



KINDERGARTEN

Unit 4 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](#).

About Unit 4

Paths to Adding, Subtracting & Measuring

Students begin this unit by building a number line to model the number sequence from 0 to 10. They continue to practice counting forward and backward between 0 and 50, starting with any number in the range. They also solve addition and subtraction problems and begin measuring length using non-standard units.

The number line and measurement activities provide many opportunities for students to consider the relationships between numbers and quantities, including making comparisons about which are greater and which are less.

- Counting forward and backward within 10 on the number line leads to games about missing numerals, guessing the number on someone's mind, and plenty of practice with the terms *before*, *after*, *greater than*, and *less than*. The Scrambled Numbers One to Ten Work Place is introduced.

- In Module 2, students focus on representational addition with sums to 10 and subtraction with minuends to 10. They practice solving story problems and expand their rote counting to 40. Two new Work Places, Foxes & Dens and Beat You to Twenty, are introduced.
- In Module 3, students measure and compare classroom objects and use the terms *longer*, *shorter*, and *the same length*. Rote counting increases to 50.
- In Module 4, students use pennies and nickels to focus on the concept of “five and some more” and the idea that 10 is composed of two sets of 5. Two Work Places, Which Coin Will Win? and Race You to 15¢, are introduced.

Major goals for Unit 4 include rote counting from 1 and numbers other than 1, counting backward within 10, counting with 1:1 correspondence and cardinality, and reading and writing numerals to 10. The instruction in this unit is also intended to help students develop increasingly efficient counting strategies, including subitizing, counting on, and anchoring on 5 and 10.

Identifying Topics for Reengagement

Depending on their experiences with Units 1, 2, and 3 in the face of possible disruptions to instruction, students might need opportunities to reengage with the following topics relevant to Unit 4:

- Counting to 30 by 1s from a number other than 1
- Counting backward from 12
- Recognizing quantities quickly on ten-frames
- Writing numerals 1–10

To assess students' current skills in these areas, we recommend that you conduct the Unit 4 Screener during Module 1. Use the Unit 4 Screener Implementation Guide to help interpret the results. This short diagnostic tool will help to inform your instruction, differentiation, and possible modifications to Unit 4. In addition, use selected items from the Number Corner assessments,

as well as observations and interactions with students during daily instruction and Work Places, to guide your instructional decisions.

Above all, **trust in the resilience and mathematical capabilities of your students and keep moving forward.** Your repeated practice and focus on these early math concepts through Number Corner, Problems and Investigations, and Work Places will lay the necessary groundwork for their continued math growth in kindergarten.

Recommended Modifications to Unit 4

- While Unit 4 contains less explicit emphasis on building community and routines, you will find it is critical to continue reinforcing your expectations to support your students socially, emotionally, and academically. [The Responsive Classroom](#) website offers suggestions for building your social and emotional foundation so that you can work on the academic foundation. You might find after holiday breaks or time away due to intermittent school closures that students need to practice and reacquaint themselves with the classroom rules just as they do with academic material. Remember that a [Morning Greeting](#) sets the tone.
- MP.7 is especially important during this unit as students use the Number Line to “look for and make use of structure.” As they work toward the year-end goal of counting to 100, consider using some of the very powerful suggestions in the blog post [Counting to 100](#).
- If time is an issue, skip Module 3 or move it to the end of the year and delete Module 4 entirely. (The sessions in Module 4 focus on “five and some more” with money, which is not a priority standard in kindergarten.)
- The Unit 4 Screener is designed as a brief, individual interview and includes four tasks: 1) counting to 30 from a number other than one; 2) counting backward from 12; 3) recognizing quantities quickly on the ten-frame and 4) writing numerals 1–10. Use the information from the screener to identify students who might need additional support in the form of small-group work during Work Places.
- Along with the screener, you could choose to use the Numeral Order Checkpoint and the Foxes & Den Checkpoint to collect additional information about students during Work Places. We recommend that

you skip the Counting & Writing Numbers Checkpoint and the Money March Checkpoint.

