## Unit 7 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.

## Unit 7 Hungry Ants

This unit addresses metric measurement, fractions, and multi-digit addition and subtraction, set in the context of army ants, picnic ants, and imaginary ants who enjoy toys as much as second graders do.

- In Module 1, students discover that the average length of a worker army ant is 1 centimeter, make army ant rulers similar to the inchworm rulers they made in Unit 4 and use their new rulers to measure in metric units.
- In Module 2, an amusing children's book about ants serves as a springboard for investigating division and fractions.
- In Module 3, students use models corresponding with base ten pieces to generate strategies for adding and subtracting 3-digit numbers.
- In Module 4, while continuing to consider strategies for 3-digit computation, students draw, write and share toy store problems for others in the class to solve.

Unit 2 moved students through counting and grouping discrete objects by place value to operating on the open number line. Unit 3 emphasized strategies for adding and subtracting within 100 . Unit 5 helped to solidify understanding of place value to 1,000 . Unit 7 uses the theme of ants to integrate measurement, fraction concepts, and 3-digit addition and subtraction.

## 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 following topics relevant to Unit 7:

- Reading and writing numbers to 1,000
- Comparing 3-digit numbers based on the meanings of the hundreds, tens, and ones digits
- Adding and subtracting within 100 using strategies based on place value, properties of operations, or the relationship between addition and subtraction

To assess students' current levels of proficiency with these skills, replace the Unit 7 Pre-Assessment (Module 1, Session 1) with the Unit 7 Screener and Implementation Guide. This short diagnostic tool will help to inform your instruction, interventions, and possible modifications to Unit 7. In addition, use selected items from the Number Corner Checkups and Unit 5 Post-Assessment (as indicated in the Screener Implementation Guide), as well as observations and interactions with students during daily instruction to guide your instructional decisions. Above all, continue to trust in the resilience and mathematical capabilities of your students and keep moving forward.

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## Recommended Modifications to Unit 7

1. The Unit Planner suggests teaching several of the sessions over two-day periods in order to strengthen work with measurement, fractions, and story problems.
2. We've suggested consolidating sessions 4 and 5 in Module 2 to eliminate the work with data collection, which isn't major work of the grade level. What remains is the introduction of a new Work Place, a checkpoint, and Work Place time for students.
3. In Module 4, students create illustrated story problems. Confer with them to ensure you can accurately read their story problems in order to type and print them at a later time.
4. Conferencing with small heterogeneous groups provides opportunities to check students' understandings of posing and solving multi-digit story problems. We suggest teaching Module 4, Session 2 over two days to allow more time for this.
5. Regarding the Unit 7 Post-Assessment (Module 3, Session 5), we recommend that you have all students do problems 1-7. They can be invited to complete some or all of the remaining problems as time and interest allow. Abbreviating the post-assessment in this way reduces the amount of time you have to spend collecting and recording data.

## 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 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 1-4, Computational Fluency Activities 1 \& 2, and Number Line Activities 1-3.


## April

- Calendar Grid Garden Fractions [Reinforces and extends instruction related to fractions.]
- Calendar Collector Measuring \& Plotting Plant Growth [Provides opportunities to measure in centimeters and collect data on line plots.]
- Computational Fluency More Addition Quick Facts [Develops mastery of addition facts to 20, and proficiency with related subtraction facts.]


## Additional Notes

- Daily Rectangle reinforces skills for finding the area of paper rectangles and writing repeated addition or multiple equations to match. While these are not considered major work of the grade level, this workout lays foundations for multiplication and area in Grade 3.
- Number Line provides practice representing and solving addition and subtraction combinations on the number line.


