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add 1s or 10s (no regrouping)</td>
<td>1.NBT.C.4</td>
</tr>
<tr>
<td>Add 2-digit numbers (no regrouping)</td>
<td>1.NBT.C.4</td>
</tr>
<tr>
<td>Break apart 2-digit addition problems</td>
<td>1.NBT.C.4</td>
</tr>
<tr>
<td>Regroup when adding 1-digit numbers</td>
<td>1.NBT.C.4</td>
</tr>
<tr>
<td>Add 1 or 10</td>
<td>1.NBT.C.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 179-191</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add 2-digit numbers by making tens</td>
<td>2.NBT.B.5</td>
</tr>
<tr>
<td>Add 2-digit numbers by making tens 2</td>
<td>2.NBT.B.5</td>
</tr>
<tr>
<td>Add within 100</td>
<td>2.NBT.B.5</td>
</tr>
<tr>
<td>Subtract 1 or 10</td>
<td>2.NBT.B.5</td>
</tr>
<tr>
<td>Subtract 2-digit numbers (no regrouping)</td>
<td>2.NBT.B.5</td>
</tr>
<tr>
<td>Subtract within 100</td>
<td>2.NBT.B.5</td>
</tr>
<tr>
<td>Subtract within 20</td>
<td>2.NBT.B.5</td>
</tr>
<tr>
<td>Subtracting 1s or 10s (no regrouping)</td>
<td>2.NBT.B.5</td>
</tr>
<tr>
<td>Add 10s and 100s (no regrouping)</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Add 2- and 3-digit numbers (no regrouping)</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Add and subtract on a number line</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Add and subtract using a number line</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Select strategies for adding within 100</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Subtract 10s and 100s (no regrouping)</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Subtract 2- and 3-digit numbers (no regrouping)</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Add using groups of 10 and 100</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Break apart 3-digit addition problems</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Estimate to add and subtract multi-digit whole numbers</td>
<td>2.NBT.B.7</td>
</tr>
</tbody>
</table>
### Number and Operations

#### Number and Operations in Base Ten

**RIT Range: 192-202**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add using groups of 10 and 100</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Break apart 3-digit addition problems</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Estimate to add and subtract multi-digit whole numbers</td>
<td>2.NBT.B.7</td>
</tr>
<tr>
<td>Add within 1000</td>
<td>3.NBT.A.2</td>
</tr>
<tr>
<td>Subtract within 1000</td>
<td>3.NBT.A.2</td>
</tr>
<tr>
<td>Multiply by tens</td>
<td>3.NBT.A.3</td>
</tr>
<tr>
<td>Multiply by tens word problems</td>
<td>3.NBT.A.3</td>
</tr>
</tbody>
</table>

**RIT Range: 203-212**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-digit addition</td>
<td>4.NBT.B.4</td>
</tr>
<tr>
<td>Multi-digit subtraction</td>
<td>4.NBT.B.4</td>
</tr>
<tr>
<td>Multiply 1-digit numbers by 10, 100, and 1000</td>
<td>4.NBT.B.5</td>
</tr>
<tr>
<td>Multiply 1-digit numbers by a multiple of 10, 100, and 1000</td>
<td>4.NBT.B.5</td>
</tr>
<tr>
<td>Multiply 2-, 3-, and 4-digits by 1-digit with area models</td>
<td>4.NBT.B.5</td>
</tr>
<tr>
<td>Multiply 2-digit numbers</td>
<td>4.NBT.B.5</td>
</tr>
<tr>
<td>Multiply 2-digit numbers with area models</td>
<td>4.NBT.B.5</td>
</tr>
<tr>
<td>Multiply using place value</td>
<td>4.NBT.B.5</td>
</tr>
<tr>
<td>Multiply with regrouping</td>
<td>4.NBT.B.5</td>
</tr>
<tr>
<td>Multiply without regrouping</td>
<td>4.NBT.B.5</td>
</tr>
<tr>
<td>Multiplying 10s</td>
<td>4.NBT.B.5</td>
</tr>
<tr>
<td>Cancel zeros when dividing</td>
<td>4.NBT.B.6</td>
</tr>
<tr>
<td>Divide by 1-digit numbers (no remainders)</td>
<td>4.NBT.B.6</td>
</tr>
<tr>
<td>Divide by 1-digit numbers (visual models)</td>
<td>4.NBT.B.6</td>
</tr>
<tr>
<td>Divide using place value</td>
<td>4.NBT.B.6</td>
</tr>
<tr>
<td>Divide with remainders</td>
<td>4.NBT.B.6</td>
</tr>
<tr>
<td>Divide with remainders (basic)</td>
<td>4.NBT.B.6</td>
</tr>
</tbody>
</table>
Number and Operations

