



## GRADE 3

# Unit 7 Introduction & Planner

Revised for 2020–2021

**Note:** These guidance documents were developed, originally, with the hope that teachers and students would be back in classrooms this fall. Some of the recommended Problems & Investigations are not easy to facilitate in remote settings. Likewise, some Work Places are not available as [Digital Work Places](#) for direct student use.

If you are conducting all or some of your instruction online, we suggest you look into Bridges Tech-Enhanced Activities (TEAs), Math at Home, and resources for using Number Corner in remote settings. All of these resources were informed by the revised Scope & Sequence for 2020–21 and are available at the [Resources & Support for 2020–21](#) section of the Bridges Educator Site. For support with selecting resources and planning for remote instruction, we encourage you to attend our [monthly grade-level webinars](#).

## Unit 7 Extending Multiplication & Fractions

Unit 7 provides a review of material covered earlier in the year, as well as opportunities to extend skills and concepts into work with larger numbers and bigger ideas.

- In Module 1, students review the use of equations to represent two-step story problems that involve multiplication, then explore strategies for multiplying single digits by 11 and 12.
- In Module 2, students build and sketch arrays to model and solve 1-by-2-digit multiplication combinations. They also explore the properties of operations with larger numbers. We recommend you skip these sessions or offer them as extensions.
- Module 3 features a return to fractions, introducing three new ways to model, compare, and generate equivalent fractions—a 12-inch ruler, a 12-foot long strip of adding machine tape, and tiles in an egg carton subdivided with one or more pieces of yarn. While all three models

allow students to work with halves, thirds, fourths, and sixths, those are framed in terms of twelfths. Since third graders aren't expected to work with twelfths, you might choose to make this module optional.

- Module 4 reviews fractions on a number line and with a circle model, in the context of division and data problems.

Major goals for the unit include representing and solving problems involving multiplication and division, understanding the properties of multiplication and the relationship between multiplication and division. Students also develop deeper understandings of fractions as numbers.

**Note:** On the Grade 3 Scope & Sequence revised for 2020–21, Unit 7 follows Unit 5. Unit 6 appears at the end of the year.

## Identifying Topics for Reengagement

Depending on their experience with earlier Bridges units and Number Corner workouts during school closures or other disruptions to instruction this year, students might need opportunities to reengage with the following topics relevant to Unit 7:

- Multiplying with products to 100 using strategies
- Understanding unit fractions, fractions as parts of a whole and fractions as numbers on the number line
- Recognizing and generating equivalent fractions
- Solving 2-step story problems

To assess students' current levels of proficiency with the first three, replace the Unit 7 Pre-Assessment (Module 1, Session 1) with the Unit 7 Screener and Implementation Guide. This short diagnostic tool will help to inform your instruction, interventions, and possible modifications to Unit 7. In addition, use selected items from Number Corner Checkup 3 (as indicated in the

Screener Implementation Guide), as well as observations and interactions with students during daily instruction to guide your instructional decisions. Above all, continue to **trust in the resilience and mathematical capabilities of your students and keep moving forward.**

### Recommended Modifications to Unit 7

1. If you are nearing the end of the year and time is running short, complete Modules 1 and 4. Then move on to Unit 6, Module 3 for some additional work with area and perimeter, and finally loop back to other modules in Units 6 and 7 as time allows.
2. Students should have access to red linear pieces, tiles, and base ten pieces (or the app) throughout this unit.
3. Regarding the Unit 7 Post-Assessment (Module 4, Session 5), we recommend that you have all students do problems 1–5, 11 and 12. They can be invited to complete some or all of other problems as time and interest allows. Abbreviating the post-assessment in this way reduces the amount of time you have to spend collecting and recording data. Problems 1-5, 11 & 12 assess the major fraction and multiplication standards (3.OA.5, 3.NBT.3, and 3.NF.1, 3.NF.2 & 3.NF.3).

### Number Corner Notes

- If time for Number Corner is limited, prioritize the workouts listed below. These recommendations are based on the major work of the grade level. You might make additional selections based on the needs of your students.
- In some schools and districts, April is interrupted by spring break. If you have fewer instructional days this month, review the monthly Target Skills, the data from Number Corner Checkup 3, and make the best choice for your students.

### April

- **Calendar Grid** More Equivalent Fractions [Students examine arrays, pizzas, clocks, egg cartons, and rulers, specifically focusing on the relationship between thirds, sixths and twelfths. Focus on thirds and sixths to address Grade 3 standards.]

