

KINDERGARTEN

Unit 7 | Unit 8 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 <u>Digital</u> <u>Work Places</u> 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 <u>Resources & Support for 2020–21</u> section of the Bridges Educator Site. For support with selecting resources and planning for remote instruction, we encourage you to attend our <u>monthly grade-level webinars</u>.

Unit 7, Modules 2 & 3 Weight & Place ValueUnit 8, Modules 1 & 4 Computing & Measuring with Frogs & Bugs

The final two units in Kindergarten are merged to provide a strong focus on numeracy skills and the major cluster standards. In Unit 7, students explore weight and capacity, solve addition and subtraction problems, and continue to develop an understanding of place value. The work in Unit 8 builds deeper understandings of subtraction and linear measurement, and strengthens the connections among quantity, related number combinations, and written notation to 20. The modules selected from each unit provide opportunities for students to develop increasingly robust strategies for solving addition and subtraction problems and strengthen their understanding of place value.

- In Unit 7 Module 2, students use the double ten-frames to connect a quantity to symbolic notation and to compare numbers/quantities. They arrange numbers on a number line using concepts of greater than, less than, and equal to. Two Work Places are introduced: Capture the Number and Double Top Draw. Warm-ups focus on counting by 10s to 100.
- In Unit 7 Module 3, students solve addition and subtraction story problems with an emphasis on discussing multiple solution strategies and play a game to strengthen their knowledge of facts to 5. Warm-ups focus on reading numbers and counting on.
- In Unit 8 Module 1, students work on understanding and recording equations for 5 and 10, counting on, counting back, doubles, and thinking in 10s and 1s. Three Work Places are introduced: Bug Catchers, Piggy Bank Subtraction, and Count & Compare Bugs. Warm-ups focus on counting on from 30 to 100.
- In Unit 8 Module 4, students focus on the connection between the equation and the quantity represented on a ten-frame or number rack, extend this relationship to fact families for 5, and conclude with making a paper quilt and exploring the quilt patterns. This module can be shortened by combining or skipping some sessions; the quilt project may be skipped. Warm-ups focus on generating equations to represent Ten-Frame Display Cards.

Major goals for these two merged units include helping students understand that numbers are composed of groups of 10s and 1s and seeing subtraction as both taking away and as comparing or finding the difference between two quantities. The three facets of number are repeatedly connected: the verbal sequence, the quantities they represent, and the written notation.

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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 skills and concepts listed below.

- Counting to 100 by 1s
- Subitizing quantities to 5, and telling how many more are needed to make a total of 5
- Using drawings, objects, or numbers to find the number to make 10 when added to quantities of 9 or less
- Solving addition and subtraction word problems using objects or drawings

To assess students' current skills in these areas, we recommend that you conduct the Unit 7/8 Screener (Interview and Written Assessment) during Module 1. Use the Unit 7/8 Screener Implementation Guide to help interpret the results. This short diagnostic tool will help to inform your instruction, interventions, and possible modifications to Unit 7/8. In addition, use observations and interactions with students during daily instruction and Work Places to guide your instructional decisions. Number Corner Checkup 4 has three tasks identical or similar to the ones on the screener: counting to 100, fluently add and subtract within 5, and two subtraction story problems. Use one or the other for your information; do not complete both.

Above all, continue to **trust in the resilience and mathematical capabilities of your students and keep moving forward**. A consistent focus on early math concepts through Number Corner, Problems & Investigations, and Work Places will lay the necessary groundwork for students' continued growth as they complete their year in Kindergarten.

