## Grade 3

## Summer Guidance

## How to Use This Document

Schools and districts provide extended summer learning opportunities for students in a variety of formats. The Math Learning Center has developed this summer guidance to provide flexible options for instructional planning. Each document includes a curated list of tasks, sessions, and resources aligned to the grade-level content recommendations from the Common Core State Standards identified critical areas and the Student Achievement Partners (Achieve the Core) focus documents. In addition, a planning template with sample plans can be found here.

## Grade 3 Critical Content

## From CCSS

(1) Develop understanding of multiplication and division and strategies for multiplication and division within 100
(2) Develop understanding of fractions, especially unit fractions (fractions with numerator 1)
(3) Develop understanding of the structure of rectangular arrays and of area
(4) Describe and analyze two-dimensional shapes

## Grade 3 Major Clusters

## From Achieve the Core

3.OA.A Represent and solve problems involving multiplication and division
3.OA.B Understand properties of multiplication and the relationship between multiplication and division
3.OA.C Multiply and divide within 100
3.OA.D Solve problems involving the four operations, and identify and explain patterns in arithmetic
3.NF.A Develop understanding of fractions as numbers
3.MD.A Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects
3.MD.C Geometric measurement: understand concepts of area and relate area to multiplication and to addition

## Fluency Expectations:

3.OA.C. 7 Single-digit products and quotients (products from memory)
3.NBT.A. 2 Add/subtract within 1,000

## Suggested Bridges Materials

Familiar Bridges in Mathematics resources can be used flexibly to support summer learning. Grade-level recommendations include suggested activities for each of the following components.

Math at Home (10 minutes/day)
Using familiar routines and designed for flexible use by students, families, and teachers, Math at Home activities can be used as daily warmups to establish a positive classroom culture and support social and emotional learning. Resources include printable pages and sample responses for reference for most activities.

Bridges Intervention (30 minutes/day)
Organized by content, Bridges Intervention volumes are designed for explicit, small-group instruction and address critical numeracy and computation skills. Each session includes a warmup, an activity, and a guided practice page with progress monitoring conducted every fifth session. Activities might also be selected as needed to support students who require work with particular skills or concepts.

Work Places (20-30 minutes/day)
Work Place activities engage students in differentiated practice with key skills. They can be introduced in whole- or small-group settings and used at work stations. To focus on specific standards, refer to the Grade 3 Work Place CCSS Correlations. Use support and challenge suggestions from the Work Place Guide and assign game variations from the Work Place Instructions to further individualize instruction. Work Place materials (with student materials in English and Spanish) are available on the Curriculum tab of the Bridges Educator Site.

Bridges in Mathematics Unit 8 (60 minutes/day) Grade 3 Unit 8 is a STEM-based unit that can be used for a thematic approach to in-person summer learning. The 20 one-hour sessions may be offered as an extension program that focuses on grade-level content and may be combined with focused small-group work for students requiring additional support. Note that specialized materials may need to be gathered and/or borrowed from a classroom kit to teach this unit.

## Bridges ${ }^{\circledR}$ in Mathematics Grade 3 Summer Guidance

## Grade 3 Summer Learning Resources

| Math at Home | Bridges Intervention | Work Places CCSS Correlations |
| :---: | :---: | :---: |
| Multiplying \& Dividing Within 100 (3.OA.C) |  |  |
| Family Games <br> - Multiplication Facts Tic-Tac-Toe <br> Math in Our World <br> - Exercise by the Numbers <br> - People \& Their Pets <br> - Snack Time <br> Math Mobiles <br> - Heavy Weiqhts <br> - Number Chimes <br> Online Games <br> - Clear It Multiplication <br> - Meteor Multiplication <br> Same \& Different <br> - Broken Rectangles <br> - Dip-Dyed Arrays <br> - Dog Treat Packs <br> - Speedy Skateboards <br> - Target Practice <br> Today's Number <br> - 24 <br> - 36 <br> Would You Rather? <br> - Marble Collection <br> What Comes Next? <br> - Fruit Stand <br> - Stacking Boxes <br> Which One Doesn't Belong? <br> - Color Array <br> - Dot by Dot | Volume 5 <br> Operations: Basic Multiplication \& Division, Modules 1-12 <br> Note that work with arrays begins in Module 4. <br> - CCSS Correlations <br> - Tech Resources <br> - Writable PDFs | 2A Loops \& Groups <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> 2B Frog Jump Multiplication <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> 2C Cover Up <br> * Includes concepts of area <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> 2D Doubles Help <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> - Number Rack App <br> 5A Solving Game Store Problems <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Sentence Frames <br> - Number Pieces App <br> 5B Scout Them Out <br> - Guides \& Instructions <br> - Record Sheets <br> - Student Work Place <br> - Sentence Frames <br> - Number Rack App <br> 5C Line 'Em Up <br> - Guides \& Instructions <br> - Record Sheets <br> - Student Work Place <br> - Sentence Frames <br> 5D Division Capture <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> - Number Rack App |