Number and Operations in Base Ten

Standards Alignment

RIT Range: 203-212

**Intro to remainders**

4.NBT.B.6

**Quotients that are multiples of 10**

4.NBT.B.6

**Zeros in the dividend (no remainders)**

4.NBT.B.6

**Zeros in the quotient (no remainders)**

4.NBT.B.6

RIT Range: 213-219

**Estimate multi-digit multiplication problems**

5.NBT.B.5

**Multi-digit multiplication**

5.NBT.B.5

**Multiply by taking out factors of 10**

5.NBT.B.5

**Basic multi-digit division**

5.NBT.B.6

**Divide by taking out factors of 10**

5.NBT.B.6

**Estimate multi-digit division problems**

5.NBT.B.6

**Add decimals like 0.7+0.5**

5.NBT.B.7

**Add decimals like 0.76+0.21**

5.NBT.B.7

**Add decimals like 4+5.7**

5.NBT.B.7

**Add decimals like 40.1+7.6**

5.NBT.B.7

**Add decimals like 47.75+11.98**

5.NBT.B.7

**Add decimals like 5.53+6.1**

5.NBT.B.7

**Add decimals visually**

5.NBT.B.7

**Divide decimals and whole numbers by 0.1 or 0.01**

5.NBT.B.7

**Divide decimals like 0.72÷0.08**

5.NBT.B.7

**Divide decimals like 1.32÷0.12**

5.NBT.B.7

**Divide decimals like 1.86÷2**

5.NBT.B.7

**Divide decimals like 16.8÷40 by factoring out a 10**

5.NBT.B.7

**Divide decimals visually**

5.NBT.B.7

**Divide whole numbers like 63÷12 to get a decimal**

5.NBT.B.7
Number and Operations
Number and Operations in Base Ten

**Standards Alignment**

**RIT Range: 213-219**

- Divide whole numbers like 7+5 to get a decimal
- Divide whole numbers like 80+200 to get a decimal
- Estimating with adding decimals
- Estimating with dividing decimals
- Estimating with multiplying decimals
- Estimating with subtracting decimals
- Multiply decimals like 0.56x4
- Multiply decimals like 0.6x0.4
- Multiply decimals like 1.7x0.12
- Multiply decimals visually
- Subtract decimals like 0.6-0.43
- Subtract decimals like 0.75-0.56
- Subtract decimals like 0.9-0.7
- Subtract decimals like 1.6-0.3
- Subtract decimals like 15-7.45
- Subtract decimals like 56.8-17.9
- Subtract decimals like 67.89-6
- Subtract decimals like 78.4-3
- Subtract decimals visually
- Multiplying decimals like 4x0.6 (standard algorithm)

**RIT Range: 220-223**

- Multiplying decimals like 4x0.6 (standard algorithm)
- Exponents
- Exponents (basic)
- Variable expressions with exponents
Number and Operations
Number and Operations in Base Ten

RIT Range: 220-223

- Division by 2-digits
- Multi-digit division
- Adding & subtracting decimals word problems
- Adding decimals: thousandths
- Dividing decimals: hundredths
- Dividing decimals: thousandths
- Dividing whole numbers like 56÷35 to get a decimal
- Multiplying decimals like 0.847x3.54 (standard algorithm)
- Multiplying decimals like 2.45x3.6 (standard algorithm)
- Subtracting decimals: thousandths

 Standards Alignment

6.NS.B.2
6.NS.B.2
6.NS.B.3
6.NS.B.3
6.NS.B.3
6.NS.B.3
6.NS.B.3
6.NS.B.3
6.NS.B.3

RIT Range: 224-227

- Adding & subtracting negative numbers
- Adding negative numbers
- Adding negative numbers on the number line
- Addition & subtraction: find the missing value
- Interpret negative number addition and subtraction expressions
- Negative number addition and subtraction: word problems
- Number equations & number lines
- Subtracting negative numbers

 Standards Alignment

7.NS.A.1
7.NS.A.1
7.NS.A.1
7.NS.A.1
7.NS.A.1
7.NS.A.1
7.NS.A.1
7.NS.A.1
Number and Operations