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Unit 7 Hungry Ants Planner

| Module | Session | Session Title | Session Notes | Activities for Reengagement |
| :---: | :---: | :---: | :---: | :---: |
| Module 1 <br> Army Ants: <br> Length in <br> Metric Units | 1 | Introducing Work Place 7A <br> Race to the Cookie Jar | Teach steps 1-9. Replace Unit 7 Pre-Assessment in steps 10-13 with the Unit 7 Screener. Teach steps 14-19. | Focus Read and write numbers to 1,000 using numerals, number names, and expanded form (2.NBT.3) <br> Work Places from Earlier in Grade 2 <br> G2 WP3D Base Ten Triple Spin <br> G2 WP5A Jump-a-Ten <br> G2 WP5E Jump-a-Hundred <br> Number Corner Workouts from Previous Grade Level <br> G1 Number Corner: April Computational Fluency (activities 2-4) <br> Bridges Intervention Volume 1 <br> Module 7 Sessions 31-34 Activities: What's My Number? 10-110, 20-120, 300-400, and 520-620 |
|  | 2 | How Long Is an Army Ant? | Teach the entire session. |  |
|  | 3 | Estimate \& Measure Centimeters | Teach the entire session over 2 days to allow plenty of time to estimate and measure. Teach steps 1-7 today. |  |
|  | $\begin{gathered} 3 \mathrm{3a} \\ \text { insert } \end{gathered}$ | Estimate \& Measure <br> Centimeters, cont. <br> Work Place 7B <br> Estimate \& Measure <br> Centimeters | Teach session 3, steps 8-18. If time permits, consider using Activities for Reengagement. |  |
|  | 4 | One Hundred Army Ants \& More | Teach the entire session. |  |
|  | 5 | Ant Paths <br> Work Place 7C <br> Ant Paths | Teach the entire session. If time is short, skip steps 3-5 or let students decorate their ant paths at another time. |  |
| Module 2 <br> Ant Treats: Division \& Fractions | 1 | One Hundred Hungry Ants | Teach the entire session. | Focus Compare pairs of 3-digit numbers (2.NBT.4) <br> On-Grade Work Place Observations \& Modifications <br> - Observe students' strategies for counting and comparing 3-digit numbers as they play Work Place 7E, The Gardener's Friend Game. Make base ten pieces available to students who want to use them to compare and find the difference of their scores. <br> - See the Work Place 7E Guide for additional support suggestions. <br> Work Places from Earlier in Grade 2 <br> G2 WP2A Scoop, Count \& Compare <br> G2 WP3D Base Ten Triple Spin <br> G2 WP5E Jump-a-Hundred <br> Bridges Intervention Volume 1 <br> Module 8 Sessions 36-38 Activities: Place Value Challenge; Place Value Challenge with Inequality Statements; Place Value Challenge \& Expanded Notation <br> Bridges Intervention Volume 3 <br> Module 7 Sessions 33-34 Activity: Find the Difference |
|  | 2 | Ant Treats | Teach the entire session. |  |
|  | 3 | Fraction Races | Teach the entire session over 2 days to allow plenty of time to play the Fraction Race Game. Teach steps 1-12 today. If time permits, teach an Activity for Reengagement. |  |
|  | $\begin{gathered} \text { 3a } \\ \text { insert } \end{gathered}$ | Fraction Races, continued | Teach session 3, steps 13-24. |  |
|  | 4 \& 5 | Bug Spinner Experiments, Part 1 <br> Work Place 7D <br> Fair Shares | Combine sessions 4 and 5 : <br> Session 4, skip steps 1-12. Teach steps 1320. Session 5 , teach steps $1-4$. Skip steps 5-13 and proceed to Work Places in steps 14-15. If you have reintroduced one or more Work Places from the Reengagement column, make them available today and throughout the rest of the unit. |  |
|  |  | Bug Spinner Experiments, Part 2 |  |  |

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| :---: | :---: | :---: | :---: | :---: |
| Module 3 <br>  <br> Subtracting <br> Three-Digit <br> Numbers | 1 | The Ants' Toy Store <br> Work Place 7E <br> The Gardener's Friend Game | Teach the entire session. | Focus Fluently add and subtract within 100 using strategies (2.NBT.5) <br> On-Grade Work Place Observations \& Modifications <br> - Observe students' strategies for adding and subtracting 2-digit multiples of 10 as they play Work Place 7A, Race to the Cookie Jar. Make base ten pieces available to students who want to use them to make or check their computations. <br> - See the Work Place 7A Guide for additional support suggestions. <br> Bridges Intervention Volume 3 <br> Module 4: Adding Tens to Tens, Ones to Ones <br> Module 5: Adding Two-Digit Numbers on a Number Line <br> Module 6: Subtracting Tens from Tens, Ones from Ones <br> Module 7: Subtracting Two-Digit Numbers on a Number Line <br> Module 8: Combinations of One Hundred |
|  | 2 | Introducing Toy Store Problems | Teach the entire session. |  |
|  | 3 | Solving Toy Store Picture Problems | Teach the entire session over 2 days to allow plenty of time for solving Toy Store Picture Problems. Teach steps 1-9 today. |  |
|  | $\begin{gathered} \text { 3a } \\ \text { insert } \end{gathered}$ | Solving Toy Store Picture Problems, continued | Review step 8 from session 3. Teach steps 9-12. If time permits, teach Activities for Reengagement. |  |
|  | 4 | A Closer Look at Our Strategies | Teach the entire session. |  |
|  | 5 | Unit 7 Post-Assessment | Teach the entire session. |  |
| Module 4 <br>  <br> Solving <br> Story <br> Problems | 1 | Creating Toy Store Problems, Part 1 | Teach the entire session. |  |
|  | 2 | Creating Toy Store Problems, Part 2 | Teach the entire session over 2 days to provide more time to write story problems and confer with students about their problems. Teach steps $1-5$ today. |  |
|  | $\begin{gathered} \text { 2a } \\ \text { insert } \end{gathered}$ | Creating Toy Store <br> Problems, Part 2 continued | Teach session 2 , steps 6-9. Continue to confer with small groups of students about their story problems. |  |
|  | 3 | Solving Story Problems Together | Teach the entire session. |  |
|  | 4 | Shopping for Toy Store Problems, Part 1 | Teach the entire session. |  |
|  | 5 | Shopping for Toy Store Problems, Part 2 | Teach the entire session. |  |

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