- **Computational Fluency** Quick Facts & Games [Students track their progress with multiplication facts via Quick Facts, play Fact Families and Rows & Columns games, and then explore the Associative Properties of Multiplication.]
- **Number Line** Put It on the Line [Students play three games against the teacher, as a class, and with partners that focus on different sets of equivalent fractions.]

### Additional Notes

- The Calendar Collector workout this month reviews telling time on a clock, and fractions of an hour. Consider compacting a few of the activities, as time allows.
- The Solving Problems workouts provide multiplication and division Practice on a 10 by 10 grid. Students examine properties and inverse operations, with the support of visual models and problem solving. Consider doing two or more of the activities in a small group setting if you are short on time.

## Unit 7: Extending Multiplication & Fractions Planner

Module	Session	Session Title	Session Notes	Activities for Reengagement
Module 1 Multi- plication Beyond the Basics	1	Unit 7 Pre-Assessment	Replace Unit 7 Pre-Assessment with the screener and then send students out to Unit 5 Work Places.	<b>Focus</b> Multiply by 10 (CCSS 3.OA.7)
	2	Multiplications Stories & Equations	Teach the entire session.	<b>Bridges Intervention Volume 5</b> Module 1 Session 3 Warm-Ups 1 & 2: <a href="#">Equal Groups of Ten</a> , <a href="#">Counting Forward &amp; Backward by Tens</a>
	3	Multiplying by Eleven	Teach the entire session. Be sure to use base ten pieces or the app for visual representation.	Module 1 Practice Pages: <a href="#">Hop, Skip &amp; Jump by Twos, Fives &amp; Tens, Versions A &amp; B</a>
	4	Multiplying by Twelve	Teach steps 6–18.	Module 2 Practice Pages: <a href="#">Dime Problems, Versions A &amp; B</a>
	5	Multiplying Single Digits by Multiples of Ten	Teach the entire session.	Module 7 <a href="#">Multiplying by Ten &amp; Five</a>
Module 2 One-by-Two Digit Multi- plication	1	Building Arrays for One-by-Two-Digit Multiplication Problems	Because the work in this module goes beyond grade 3 expectations, we recommend that you skip these sessions or offer them as extensions.	
	2	Sketching Arrays for One-by-Two-Digit Multiplication		
	3	Mystery Arrays		
	4	Making Posters for One-by-Two Arrays		
	5	Sharing Multiplication Posters		

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Module	Session	Session Title	Session Notes	Activities for Reengagement
<b>Module 3</b> Fractions as Parts of a Whole & Parts of a Set	1	<b>Fractions on a Ruler</b>	While the models introduced in these sessions allow students to work with halves, thirds, fourths, and sixths, these are framed in terms of twelfths. Since third graders aren't expected to work with twelfths, you might choose to make this module optional.	<b>Focus A</b> Locate and label fractions on a number line. (CCSS 3.NF.1 & 3.NF.2)  <b>G3 Work Place Modifications:</b> <ul style="list-style-type: none"> <li>Observe students' reasoning about equal parts and iterating unit fractions at Work Place 7B Racing Fractions.</li> <li>See support suggestions in the Work Place Guide for 7B Racing Fractions.</li> </ul> <b>Bridges Intervention Volume 8</b> Module 3 <a href="#">Building with Unit Fractions</a> Module 4 <a href="#">Fractions on the Number Line</a>
	2	<b>Introduction to Egg Carton Fractions</b>		
	3	<b>Exploring Egg Carton Fractions</b>		
	4	<b>Equivalent Egg Carton Fractions</b>		
	5	<b>Dozens of Eggs Work Place 7A</b> Dozens of Eggs		
<b>Module 4</b> Fractions at Work	1	<b>Racing Fractions Work Place 7B</b> Racing Fractions	Teach the entire session.	<b>Focus B</b> Recognize and generate simple equivalent fractions. (3.NF.3a, 3.NF.3b)  <b>Bridges Intervention Volume 8</b> Module 5 <a href="#">Introducing Equivalent Fractions</a> Module 6 <a href="#">Generating Equivalent Fractions</a>
	2	<b>Pizza Fractions</b>	Teach the entire session. Use items 1, 2, 4 and 5 on the Fractions Checkpoint as a review.	
	3	<b>Surveys &amp; Fractions</b>	Teach the entire session.	
	4	<b>Pull &amp; Graph</b>	Teach the entire session.	
	5	<b>Unit 7 Post-Assessment</b>	Teach the entire session.  Recommendation: Have all students complete problems 1–5, 11 and 12. Students can be invited to complete additional problems as time and interest allows.	