## Bridges ${ }^{\circledR}$ in Mathematics Grade 3 Summer Guidance

| Math at Home | Bridges Intervention | Work Places CCSS Correlations |
| :---: | :---: | :---: |
| Multiplying \& Dividing Within 100 (3.OA.C) continued |  |  |
|  |  | Concepts of Area <br> 6D Area or Perimeter <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames |
| Understanding Fractions (3.NF.A) |  |  |
| Guess My Rule <br> - Fraction Expressions <br> Math in Our World <br> - Baking Bread <br> - Kite Design <br> - Scratch Art <br> Same \& Different <br> - All in the Slice <br> - Fraction Hops <br> - Geoboard Fractions <br> - Shelly's Seashells <br> Today's Number <br> - 3/4 <br> - 4/6 <br> Would You Rather? <br> - Fraction Locations <br> - Slime Time <br> - Unicycle or Bike <br> What Comes Next? <br> - Fractional Parts <br> - Fraction Jumps <br> - Quarter-Inch Creep <br> Which One Doesn't Belong? <br> - Pieces \& Parts <br> - Shady Fractions <br> - We Are Many Parts | Volume 8 <br> Adding, Subtracting \& Making <br> Sense of Fractions, Modules 1-4 <br> - CCSS Correlations <br> - Tech Resources <br> - Writable PDFs | 4D Hexagon Spin \& Fill <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> 7A Dozens of Eggs <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> 7B Racing Fractions <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> Note: The Fraction App is a helpful tool for modeling fractions. |


| Math at Home | Bridges Intervention | Work Places |
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## Bridges ${ }^{\circledR}$ in Mathematics Grade 3 Summer Guidance

|  |  | CCSS Correlations |
| :---: | :---: | :---: |
| Describing \& Analyzing Two-Dimensional Shapes (3.G.A) |  |  |
| Family Game <br> - Grade 3 Geometry Scavenger Hunt <br> - Last Shape in Wins <br> Guess My Rule <br> - Polygon Sort <br> Same \& Different <br> - Related Quadrilaterals | N/A | 6A Tangram Polygons <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> 6B Geoboard Polygons <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> 6C Guess My Quadrilateral <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Sentence Frames |
| Solving Problems Involving the Four Operations (3.NBT.A, 3.OA.D with a subtraction focus) |  |  |
| Family Game <br> - Subtraction Draw <br> Math in Our World <br> - Bike Challenge <br> - Block Towers (Grade 2) <br> - Our Dog, Sister (Grade 2) <br> - Ramp Racing <br> Math Mobiles <br> - Balance the Triangle <br> Same \& Different <br> - On the Court <br> - Unknown Number (Grade 2) <br> - Which Number Is Missing? (Grade 2) <br> Would You Rather? <br> - Puzzled Over Puzzles (Grade 2) <br> What Comes Next? <br> - Jersey Countdown | Volume 2 <br> Operations: Basic Addition \& Subtraction, Modules 7-10 <br> - CCSS Correlations <br> - Tech Resources <br> - Writable PDFs <br> Volume 3 <br>  <br> Subtraction with Multi-Digit <br> Numbers, Modules 6-9 <br> - CCSS Correlations <br> - Tech Resources <br> - Writable PDFs <br> Volume 4 <br> Addition \& Subtraction Word <br> Problems, Modules 7-9 <br> - CCSS Correlations <br> - Tech Resources <br> - Writable PDFs | Grade 2 Work Places <br> 2D Pick Two, Roll \& Subtract <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> - Number Rack App <br> 5A Jump-a-Ten <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> 5E Jump-a-Hundred <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> 7A Race to the Cookie Jar <br> - Guides \& Instructions <br> - Student Work Place <br> - Sentence Frames <br> - Number Pieces App <br> 8B Roll \& Subtract One Thousand <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> - Number Pieces App |

## Bridges ${ }^{\circledR}$ in Mathematics Grade 3 Summer Guidance

| Math at Home | Bridges Intervention | Work Places CCSS Correlations |
| :---: | :---: | :---: |
| Solving Problems Involving the Four Operations (3.NBT.A, 3.OA.D with a subtraction focus) continued |  |  |
|  |  | Grade 3 Work Places <br> 1C Blast Off to Space <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> - Number Rack App <br> 1D Subtraction Bingo <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> - Number Rack App <br> 1H Anything But Five <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> - Number Pieces App <br> 4C Target One Thousand <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> - Number Pieces App |
| Measuring Time, Liquid Volume \& Mass (3.MD.A) |  |  |
| Family Game <br> - Measurement Scavenger Hunt <br> Guess My Rule <br> - Sorting Tools <br> Math in Our World <br> - Collecting Raindrops <br> - Julio's After-School Schedule <br> Same \& Different <br> - Weighty Numbers <br> What Comes Next? <br> - Cube Masses <br> - Time Pattern | N/A | 4A Tic-Tac-Tock <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Student Work Place <br> - Sentence Frames <br> 4B Measurement Scavenger Hunt <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Sentence Frames <br> 8A Weight Lifting <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Sentence Frames <br> 8C Speed Skating <br> - Guides \& Instructions <br> - Record Sheets \& Game Boards <br> - Sentence Frames |

## Bridges ${ }^{\circledR}$ in Mathematics Grade 3 Summer Guidance

## Unit 8: Bridges Design \& Construction: Data Collection \& Analysis

In this unit, students learn about different kinds of bridges by reading nonfiction, looking at pictures, doing research, and building their own model bridges. This unit integrates mathematics and science with a primary focus on designing and building model bridges, which are then tested in systematic ways to collect data. Students graph and analyze the data, finding the range and mean, to make conjectures and draw conclusions about effective bridge design and construction.

Throughout the unit, students apply important skills and concepts from their grade-level work, including the following areas of focus:

- 3.NF.A Develop understanding of fractions as numbers
- 3.MD.A Solve problems involving measurement and estimation of intervals of time and masses of objects
- 3.MD.C Geometric measurement: understand concepts of area and relate area to multiplication and to addition