Work Places

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

Number Corner Notes

Remember that this year it could be more important than ever to implement Number Corner, as it provides ongoing opportunities to preview, review, and assess key skills. [This blog post](#) discusses some key skills in January Number Corner and [this blog post](#) discusses the importance of number bonds for kindergartners.

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 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 January include Calendar Grid, Activity 2; and Number Line, Activities 1 and 3. In February, these include Calendar Grid, Activity 2 and Days in School, Activity 1.

Students should participate in all the Computational Fluency activities for January and February.

January

- **Calendar Grid** Teddy Bear’s Buttons: Combinations to Five [Supports decomposing 3, 4, and 5, subitizing, 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, and making ten. Students use Unifix cubes and number bonds to model “How many more to make ten?”]
- **Computational Fluency** Combinations for Numbers from Two to Ten [Supports 1:1 correspondence, cardinality, counting, counting on,

subitizing, and decomposing quantities within 10 with a particular focus on doubles.]

- **Number Line** Hopping on the Number Line [Supports forward/backward counting within 20, counting from a number other than 1, interval counting, numeral recognition, comparing numbers, concepts of greater than and less than, and the inequality symbol.]

Additional Notes

Calendar Collector (Collecting Cubes in Three Colors) is an enjoyable workout. If you have time, it will reinforce many of the skills being addressed in other workouts. However, if time is short, drop this workout until you have time to include it.

Days in School and Number Line are workouts that build cumulatively across the year. These routines provide important continuity for students, 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 (drawing to make ten, for example) as all students will gain sufficient exposure over the course of the month and the year.

February

- **Calendar Grid** One Dot, Many Dots [Supports matching and counting strategies, greater than/less than/same as and other math quantity vocabulary, patterns, counting skills, numeral recognition, and developing your classroom community around the calendar/schedule.]

[This blog post](#) supports using the Word Resource Cards with the Calendar Grid.

- **Days in School** [Supports counting forward and backward, counting by 10s, subitizing, cardinality, 1:1 correspondence, counting on, number sense, grouping in 5s and 10s, numeral recognition, and making 10.]
- **Computational Fluency** Representing Addition & Subtraction on the Farm [Supports 1:1 correspondence, cardinality, counting, subitizing, decomposing quantities within 5 and 10, story problems, and solving for a missing addend.]
- **Number Line** Ten & More [Supports teen numbers as ten and some more ones, forward and backward counting, counting on from 10, numeral recognition, and numeral order.]

Additional Notes

Calendar Collector (Ones & Fives with Pennies & Nickels) 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.

See January's note about Days in School and Number Line.

Unit 4: Paths to Adding, Subtracting & Measuring Planner

Module	Session	Session Title	Session Notes	Activities for Reengagement
Module 1 Paths: The Number Line	1	Building a Number Line	Teach the entire session. Conduct the Unit 4 Screener during this module or the next as time permits.	Focus Write numerals 1–10 (supports CCSS.K.CC.3) Work Places from Earlier in Kindergarten WP1H Which Numeral Will Win? Activities from Bridges K Continue to play Read My Mind (Unit 4, Module 1 Sessions 4 & 5) and vary the range of the numbers.
	2	X-Ray Vision	Teach the entire session. This is also a great game to incorporate as a “sponge” activity. Use it whenever you have a few extra minutes.	Number Corner Workouts from Earlier in Kindergarten Revisit the Computational Fluency activities from November but use one color of cubes to spill, count, and record on a dry-erase board or to “plunk” and then count.
	3	Introducing Work Place 4A Scrambled Numbers One to Ten	Teach the entire session. Consider ways to differentiate for challenge with this game here.	Morning Warm-up Have students write their numerals on dry-erase boards as a warm-up in the mornings when they arrive. Provide less support as their skills improve
	4	Read My Mind, Part 1	Teach the entire session.	Bridges Intervention Volume 1 - Module 1 Session 1 Activity: Count & Dump (Play as written, but have students record the number on their dry-erase board each time they dump their cubes.) - Module 2 Session 8 Warm-up: Writing Numbers - Module 3 Session 11 Warm-up: Counting on a Line (vary going forward and backward)
	5	Read My Mind, Part 2	Teach the entire session. Consider repeating this activity on other days as time allows. (If you delete Module 4, this is an excellent activity to use.)	- Module 1 Practice Pages T3–4 and T15–20 - Module 2 Practice Pages T1–2

