## GRADE 1

## Unit 4 Introduction \& Planner

Revised for 2020-2021


#### Abstract

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 Leapfrogs on the Number Line

Unit 4 revolves around the number line, an essential mathematical model. Throughout, closed and open number lines are used both as models of our number system, as well as models for beginning operations with addition and subtraction.

Module 1 works to familiarize students with the number line as a mathematical model and an operational tool while deepening their understanding about the relationship between addition and subtraction.
In Modules 2 and 3, students deepen their conceptual understanding of our number system through explorations of closed and open number lines. They work to determine the value of empty number boxes placed strategically on the open number line, practice making jumps of 5 and 10 forward and backward, and extend their use of a number line in the range of $0-120$.

Module 4 uses measuring penguins as a context for comparing and ordering two-digit numbers, writing inequality statements, finding differences, and working on a number line.
The major goal of the unit is helping students develop skills with counting, adding, and subtracting within 120 . With its focus on using multiples of 1,5 , and 10 on the number line, Unit 4 helps students move from calculating by counting to calculating by using the structure of our number system.

## Identifying Topics for Reengagement

Depending on their experiences with the last few units in Kindergarten or the first several units in Grade 1 during school closures or other disruptions to instruction, students might need opportunities to reengage with the following topics relevant to Unit 4:

- Counting to 100 by 10 s
- Counting forward or backward from various numbers within 120
- Understanding that 10 can be thought of as a bundle of 10 ones (1.NBT.2a)
- Understanding that the numbers from 11 to 19 are composed of a ten and 1-9 ones (1.NBT.2b)

To assess students' current skills in these areas, we recommend that you conduct the Unit 4 Screener in Module 1, Session 5, and 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. The Unit 4 Screener does not include an interview this time, so you'll want to be sure to use your observations of and interactions with students during daily instruction to help guide your instructional decisions. Above all, trust in the resilience and mathematical capabilities of your students and keep moving forward.

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## Recommended Modifications to Unit 4

- Two of the longer sessions in Modules 1 and 2 are split into two parts. This allows time to conduct the Unit 4 Screener and time to reengage students with foundational skills as needed.
- During Modules $1-3$, use the information from the Unit 4 Screener to focus your attention on students who might need additional reengagement with prerequisite skills and concepts in the form of small group work during Work Places. See additional differentiation suggestions in the Work Place Guides.
- While the penguin measuring activities in Module 4 have strong place value connections, consider moving these sessions to the end of the year if you run short of time.


## 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 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 Calendar Grid Activities 2-4 in January, Days in School Activity 1 in January and Activity 3 in February, and all the Computational Fluency activities in January and February.

## January

- Calendar Grid Equations with Unknowns [Involves telling math stories to match equations with unknowns in different positions and solving them with efficient and flexible strategies]
- Days in School Close to One Hundred and Number Line The Seventies \& Eighties [Complementary workouts that anchor students' place value understanding around groups of 10 within 100.]
- Computational Fluency Doubles Plus or Minus One Facts [Reviews doubles facts and extends to strategies for solving closely related facts.]


## Additional Notes

Calendar Collector involves work with tens and ones, using dimes and pennies. While the work with tens and ones is important, money is not part of the major work of the grade.

Days in School and Number Line are complementary workouts that build cumulatively across the year. These routines provide important continuity, but because they repeat frequently, it is less important that every student experience every activity each month. Even if students are present only for some of the days that these are areas of focus, it is not necessary to repeat these activities (unless specifically mentioned above), as all students will gain sufficient exposure over the course of the month and the year.

## February

- Calendar Collector Collecting Cubes [Involves building and analyzing collections of Unifix cubes as a model for thinking about tens and ones as well as the number needed to make the next ten.]
- Days in School One Hundred Days of School \& More and Number Line The Tenth Decade [These complementary workouts focus on 100 and the 100th day of school.]
- Computational Fluency Multiple Addends [Offers activities that help students identify "friendly" or known number combinations when adding multiple addends.]


## Additional Notes

Calendar Grid addresses concepts and language related to two-dimensional shapes. While these are not considered major work of the grade level, this workout provides valuable practice with discovering and describing mathematical patterns as well as foundational prerequisites for upcoming grade levels. Consider keeping the Calendar Grid updated and encouraging student discourse around the patterns. If you have time, collect student observations on the chart.

The optional 100th Day of School activities that appear in the February Number Line workout may be skipped.