Number and Operations - Fractions

Standards Alignment

RIT Range: 192-202

- Cut shapes into equal parts
- Identify numerators and denominators
- Identify unit fractions
- Recognize fractions
- Recognize fractions greater than 1
- Find 1 on the number line
- Fractions on the number line
- Unit fractions on the number line
- Relate fractions to 1
- Compare fractions of different wholes
- Compare fractions with the same denominator
- Compare fractions with the same numerator
- Compare fractions with the same numerator or denominator
- Equivalent fraction models
- Equivalent fractions on the number line
- Visually compare fractions 1
- Write fractions as whole numbers

RIT Range: 203-212

- Equivalent fractions
- Equivalent fractions (fraction models)
- Common denominators
- Compare fractions and mixed numbers
- Compare fractions with different numerators and denominators
- Equivalent fractions and different wholes
- Order fractions
## Number and Operations

### Number and Operations - Fractions

**RIT Range:** 203-212

<table>
<thead>
<tr>
<th>Activity</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visually compare fractions with unlike denominators</td>
<td>4.NF.A.2</td>
</tr>
<tr>
<td>Add and subtract fractions word problems (same denominator)</td>
<td>4.NF.B.3</td>
</tr>
<tr>
<td>Add and subtract mixed numbers (no regrouping)</td>
<td>4.NF.B.3</td>
</tr>
<tr>
<td>Add and subtract mixed numbers (with regrouping)</td>
<td>4.NF.B.3</td>
</tr>
<tr>
<td>Add and subtract mixed numbers word problems (like denominators)</td>
<td>4.NF.B.3</td>
</tr>
<tr>
<td>Add fractions with common denominators</td>
<td>4.NF.B.3</td>
</tr>
<tr>
<td>Decompose fractions</td>
<td>4.NF.B.3</td>
</tr>
<tr>
<td>Rewrite mixed numbers and improper fractions</td>
<td>4.NF.B.3</td>
</tr>
<tr>
<td>Subtract fractions with common denominators</td>
<td>4.NF.B.3</td>
</tr>
<tr>
<td>Equivalent unit fraction and whole number multiplication expressions</td>
<td>4.NF.B.4</td>
</tr>
<tr>
<td>Multiply fractions and whole numbers intuition</td>
<td>4.NF.B.4</td>
</tr>
<tr>
<td>Multiply unit fractions and whole numbers</td>
<td>4.NF.B.4</td>
</tr>
<tr>
<td>Multiply fractions and whole numbers</td>
<td>4.NF.B.4</td>
</tr>
<tr>
<td>Interpret multiplying fraction and whole number word problems</td>
<td>4.NF.B.4</td>
</tr>
<tr>
<td>Multiply fractions and whole numbers word problems</td>
<td>4.NF.B.4</td>
</tr>
<tr>
<td>Add fractions (denominators 10 &amp; 100)</td>
<td>4.NF.C.5</td>
</tr>
<tr>
<td>Decompose fractions with denominators of 100</td>
<td>4.NF.C.5</td>
</tr>
<tr>
<td>Equivalent expressions with common denominators (denominators 10 &amp; 100)</td>
<td>4.NF.C.5</td>
</tr>
<tr>
<td>Equivalent fractions (denominators 10 &amp; 100)</td>
<td>4.NF.C.5</td>
</tr>
<tr>
<td>Equivalent fractions with fraction models (denominators 10 &amp; 100)</td>
<td>4.NF.C.5</td>
</tr>
<tr>
<td>Decimals in words</td>
<td>4.NF.C.6</td>
</tr>
<tr>
<td>Decimals on the number line: hundredths</td>
<td>4.NF.C.6</td>
</tr>
<tr>
<td>Decimals on the number line: hundredths 0-0.1</td>
<td>4.NF.C.6</td>
</tr>
<tr>
<td>Decimals on the number line: tenths</td>
<td>4.NF.C.6</td>
</tr>
<tr>
<td>Decimals on the number line: tenths 0-1</td>
<td>4.NF.C.6</td>
</tr>
<tr>
<td>Standards Alignment</td>
<td>Number and Operations - Fractions</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>RIT Range: 203-212</td>
<td>Place value for decimals greater than 1</td>
</tr>
<tr>
<td></td>
<td>Rewrite decimals as fractions</td>
</tr>
<tr>
<td></td>
<td>Rewrite fractions as decimals (denominators of 10 &amp; 100)</td>
</tr>
<tr>
<td></td>
<td>Write decimal numbers shown in grids</td>
</tr>
<tr>
<td></td>
<td>Write number as a fraction and decimal</td>
</tr>
<tr>
<td></td>
<td>Compare decimals (tenths and hundredths)</td>
</tr>
<tr>
<td></td>
<td>Compare decimals and fractions</td>
</tr>
<tr>
<td></td>
<td>Compare decimals visually</td>
</tr>
<tr>
<td>RIT Range: 213-219</td>
<td>Multiply fractions and whole numbers</td>
</tr>
<tr>
<td></td>
<td>Interpret multiplying fraction and whole number word problems</td>
</tr>
<tr>
<td></td>
<td>Multiply fractions and whole numbers word problems</td>
</tr>
<tr>
<td></td>
<td>Add and subtract fractions challenge</td>
</tr>
<tr>
<td></td>
<td>Add and subtract mixed numbers with unlike denominators (no regrouping)</td>
</tr>
<tr>
<td></td>
<td>Add and subtract mixed numbers with unlike denominators (regrouping)</td>
</tr>
<tr>
<td></td>
<td>Add fractions with unlike denominators</td>
</tr>
<tr>
<td></td>
<td>Equivalent expressions with common denominators</td>
</tr>
<tr>
<td></td>
<td>Subtracting fractions with unlike denominators</td>
</tr>
<tr>
<td></td>
<td>Visually add and subtract fractions</td>
</tr>
<tr>
<td></td>
<td>Add and subtract fractions word problems</td>
</tr>
<tr>
<td></td>
<td>Fractions as division</td>
</tr>
<tr>
<td></td>
<td>Fractions as division word problems</td>
</tr>
<tr>
<td></td>
<td>Area of rectangles with fraction side lengths</td>
</tr>
<tr>
<td></td>
<td>Multiply fractions and whole numbers visually</td>
</tr>
</tbody>
</table>
## Number and Operations

