BRIDGES® IN MATHEMATICS

KINDERGARTEN

Unit 5 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 5 Two-Dimensional Geometry

Unit 5 is the first of two units addressing geometry (Unit 6 is the other). During the first session, students compare a sphere and a circle, two shapes they are likely to be quite familiar with. After this initial investigation, students spend the rest of the unit examining, identifying, comparing, and sorting two-dimensional shapes. Because geometry isn't considered major work of the grade level, we recommend that you devote significant time during Work Places to helping students master critical numeracy skills. These include rote counting, counting on, counting backward, 1:1 correspondence, recognizing and writing numerals,, subitizing, cardinality, decomposing and composing quantities to 5 and 10, and fluency with facts to 5.

- In Module 1, students name, describe, and sort pattern blocks. They compare circles and spheres. The Circles & Squares Race to 20 Work Place is introduced. Counting backwards from 20 is practiced as a warm-up.
- In Module 2, students use shape cards to name, describe, and sort basic shapes. They use equations and inequality statements to count and compare their shape groupings, and they create shapes on the geoboard. The Geoboards Shape Work Place is introduced. Counting backward from different numbers within 20 is practiced as a warm up.
- In Module 3, students continue to name, identify, and analyze basic shapes but also work to trace, draw, construct, and compose shapes. Four new Work Places are introduced: Shapes & Spinners Graphing, Pattern Block Designs, Spin & Count Shapes, and Hungry Caterpillars. Students work on counting to 60 during warm-ups.
- In Module 4, students use what they have learned about shape attributes to play a shape guessing game; they also use triangles and squares to create a patchwork quilt. While these activities are certainly engaging, you might move the module to the end of the year or skip it entirely.

Identifying Topics for Reengagement

Depending on their experience with Units 1–4 in the face of possible disruptions to instruction, students may require opportunities to reengage with some of the key numeracy skills addressed in those units:

- Counting to 40 from a number other than 1
- 1:1 correspondence to 20
- Cardinality to 20
- Fluency with facts to 5

Screen all students for the skills listed above during Module 1. Use the Unit 5 Screener Implementation Guide to help interpret the results. This short diagnostic tool will help to inform your instruction, interventions, and possible modifications to Unit 5. In addition, use observations and interactions with students during daily instruction and Work Places to guide your instructional decisions. By maintaining an emphasis on numeracy skills and concepts

during Number Corner, Problems & Investigations, and Work Places you are laying the necessary groundwork for students' continued growth this year. Kindergartners need multiple opportunities to practice these new skills—as many as 24 times before a concept makes its way to long-term memory. Knowing where they are functioning along the continuum of developmental progressions can help you determine next steps for individual students.

Recommended Modifications to Unit 5

1. While there is less explicit emphasis on building community and routines in Unit 5, you will find it is important to continue reinforcing these to support your students socially, emotionally, and academically. See this blog article for ideas about how to incorporate greetings into your morning meeting that build respect and address math skills. You may find you need to revisit Work Place behaviors and protocols too. These three blogs may be helpful: Managing Work Places in the Primary Grades, Tools & Tips to Support Work Places, and Making Work Places Work for You. Modeling your expectations and revisiting the "looks like" or "sounds like" charts you create about Work Place behaviors is helpful.
2. The primary goal of Unit 5 is to support the development of skills and concepts related to two-dimensional geometry. As geometry isn't considered major work of the grade level, the unit has minimal expectations for mastery of these skills. This allows you to support students in developing number sense, including subitizing, counting, and structuring 5 and 10. The Unit 5 Screener is designed as a brief, individual interview and includes three tasks: 1) counting to 40 from a number other than 1; 2) counting with 1:1 correspondence and cardinality to 20; and 3) fact fluency to 5. Use the information from the screener to identify students who may need additional support in the form of small group work during Work Places.
3. If you run short of time, consider moving the sessions in Module 4 to the end of the year or skipping them entirely.
4. We recommend that you skip both the Sort & Count Checkpoint and the Two-Dimensional Shapes and Their Attributes Checkpoint, neither of which have a scoring guide. Instead, use the Unit Screener, Number Corner Check-Up 3, and your observations to guide your instruction and differentiation.

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 may 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 may need to teach key activities from priority workouts twice. In March these include: Calendar Grid, Activity 2; Days in School, Activity 1; and Number Line, Activity 4. Students should participate in all the Computational Fluency activities in March.