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Module	Session	Session Title	Session Notes	Activities for Reengagement
Module 2 Counting, Adding & Subtracting with Forest Animals	1	Foxes & Dens	Teach the entire session. Another version of this is available on the MLC page: Frogs & Lily Pads. Consider adding it to Work Place time for more practice and variety or add it in Unit 5.	Focus <i>Recognize some quantities on ten-frames instantly; anchor on 5 or 10 for others (supports CCSS K.CC.1)</i> Activities from Bridges Pre-K • Five Little Ducks & Some More Story Collection with • Storyboard or Rubber Duckie Set Cards or More Rubber Duckie Set Cards • How Many Spots on a Ladybug? • Put Spots on the Bugs • More Spots • Match the Spots • Robot Control Buttons • More Robot Control Buttons • Butterfly Number Search Bridges Intervention Volume 1 • Module 1 Session 3 Warm-up: How Many Dots? • Module 1 Session 4 Activity: Match Pairs
	2	Introducing Work Place 4B Foxes & Dens	Teach the entire session.	
	3	The Forest Game	Teach the entire session. Consider making this game into another Work Place for continued practice of addition & subtraction.	
	4	Beat You to Twenty	Teach the entire session.	
	5	Introducing Work Place 4C Beat You to Twenty	Teach the entire session.	

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Module	Session	Session Title	Session Notes	Activities for Reengagement
Module 3 Comparing & Measuring Length	1	Longer, Shorter, or the Same?	Teach the entire session.	Focus Count forward by ones starting from a number other than one (CCSS K.CC.2) Activities from Bridges Pre-K These activities can all be adjusted to focus on the start number and range students need to practice. • What Comes Next? • Number Games: Puppet Count to 10 • Number Games: A Count of Twenty • Number Games: Puppet's Counting Circle • Choose the target number appropriate for your students (15, 20, 25, or 30) and have them sit down whenever that number is stated. (You can also play sitting down on 20 AND on 25 AND on 30) This game may be played socially distanced while students are at desks, or spread out around the room, or even outdoors. Bridges Intervention Volume 1 • Module 2 Session 7 Warm-up: Pendulum Counting from Numbers other than One • Module 2 Session 8 Warm-up: Writing Numbers • Module 3 Session 12 Warm-up: Start & Stop Counting Literature Connections from Bridges Pre-K Use this list to select books which support early counting skills. 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.
	2	How Long?	Teach the entire session.	
	3	Animal Paths	Teach the entire session.	
	4	Compare, Spin & Win	Teach the entire session.	
	5	How Many Cubes? How Many Sticks?	Teach the entire session.	

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Module	Session	Session Title	Session Notes	Activities for Reengagement
Module 4 Fives & Ones with Money	1	Which Coin Will Win?	This module may be deleted to allow more time on priority standards. These don't include money in Kindergarten.	Focus <i>Count backward from within 10. (supports CCSS K.CC)</i> Activities from Bridges Pre-K • Jump High, Count Low with Chirpy • Ladybug Countdown activity with the Ladybug Countdown Story • Six Silly Robots story with activity below • Six Silly Robot activity • Number Path with Teddy Bears 1–10 • Number Path with Tally Marks 1–10 Bridges Intervention Volume 1 • Module 1 Session 4 Warm-up: The Counting Puppet (vary the range based on student needs) • Module 3 Session 11 Warm-up: Counting on a Line (vary the range based on student needs) Count & Count Some More • Remember to include counting activities throughout your day, including counting on and counting backward. • Use this list to select books which support counting backward.
	2	Introducing Work Place 4D Which Coin Will Win?		
	3	Money March		
	4	Money March Partner Game		
	5	Introducing Work Place 4E Race You to 15¢		