Recommended Modifications to Units 7 & 8

- The final month of instruction should be a time of celebration for you and your students. You will have established a classroom community, focused on the math practices that build learners' habits, guided students in developing a deeper understanding of mathematics, and survived what will have to have been the most challenging year in your career. This <u>blog</u> <u>post</u> discusses celebration ideas with Work Places. Consider also taking the time to pack and organize your materials as the year ends to best prepare you for next fall, using the suggestions in this <u>blog post</u>.
- 2. MP.7 is especially important during this unit as students use the three facets of number to "look for and make use of structure." Small-group opportunities to read a number, build a number, and write a number to represent a quantity all help develop number sense.
- 3. The first three tasks on the Unit 7/8 Screener are oral interview tasks. The last task is a written assessment and may be administered in small groups with privacy screens. Use the information from the screener to identify students who might need additional support in the form of small-group work during Work Places.
- 4. Along with the screener, you might choose to use screener data from earlier units and observations made during Work Places and whole-group instruction to guide your knowledge of students' skills. We recommend you skip all the checkpoints available in Units 7 and 8 and rely instead on the data from your screeners. As always, rescreen any skills not previously mastered and continue to use the support suggestions for those skills.
- 5. If you conducted Number Corner Checkup 3 and children were successful with the two addition story problems, consider having them skip the first problem on the written portion of the screener and complete only the second.

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Work Places

Consider making adjustments to the Work Places in this unit similar to those suggested in the Unit 1 Planner.

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 can make additional or alternate selections based on the needs of your students.
- If you will be working with only half your students on any given day, you might need to teach key activities from priority workouts twice. Examples in May include Calendar Grid, Activity 2; Days in School, Activities 1, 2, and 3; Number Line, Activity 3; and all the Computational Fluency activities.
- Should you have additional days in June, consider repeating some of the Computational Fluency or Number Line activities from March, April, or May that you feel would best benefit your students.

May

- Calendar Grid Number Puzzles [Supports addition and subtraction within 10, solving addition and subtraction story problems, representing addition and subtraction with drawings, objects, and equations, seeing patterns, counting skills, numeral recognition, and developing your classroom community around the calendar/schedule.]
- **Days in School** [Supports counting, subitizing, cardinality, 1:1 correspondence, counting on, number sense, grouping in 5s and 10s, numeral recognition, making ten, counting by 10s, and understanding the number line. Students use stuffed animals to race by 10s on a number line.]
- **Computational Fluency** Fives Up [Supports 1:1 correspondence, cardinality, counting, counting on, subitizing, adding with fingers or drawings, and fluently adding within five.]
- Number Line Fun with Fifty [Supports forward/backward counting within 50, counting from a number other than 1, numeral recognition, interval counting, comparing numbers, concepts of before, after, and between, and place value.

Additional Notes

- Calendar Collector (Cats & Dogs to Ten) is fun and engaging. If you have time to include this workout, it will reinforce many of the skills being addressed in other workouts. However, if time is short, drop this workout until you can include it.
- Days in School and Number Line are workouts that build cumulatively across the year. These routines provide important continuity for children, but because they repeat frequently, it is less important that every student experience every activity each month. Even if students are present for only some of the days that these are areas of focus, it is not necessary to repeat these activities unless a major concept is being introduced, as all students will gain sufficient exposure over the course of the month and the year.

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Module	Session	Session Title	Session Notes	Activities for Reengagement
U7 Module 2 Tens & Ones to Twenty	1	Capture the Number	Teach the entire session.	Focus Count forward by ones starting from 1 to 100. (CCSS K.CC.1)
			Conduct the Unit 7/8 Screener during this module.	Modify any of the counting activities below to focus on the skill of counting to 100 with special attention to crossing the decades, e.g., 19 to 20, 29 to 30, 39 to 40. You can also start with any
	2	Introducing Work Place 7C Capture the Number	Teach the entire session. This is also a great game to incorporate as a warm-up activity for small groups. They can flip the cards and mark the number. Use some number lines with missing numerals.	multiple of 5 or 10 between 20 and 90 rather than starting from 1 each time. Activities from Bridges Pre-K <u>What Comes Next?</u> <u>Number Games: Puppet Count to Ten</u> <u>Number Games: A Count of Twenty</u> <u>Number Games: Puppet's Counting Circle</u>
	3	Double Top Draw	Teach the entire session.	Bridges Intervention Volume 1
	4	Introducing Work Place 7D Double Top Draw	Teach the entire session.	Module 2 Session 7 Warm-Up: <u>Pendulum Counting from Numbers Other Than One</u> Module 2 Session 8 Warm-Up: <u>Writing Numbers</u>
	5	Greater Than? Less Than? Equal To?	Teach the entire session.	 Module 3 Session 12 Warm-Up: <u>Start & Stop Counting</u> Bridges Intervention Volume 4 Warm-ups in <u>Module 1</u> and <u>Module 2</u> (change the range to focus on counting to 100 and within the decades that are preventing success) Count Everywhere! Use counting as a routine as you transition throughout the day. Count as you walk to recess, count as students clean up, sing counting songs and rhymes, count and move/stretch, count around the circle, etc. Increase the range of the count as students' skills grow. Use a Number Line Having students point to and touch each numeral along a student-sized number line while counting can help them anchor on the count and internalize the number sequence; focus on using the range that is problematic for them. Use the Decade Numbers Post a list of the count-by-10 numbers for students' reference when they get to a point in the counting sequence where they need to shift into the next decade.