### Number and Operations - Fractions

<table>
<thead>
<tr>
<th>RIT Range: 213-219</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiply mixed numbers</td>
<td>5.NF.B.4</td>
</tr>
<tr>
<td>Multiplying fractions</td>
<td>5.NF.B.4</td>
</tr>
<tr>
<td>Multiplying fractions with visuals</td>
<td>5.NF.B.4</td>
</tr>
<tr>
<td>Multiply fractions word problems</td>
<td>5.NF.B.6</td>
</tr>
<tr>
<td>Divide fractions and whole numbers word problems</td>
<td>5.NF.B.7</td>
</tr>
<tr>
<td>Dividing unit fractions by whole numbers</td>
<td>5.NF.B.7</td>
</tr>
<tr>
<td>Dividing unit fractions by whole numbers visually</td>
<td>5.NF.B.7</td>
</tr>
<tr>
<td>Dividing whole numbers by unit fractions</td>
<td>5.NF.B.7</td>
</tr>
<tr>
<td>Dividing whole numbers by unit fractions visually</td>
<td>5.NF.B.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 220-223</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divide mixed numbers</td>
<td>6.NS.A.1</td>
</tr>
<tr>
<td>Divide whole numbers by fractions</td>
<td>6.NS.A.1</td>
</tr>
<tr>
<td>Dividing fractions</td>
<td>6.NS.A.1</td>
</tr>
<tr>
<td>Dividing fractions word problems</td>
<td>6.NS.A.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 224-227</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative number addition and subtraction: word problems</td>
<td>7.NS.A.3</td>
</tr>
</tbody>
</table>
# Measurement and Data

## Geometric Measurement and Problem Solving

<table>
<thead>
<tr>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>K.MD.A.2</td>
</tr>
</tbody>
</table>