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## Unit 4: Leapfrogs on the Number Line Planner

| Module | Session | Session Title | Session Notes | Activities for Reengagement |
| :---: | :---: | :---: | :---: | :---: |
| Module 1 <br>  <br> Subtracting <br> on the <br> LIfe-Sized <br> Number <br> Line | 1 | The Life-Sized Number Line | Teach the entire session. | Focus: Counting within 120 (1.NBT.1) <br> On-Grade Work Place Observations <br> - Watch to see if students are able to count both forward and backward on the number line, understanding which direction to go based on the operation (addition vs. subtraction). <br> - See additional support suggestions in Work Place Guides <br> Work Places from Previous Grade Level <br> - GK WP8E Unifix Cube Measuring <br> Number Corner Workouts from Previous Grade Level <br> - GK Number Corner: April Number Line Activity 3 <br> Bridges Intervention Volume 1 <br> - Module 6 Sessions 26-29: Numbers to One Hundred |
|  | 2 | What's in the Box? | Teach the entire session. |  |
|  | 3 | Hopping Along the Number Line to Ten | Teach the entire session. |  |
|  | 4 | Introducing Work Place 4A The Frog Jump Game | Teach the entire session. |  |
|  | 5 | Add \& Subtract on the Number LIne | Teach steps 1-4. <br> Administer the Unit 4 Screener. <br> When students complete the screener, have them spend the remainder of the session at Work Places. |  |
|  | $\begin{gathered} \text { 5a } \\ \text { insert } \end{gathered}$ | Add \& Subtract on the Number Line, continued | Teach session 5, steps 5-12. <br> During Work Places, consider using some of the reengagement activities based on data from the screener. |  |
| Module 2 Jumping by Fives \& Tens | 1 | The Number Line to 120 | Teach the entire session. | Focus: Counting by 10s to 100 (K.CC.1) <br> On-Grade Work Place Observations <br> - Observe to see how students count forward and backward on the number line. <br> - If students are still counting by 1 s , help them identify the groups of 10 ones and practice counting them by 10s. <br> - See additional support suggestions in Work Place Guides. <br> Work Places from Previous Grade Level <br> - GK WP7B Measuring Handfuls <br> - GK WP7D Double Top Draw <br> - GK WP8C Count \& Compare Bugs |
|  | 2 | Find the Value | Teach the entire session. |  |
|  | 3 | Hopping Along the Number LIne to One Hundred | Teach the entire session. |  |
|  | 4 | Introducing Work Place 4B Super Frogs | Teach the entire session. |  |
|  | 5 | Add \& Subtract on the Number Line to One Hundred | Conduct the Numbers on a Line <br> Checkpoint (steps 1-8) <br> When students finish, have them spend the remainder of the session at Work Places. |  |
|  | $\begin{gathered} 5 \mathrm{5a} \\ \text { insert } \end{gathered}$ | Add \& Subtract on the Number LIne to One Hundred, continued | Teach session 5, steps 9-19. |  |

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| :---: | :---: | :---: | :---: | :---: |
| Module 3 Jumping by Fives \& Tens on the Open Number Line | 1 | Lily Pads Work Place 4C Frog Path | Teach the entire session. | Focus: Identify teen numbers as a ten and some more ones. (1.NBT.2b) <br> On-Grade Work Place Observations <br> - Continue to relate the number line to physical models such as the number rack and Unifix cubes to help students begin to "chunk" the ones together into groups of ten and some more. <br> - See additional support suggestions in Work Place Guides. <br> Work Places from Previous Grade Level <br> - GK WP7B Measuring Handfuls <br> - GK WP7D Double Top Draw <br> - GK WP8C Count \& Compare Bugs <br> Bridges Intervention Volume 1 <br> - Module 5 Sessions 21-24: Ten \& More |
|  | 2 | Chase the Fly | Teach the entire session. |  |
|  | 3 | Frog Races | Teach the entire session. |  |
|  | 4 | Hit the Pad | Teach the entire session. |  |
|  | 5 | Unit 4 Assessment <br> Work Place 4D <br> Hit the Pad | Teach the entire session. |  |
| Module 4 <br> Penguins <br> Part 1 | 1 | Going to Antarctica | While the penguin measuring activities in this module have strong place value connections, consider moving these sessions to the end of the year if you run short of time. |  |
|  | 2 | Rockhoppers |  |  |
|  | 3 | King Penguins |  |  |
|  | 4 | Comparing Rockhoppers \& King Penguins |  |  |
|  | 5 | Me \& The Penguins |  |  |

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