## KINDERGARTEN

## Unit 2 Introduction \& Planner

## Revised for 2020-2021

## About Unit 2 Numbers to Ten

Unit 2 emphasizes combinations of 5 and also introduces the process of comparing quantities within 10 . Students will engage with two color five-frames, two color ten-frames, tally marks, the number rack, and finger patterns. The use of two colors on the frames and the two colors on the number rack, as well as the use of two groups with tally marks and fingers, supports students' recognition that two quantities can be combined (composed) or separated (decomposed). While equations will be introduced, the emphasis is on the understanding that a single quantity can be decomposed into smaller component quantities.

- In Module 1, students use five-frames to see combinations to 5 , meet the ten-frame, and compare quantities on ten-frames using the words more and less. They continue to practice 1:1 correspondence, cardinality, and subitizing. The Count \& Compare Dots Work Place is introduced.
- In Module 2, students are introduced to the Number Rack and build their own with one string of beads. They practice $1: 1$ correspondence, cardinality, subitizing, and combinations within 10 with a focus on combinations to 5 . The Numbers \& Number Racks Work Place is introduced.
- In Module 3, tally marks are introduced using craft sticks. Students focus on quantities of " 5 and some more" with tally marks, ten-frames, and a graphing game. They match numerals to ten-frames and tally marks, and practice subitizing, counting on, and composing/decomposing numbers. Two Work Places are introduced: Which Bug Will Win? and Beat You to Ten.
- In Module 4, students make a paper quilt square and create a class quilt with an $A B A B$ pattern. Using pattern blocks, students fill in a shape and work to build it three different ways. The Pattern Block Puzzles Work Place is introduced.

Major goals for Unit 2 include solidifying students' ability to count with 1:1 correspondence and cardinality to 10 while helping them develop more efficient counting strategies (including subitizing, counting on, and anchoring on 5 and 10). Activities in this unit focus on flexible ways to recognize and represent quantities.

## Identifying Topics for Reengagement

Depending on their experience with the Bridges Pre-K units of instruction or other Pre-K or preschool programs during school closures, students might require opportunities to reengage with the following topics relevant to Unit 2:

- Counting to 20 by 1 s
- Counting as many as 10 objects with 1:1 correspondence
- Recognizing numerals to 10
- Subitizing quantities to 5

To assess students' current skills in these areas, we recommend that you conduct the Unit 2 Screener during Module 1. Use the Unit 2 Screener Implementation Guide to help interpret the results. This short diagnostic tool will help to inform your instruction, interventions, and possible modifications to Unit 2. 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.

Note that the Unit 2 Screener duplicates some tasks from the Number Corner Baseline Assessment; choose one or the other to gather your information.

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

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## Recommended Modifications to Unit 2

1. While Unit 2 contains less explicit emphasis on building community and routines, you will find it is critical to continue reinforcing these to support your students socially, emotionally, and academically.
2. The primary goal of this unit is to help students see numbers in groups and to subitize. Nudge students gently in this direction; developmentally, some students might need to focus on these concepts within the range of 1 to 5 while others are ready for 1 to 10 . Watch carefully to determine their readiness for more efficient strategies.
3. If time is an issue, Session 1 and 2 in Module 4 can be skipped or moved to the end of the year.
4. The Unit 2 Screener is designed as a brief, individual interview and includes four tasks: 1) counting to twenty; 2) counting objects with 1:1 correspondence to $10 ; 3$ ) recognizing numerals to 10 ; and 4) subitizing quantities to 5 . Use the information from the screener to identify students who might need additional support in the form of small group work during Work Places.
5. Along with the screener, you might choose to use the Count \& Compare Checkpoint to collect additional information about students during Work Places. We recommend that you skip the Numbers \& Number Racks Checkpoint.

## Work Places

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

## Number Corner

Remember that it might be more important than ever to implement Number Corner this year, as it provides ongoing opportunities to preview, review, and assess key skills.

- 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 include in October: Calendar Grid Activities 1, 2, and 3; Days in School Activity 1, and Number Line Activities 1 and 4. In November: Days in School, Activity 1 and Number Line Activity 4. Students should participate in all the Computational Fluency activities in October and November.


## October

- Calendar Grid Dancing Leaves [Supports directional language, counting skills, numeral recognition, basic colors, and developing your community around the calendar/schedule.]
- Days in School How Many More to Make Ten? [Supports counting, subitizing, cardinality, 1:1 correspondence, counting on, number sense, grouping in 5 s and 10 s , numeral recognition, and making 10.]
- Computational Fluency Fun with Finger Patterns [Supports work with combinations to 5 through finger patterns and five-frames as well as developing the understanding that each number is 1 more than the previous.]
- Number Line The Tricky Teens [Supports counting forward and backward 1-19, numeral recognition, and numeral writing 0-10.]


## Additional Notes

- Calendar Collector (Collecting Cubes in Two Colors) 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 (teen numbers, for example) as all students will gain sufficient exposure over the course of the month and the year.


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## November

- Calendar Grid Flat \& Solid Shapes [Supports identifying, analyzing, and comparing 2D and 3D shapes, 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 5 s and 10 s, numeral recognition, and making 10. Students learn to draw sketches to show their thinking.]
- Computational Fluency Combinations of Five [Supports 1:1 correspondence, cardinality, counting, subitizing, and decomposing quantities within 5.]
- Number Line Numbers Before \& After [Supports forward/backward counting within 25 , counting from a number other than 1 , numeral recognition, numeral writing, the next number is one larger, and concepts of before, after, and in between.]