**RIT Range: <160**

- **Compare size**

**RIT Range: 161-178**

- **Indirect measurement**

- **Order by length**

- **Measure lengths 1**

- **Tell time to hour or half hour**

**RIT Range: 179-191**

- **Measure lengths 2**

- **Estimate lengths**

- **Length word problems**

- **Add and subtract on the number line word problems**

- **Tell time with a labeled clock**

- **Tell time without labels**

- **Count money (U.S.)**

**RIT Range: 192-202**

- **Tell time to the nearest minute**

- **Telling time on the number line**

- **Telling time word problems (within the hour)**

- **Time differences (within the hour)**

- **Time word problems with number line**

- **Word problems with mass**

- **Word problems with volume**

- **Estimate mass (grams and kilograms)**

- **Estimate volume (milliliters and liters)**

- **Understanding area**

- **Estimate mass (grams and kilograms)**

- **Estimate volume (milliliters and liters)**

- **Understanding area**
Measurement and Data

Geometric Measurement and Problem Solving

**Standards Alignment**

**RIT Range: 192-202**

- **Find area by counting unit squares**
  - 3.MD.C.5 | 3.MD.C.6
- **Create rectangles with a given area**
  - 3.MD.C.6
- **Find area with partial unit squares**
  - 3.MD.C.6
- **Area and the distributive property**
  - 3.MD.C.6
- **Area of rectangles**
  - 3.MD.C.6
- **Compare areas by multiplying**
  - 3.MD.C.6
- **Decompose figures to find area 1**
  - 3.MD.C.7
- **Decompose figures to find area 2**
  - 3.MD.C.7
- **Find a missing side length when given area**
  - 3.MD.C.7
- **Measure to find area**
  - 3.MD.C.7
- **Transition from unit squares to area formula**
  - 3.MD.C.7
- **Compare area and perimeter**
  - 3.MD.D.8
- **Find a missing side length when given perimeter**
  - 3.MD.D.8
- **Find perimeter by counting unit squares**
  - 3.MD.D.8
- **Find perimeter when given side lengths**
  - 3.MD.D.8
- **Measure to find perimeter**
  - 3.MD.D.8
- **Perimeter word problems**
  - 3.MD.D.8

**RIT Range: 203-212**

- **Estimate mass (grams and kilograms)**
  - 3.MD.A.2 | 4.MD.A.1
- **Estimate volume (milliliters and liters)**
  - 3.MD.A.2 | 4.MD.A.1
- **Convert to smaller units (c, pt, qt, & gal)**
  - 4.MD.A.1
- **Convert to smaller units (g and kg)**
  - 4.MD.A.1
- **Convert to smaller units (in, ft, yd, & mi)**
  - 4.MD.A.1
- **Convert to smaller units (mL and L)**
  - 4.MD.A.1
- **Convert to smaller units (mm, cm, m, & km)**
  - 4.MD.A.1
### Measurement and Data

**Geometric Measurement and Problem Solving**

<table>
<thead>
<tr>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.MD.A.1</td>
</tr>
</tbody>
</table>

**RIT Range: 203-212**

- Convert to smaller units (oz and lb)
- Convert to smaller units (sec, min, & hr)
- Estimating length (in, ft, yd, and mi)
- Estimating length (mm, cm, m, km)
- Estimating mass (ounces and pounds)
- Estimating time (seconds, minutes, and hours)
- Estimating volume (cups, pints, quarts, and gallons)
- Convert money word problems
- Metric conversions word problems
- Telling time word problems
- Time conversion word problems
- Time differences
- US customary conversion word problems
- Area & perimeter of rectangles word problems
- Area of squares and rectangles
- Angle basics
- Benchmark angles
- Name angles
- Angles in circles
- Draw angles
- Measure angles
- Decompose angles

**RIT Range: 213-219**

- Angles in circles
- Convert units (metrics)
Measurement and Data
Geometric Measurement and Problem Solving

RIT Range: 213-219

- Convert units (US customary)
- Convert units word problems (metric)
- Convert units word problems (US customary)
- Volume with unit cubes 1
- Compare volumes with unit cubes
- Decompose figures to find volume
- Decompose figures to find volume (unit cubes)
- Volume 1
- Volume word problems

RIT Range: 220-223

- Area challenge
- Area of composite shapes
- Area of parallelograms
- Area of right triangles
- Area of triangles
- Find base and height on a triangle
- Volume by multiplying area of base times height
- Volume with cubes with fraction lengths
- Volume with fractions
- Volume word problems: fractions & decimals

Standards Alignment

- 5.MD.A.1
- 5.MD.A.1
- 5.MD.A.1
- 5.MD.C.4
- 5.MD.C.4 | 5.MD.C.5
- 5.MD.C.5
- 5.MD.C.5
- 5.MD.C.5
- 5.MD.C.5
- 5.MD.C.5
- 5.MD.C.5
- 6.G.A.1
- 6.G.A.1
- 6.G.A.1
- 6.G.A.1
- 6.G.A.1
- 6.G.A.1
- 6.G.A.2
- 6.G.A.2
- 6.G.A.2
- 6.G.A.2
- 6.G.A.2
Measurement and Data