Unit 7: Weight & Place Value Planner

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Module	Session	Session Title	Session Notes	Activities for Reengagement
U7 Module 3 Addition & Subtraction Story Problems	1	Story Problems, Part 1	Teach the entire session. This <u>blog post</u> offers helpful suggestions.	Focus Fluently add and subtract within 5. (CCSS K.OA.5) Activities from Bridges Pre-K Five Little Teddy Bears Teddy Bear Combinations Teddy Bear Handfuls
	2	Story Problems, Part 2	Teach the entire session.	
	3	Story Problems, Part 3	Teach the entire session.	
	4	Story Problem Checkpoint	Omit this session.	
	5	Cubes in My Hand	Teach the entire session. Repeat this session for students as needed.	Activities from Earlier in Kindergarten Shake Those Beans Five Unifix Trains & Equations Five Number Corner Workouts from Earlier in Kindergarten November Computational Fluency January Calendar Grid (Play a matching game with the 5-button calendar cards and number cards.) Bridges Intervention Volumes Volume 1 Module 3 Structuring Five Volume 2 Module 1 Structuring Five

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Unit 8: Computing & Measuring with Frogs & Bugs Planner

Module	Session	Session Title	Session Notes	Activities for Reengagement
U8 Module 1 Catching, Counting & Comparing	1	Bug Catchers	Teach the entire session.	Focus Solve addition and subtraction word problems within 10
	2	Introducing Work Place 8A Bug Catchers	Teach the entire session.	by using drawings, objects, or numbers. (CCSS K.OA.2)
				Activities from Bridges Pre-K
	3	Piggy Bank Subtraction	Teach the entire session.	How Many Toys in the Tub?
	4	Introducing Work Place 88 Piggy Bank Subtraction	Teach the entire session. Teach the entire session. Do not administer the checkpoint during Work Places. Use your time instead to work with students on reengagement activities.	Teddy Bear Counting Problems
				Number Corner Workouts from Earlier in Kindergarten
		Introducing Work Place 8C Count & Compare Bugs		February Computational Fluency
				March Computational Fluency
				April Computational Fluency
				Bridges Intervention Volume 4
				Module 1 Addition & Subtraction Story Problems Within Five
				Module 2 Addition & Subtraction Story Problems Within Ten
U8 Module 4 Addition &	1	Where Do You See It?	Teach the entire session.	Focus Find the number to make 10 using drawings, objects or numbers. (CCSS.K.OA.4) Activities from Bridges Pre-K
	2	Show Me	Teach the entire session.	
Equations	3	Fact Families	Teach the entire session.	
	4	Double Irish Chain Frog Cor	Consider skipping,	Tub Toys to Ten & Back
		Quilt, Part 1	shortening, or combining	In & Out of the Tub
	5	Double Irish Chain Frog Quilt, Part 2	these two sessions.	Activities from Bridges K
				Unifix Trains & Equations Ten
				Bridges Intervention Volume 1
				Module 4 Sessions 16-18 Activities: Collect Ten Dots, Win Ten,
				Win Ten with Dots & Numerals
				Module 4 Session 19 Practice Pages: Make Ten with Dominoes Versions A & B

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