## Additional Notes

- Calendar Collector (Collecting Sticks) 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.
- See October's note about Days in School and Number Line.


## Kindergarten Unit 2: Numbers to Ten Planner

| Module | Session | Session Title | Session Notes | Activities for Reengagement |
| :---: | :---: | :---: | :---: | :---: |
| Module 1 <br> Dots to Ten | 1 | Two Red, Three Blue | Teach the entire session. <br> Conduct the Unit 2 Screener during this module and the next as time permits. | Focus 1:1 correspondence to 10, Numeral recognition to 10, Subitize to 5, Addition with objects and fingers, Decompose number into pairs <br> Activities from Bridges Pre-K <br> - Use the Forest Storyboard from Bridges Pre-K to provide more practice filling five-frames, recognizing numerals, and counting 1:1. Use the ideas with two colors of bears or unifix cubes described here. Do not use the equation focus. <br> - Teddy Bear Handfuls (sorting, counting, recording, and comparing two colors of bears on five-frames) <br> - Counting Games <br> Number Games: Puppet Count to 10 <br> Number Games: A Count of Twenty <br> Number Games: Puppet's Counting Circle <br> Choose the target number appropriate for your students ( 10,15 , or 20 ) and have children sit down whenever that number is stated. (You can also play sitting down on 5 and 10 and 15.) This game can be played socially distanced while students are at desks, spread out around the room, or even outdoors. <br> - 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. Find ways to bring counting into your classroom throughout the day. Keep the range to 10 or less initially, nudging forward to 20 and beyond as students' skills grow. |
|  | 2 | Funny Five-Frame Flash | Teach the entire session. |  |
|  | 3 | Building Ten | Teach the entire session. |  |
|  | 4 | Count \& Compare Dots | Teach the entire session. |  |
|  | 5 | Introducing Work Place 2A Count \& Compare Dots | Teach the entire session. <br> Conduct the Count \& Compare Checkpoint with students as needed. <br> NOTE Consider introducing Pre-K WP14 Comparing Reds \& Blues instead of, or in addition to WP2A Count \& Compare Dots. (The Pre-K Work Place uses manipulatives rather than visual images to teach concepts of more and less.) |  |

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| Module | Session | Session Title | Session Notes | Activities for Reengagement |
| :---: | :---: | :---: | :---: | :---: |
| Module 2 Introducing the Number Rack | 1 | Two-Color Ten-Frames | Teach the entire session. | Focus 1:1 correspondence to 10 , Cardinality to 10 , Subitize to 5 , Addition with objects and fingers, Decompose number into pairs <br> On-Grade Work Place Support <br> See support suggestions in Work Place Guides for WP2A and 2B. <br> Activities from Bridges Pre-K <br> - Robot Control Buttons <br> - Ladybug Roll \& Color <br> - Teddy Bear Combinations |
|  | 2 | Building a Number Rack | Teach the entire session. |  |
|  | 3 | Numbers \& Number Racks | Teach the entire session. |  |
|  | 4 | Introducing Work Place 2B Numbers \& Number Racks | Teach the entire session. <br> NOTE Add dice, numeral cards, a spinner, and/or the Red \& Yellow Dot Cards from Pre-K to enhance this Work Place. Children should develop efficient ways to both build and interpret quantities on the number rack, and will need multiple opportunities to practice and develop these skills. |  |
|  | 5 | Show Me Five | Teach the entire session. |  |
| Module 3 <br> Five \& Some More | 1 | Craft Stick Tallying, Day 1 | Teach the entire session. | Focus 1:1 correspondence to 10 , Cardinality to 10 , Subitize to 5 , Addition with objects and fingers, Decompose number into pairs <br> On-Grade Work Place Observations <br> During Work Places, watch for students' counting strategies. Use the support suggestions in the Unit 2 Work Place Guides to nudge students toward more efficient strategies like subitizing and counting on from 5 . <br> Activities from Bridges Pre-K <br> - Numbers on the Path with Chirpy (Teddy Bears 1-10) <br> - Tally Marks to Ten <br> - Story Collections (Teddy Bears Count to Ten) |
|  | 2 | Craft Stick Tallying, Day 2 | Teach the entire session. |  |
|  | 3 | Which Bug Will Win? | Teach the entire session. |  |
|  | 4 | Introducing Work Place 2C Which Bug Will Win? | Teach the entire session. The Numbers \& Number Racks Checkpoint is optional. Your Unit 2 Screener, Number Corner Checkup, and observations will provide you with the same information. |  |
|  | 5 | Dots, Tallies \& Numbers Bingo | Teach the entire session. |  |
|  | 6 | Introducing Work Place 2D Beat You to Ten | Teach the entire session. |  |
| Module 4 <br>  <br> Decomposing <br> Shapes | 1 | The Butterfly Quilt, Part 1 | Consider skipping this session or moving to later in year. | Focus Compose simple shapes to form larger shapes, 1:1 correspondence to 10 <br> On-Grade Work Place Observations <br> Use the support suggestions offered in the Work Place Guide. |
|  | 2 | The Butterfly Quilt, Part 2 | Consider skipping this session or moving to later in year. |  |
|  | 3 | Pattern Block Puzzles | Teach the entire session. |  |
|  | 4 | Introducing Work Place 2E Pattern Block Puzzles | Teach the entire session. <br> NOTE Consider introducing Pre-K WP19 Pattern Block Puzzles instead of, or in addition to WP2E Pattern Block Puzzles. |  |

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