Represent and Interpret Data

Standards Alignment

RIT Range: <160

*Compare numbers of objects 2*

K.MD.B.3

RIT Range: 161-178

*Solve problems with bar graphs 1*

1.MD.C.4

RIT Range: 179-191

*Solve problems with bar graphs 2*

2.MD.D.10

*Solve problems with picture graphs 1*

2.MD.D.10

*Make bar graphs 1*

2.MD.D.9

*Make line plots*

2.MD.D.9

*Make picture graphs 1*

2.MD.D.9

*Solve problems with line plots*

2.MD.D.9

RIT Range: 192-202

*Create bar graphs*

3.MD.B.3

*Create picture graphs (picture more than 1)*

3.MD.B.3

*Read bar graphs and solve 1-step problems*

3.MD.B.3

*Read bar graphs and solve 2 step problems*

3.MD.B.3

*Read picture graphs*

3.MD.B.3

*Read picture graphs (multi-step problems)*

3.MD.B.3

*Graph data on line plots*

3.MD.B.4

*Read line plots (data with fractions)*

3.MD.B.4

RIT Range: 203-212

*Interpret dot plots with fractions 1*

4.MD.B.4

RIT Range: 213-219

*Interpret dot plots with fraction operations*

5.MD.B.2
## Measurement and Data

### Represent and Interpret Data

**Standards Alignment**

<table>
<thead>
<tr>
<th>RIT Range: 220-223</th>
<th>Calculating the median: data displays</th>
<th>6.SP.B.4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Create histograms</td>
<td>6.SP.B.4</td>
</tr>
<tr>
<td></td>
<td>Creating dot plots</td>
<td>6.SP.B.4</td>
</tr>
<tr>
<td></td>
<td>Creating frequency tables</td>
<td>6.SP.B.4</td>
</tr>
<tr>
<td></td>
<td>Read histograms</td>
<td>6.SP.B.4</td>
</tr>
<tr>
<td></td>
<td>Reading box plots</td>
<td>6.SP.B.4</td>
</tr>
<tr>
<td></td>
<td>Reading dot plots &amp; frequency tables</td>
<td>6.SP.B.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 224-227</th>
<th>Making inferences from random samples</th>
<th>7.SP.A.2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Valid claims</td>
<td>7.SP.A.2</td>
</tr>
</tbody>
</table>
Geometry

Reason with Shapes, Attributes, & Coordinate Plane

<table>
<thead>
<tr>
<th>RIT Range: &lt;160</th>
<th>Standards Alignment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name shapes 1</strong></td>
<td>K.G.A.1</td>
</tr>
<tr>
<td><strong>Relative position</strong></td>
<td>K.G.A.1</td>
</tr>
<tr>
<td><strong>Name shapes 2</strong></td>
<td>K.G.A.2</td>
</tr>
<tr>
<td><strong>Compare shapes</strong></td>
<td>K.G.B.4</td>
</tr>
<tr>
<td><strong>Compose shapes</strong></td>
<td>K.G.B.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 161-178</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name 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>Name shapes 4</strong></td>
</tr>
<tr>
<td><strong>Equal parts of circles and rectangles</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>Identify quadrilaterals</strong></td>
</tr>
<tr>
<td><strong>Cut shapes into equal parts</strong></td>
</tr>
<tr>
<td><strong>Identify unit fractions</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RIT Range: 203-212</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Angle types</strong></td>
</tr>
<tr>
<td><strong>Draw parallel and perpendicular lines</strong></td>
</tr>
<tr>
<td><strong>Draw rays, lines, &amp; line segments</strong></td>
</tr>
<tr>
<td><strong>Draw right, acute, and obtuse angles</strong></td>
</tr>
<tr>
<td><strong>Identify parallel and perpendicular lines</strong></td>
</tr>
<tr>
<td><strong>Identify rays, lines, &amp; line segments</strong></td>
</tr>
<tr>
<td><strong>Recognize angles</strong></td>
</tr>
<tr>
<td>RIT Range</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>203-212</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>220-223</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>224-227</td>
</tr>
</tbody>
</table>

- Classify shapes by line and angle types
- Identify triangles by angles
- Identify triangles by side lengths
- Quadrilateral types
- Draw lines of symmetry and symmetrical figures
- Identify lines of symmetry
- Identify symmetrical figures

- Identify quadrilaterals
- Quadrilateral types
- Graph points
- Identify coordinates
- Identify points
- Coordinate plane word problems (quadrant 1)
- Distance between points in first quadrant
- Shapes on the coordinate plane
- Properties of shapes
- Quadrilateral types

- Drawing polygons with coordinates
- Quadrilateral problems on the coordinate plane
- Nets of polyhedra
- Points on the coordinate plane

- Cross sections of 3D objects (basic)