March

- **Calendar Grid** How Many More to Make Ten? [Supports counting objects arranged in a line, rectangular array, scattered formation, or a circle, counting on, 1:1 correspondence, numeral recognition, combinations to make ten, the concept of ten and some more, and developing your classroom community around the calendar/schedule.]
- **Days in School** [Supports counting forward and backward by 1s, counting by 10s, subitizing, cardinality, 1:1 correspondence, counting on, number sense, grouping in 5s and 10s, numeral recognition, and making ten.]
- **Computational Fluency** Solving Addition & Subtraction Story Problems at the Zoo [Supports numeral recognition, solving subtraction story problems with objects, counting with 1:1 correspondence, subitizing and decomposing numbers within 10.]
- **Number Line** Reviewing Teens & Twenties [Supports forward/backward counting from 11-30, counting from a number other than 1, anchoring on groups of 5, interval counting, numeral recognition, numerical order, comparing numbers, concepts of greater than and less than, and the inequality symbol.]

Additional Notes

- Calendar Collector (How Many Lambs? How Many Lions?) 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 (drawing to make ten, for example) as all students will gain sufficient exposure over the course of the month and the year.

Unit 5: Two-Dimensional Geometry Planner

Module	Session	Session Title	Session Notes	Activities for Reengagement
Module 1 Exploring Shapes	1	**What Do You Know About Shapes?**	Teach the entire session. Conduct the Unit 5 Screener during this module and the next as time permits.	**Focus**: Count on to 40, 1:1 and Cardinality to 20, and Fact Fluency within 5. **Bridges K Work Places** Revisiting Work Places from an earlier unit may be appropriate for some students. Fives Up or Bicycle Doubles may be more accessible to them now. **Activities from Bridges PreK** Bathtime Storyboard 5 and the activities here. 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 **Bridges Intervention Volume 1** Module 1 Sessions 1–4 Numbers to Ten Module 2 Sessions 6–9 Numbers to Twenty Module 3 Sessions 11–14 Structuring Five Module 3 Sessions 12–14 Warm-Up 1 Module 4 Sessions 16–19 Warm-Up 1 Start and Stop Counting **Bridges Intervention Volume 2** Module 1 Sessions 1–4 Structuring Five **Bridges Intervention Volume 4** Module 1 Sessions 1–4 Addition & Subtraction Story Problems within 5 Blog about strategies for Counting to One Hundred **Counting Collections** Give students larger collections of items to count and record. Allow them to use ten-frames and practice counting on, 1:1 correspondence, cardinality, and numeral writing. **Count & Count Some More** Remember to include counting activities throughout your day, including counting on and counting backward. **Additional Activities** Use this list to select books that support counting forward and backward. **Math at Home** Warm-ups or small group activities.
	2	**What Is a Circle?**	Teach the entire session.	
	3	**Pattern Block Sort & Count**	Teach the entire session.	
	4	**Circle & Squares Race to Twenty**	Teach the entire session. Do not complete the Sort & Count Checkpoint.	
	5	**Introducing Work Place 5A Circles & Squares Race to Twenty**	Teach the entire session.	
Module 2 Circles, Squares, Triangles & Rectangles	1	**Shape Sorting**	Teach the entire session.	
	2	**Sorting & Graphing Shapes by Names**	Teach the entire session.	
	3	**Sorting Shapes by Sides & Corners**	Teach the entire session.	
	4	**Goodbye Shapes!**	Teach the entire session.	
	5	**Introducing Work Place 5B Geoboard Shapes**	Teach the entire session.	
Module 3 Constructing & Drawing Shapes	1	**Introducing Work Place 5C Shapes & Spinners Graphing**	Teach the entire session.	
	2	**Introducing Work Place 5D Pattern Block Designs**	Teach the entire session.	
	3	**Introducing Work Place 5E Spin & Count Shapes**	Teach the entire session.	
	4	**Hungry Caterpillars**	Teach the entire session. Do not administer the Two-Dimensional Shapes & Their Attributes Checkpoint.	
	5	**Introducing Work Place 5F Hungry Caterpillars**	Teach entire session.	

Unit 5: Two-Dimensional Geometry Planner

Module	Session	Session Title	Session Notes	Activities for Reengagement
Module 4 Sorting, Comparing, Composing & Decomposing Shapes	1	**Shapes & More Shapes**	This module may be deleted or moved to the end of the year.	
	2	**There's a Shape in My Pocket, Day 1**		
	3	**There's a Shape in My Pocket, Day 2**		
	4	**Triangles & Squares**		
	5	**Assembling the Shoo Fly Quilt**		