BRIDGES IN MATHEMATICS

GRADE 3

Unit 5 Screener Implementation Guide

Materials

- Screener (English | Spanish)
- Screener Recording Sheet (PDF | Google Doc)

Overview

A brief screener/diagnostic assessment for each unit has been provided to help teachers identify learning needs that might influence students' ability to access grade-level content. Each screener is accompanied by an implementation guide that includes the following information about each item:

- Description of skill and CCSS designation
- Answer key
- Current Expectation: What do my students need to be able to do relative to this skill to access the content of the unit?
- Unit Connections: What does this skill have to do with the unit?
- Activities for Reengagement:
  - How can I modify the Work Places in this unit to support students who have yet to develop proficiency with this skill?
  - What can I look for during Work Places to help identify students who need additional support with this skill?
  - What previous grade-level Bridges resources or Bridges Intervention activities can I use to provide support?

Once you've conducted the screener and collected students' work, you can:

- Sort the papers into two stacks for each item, e.g., "meeting current expectation" or "not there yet."
- Using the recommendations below, score each item to determine whether the student is **meeting current expectations (MCE)**.

In either case, you can record the results on the Screener Record Sheet. Additional observations while students work and targeted one-on-one conversations about students' reasoning may also inform changes to the content or sequence of instruction.

Activities for Reengagement can be used to support individuals, small groups, or the whole class. For example:

- If most students demonstrate proficiency on an item, no further action is needed.
- If some students do not demonstrate proficiency on an item, use Activities for Reengagement with small groups during Work Places or another time of your choosing.
- If most of the class has difficulty with an item, consider using Activities for Reengagement as warmups, closings, or additional whole-class sessions.

NOTE *Any grouping used to support unfinished learning should be considered flexible, fluid, and temporary, and is not intended for tracking.*

1. Find the total number of objects in a rectangular array without counting them one by one. (CCSS 2.OA.4, 3.OA.1)

NOTE If you have already conducted or plan to conduct Number Corner Checkup 2, item 12 will provide additional information about students' strategies for finding the total number of objects in an array.

How many squares are there in this array? Use numbers, words, and/or sketches to show how you found the total without counting the squares one at a time. **20 squares, work will vary**

Current expectation	Unit 5 Connections	Activities for Reengagement
Determine the number of objects in a rectangular array using a strategy more sophisticated than 1-by-1 counting, e.g., skip-counting, repeated addition, multiplying the number of objects in each row by the number of rows. **MCE** (meeting current expectations) Correct answer and work that demonstrates a strategy for finding the total that doesn't involve 1-by-1 counting.	Unit 5 makes extensive use of rectangular arrays to help students understand the relationship between multiplication and division. The instruction will be much more accessible to students who have developed strategies for determining the total number of objects by making use of the number of rows and/or columns in an array rather than counting the objects one by one. Work with arrays culminates in an introduction to area in Module 4.	**Focus** Find the total number of objects in a rectangular array without counting them one by one (CCSS 2.OA.4, 3.OA.1) **On-Grade Work Place Modifications** • Observe student's during Work Places, provide tiles and red linear pieces and grid paper, as needed. • See additional support suggestions in Work Place Guides. **Work Places from Earlier in Grade 3** G3 WP2C Cover Up **Number Corner Workouts from Previous Grade Level** G2 Number Corner: November Daily Rectangle, Rows & Columns G2 Number Corner: December Daily Rectangle, Rows & Columns Revisited

2. Determine how many groups of a particular size there are in a given whole-number quantity . (CCSS 3.OA.2)

How many groups of 3 are there in 15? Use numbers, sketches, and/or words to show how you know. 5 groups of 3; work will vary. **Example: If you skip count by 3s, it takes 5 of them to get up to 15—3, 6, 9, 12, 15.**

Current expectation	Unit 5 Connections	Activities for Reengagement
Uses manipulatives, sketches, skip-counting, repeated addition, or known multiplication facts to determine how many groups of a specified size there are in a given quantity. **MCE** Correct answer and work that demonstrates an understanding of groups.	Much of the work with multiplication and division in Unit 5 hinges on the ability to think in terms of equal groups. Students who understand 5 × 3 to mean 5 groups of 3, and the ability to find the total using skip-counting, repeated addition, or multiplication are in a better position to access instruction linking multiplication and division.	**Focus** Determine how many groups of a particular size there are in a given whole-number quantity (CCSS 3.OA.2) **On-Grade Work Place Modifications** • Observe student's during Work Places, provide tiles and red linear pieces and grid paper, as needed. • See additional support suggestions in Work Place Guides. **Work Places from Earlier in Grade 3** G3 WP2A Loops & Groups G3 WP2B Frog Jump Multiplication **Bridges Intervention Volume 5** Module 1 Sessions 1–4: Equal Groups of Two, Five & Ten (revised, original) Module 2 Sessions 6–9: Equal Groups & Equal Jumps (original) Double (×2 Facts) (revised)

3. Solve a story problem that involves equal groups. (CCSS 3.OA.3)

Three friends did chores and earned $12 yesterday. How much will they each get if they split the money evenly? Show your work. **$4, work will vary**

Current expectation	Unit 5 Connections	Activities for Reengagement
Solve story problems that involve situations of equal groups. **MCE** Correct answer and work that demonstrates an understanding of need to divide 12 into 3 equal groups.	Story problems play a major role in the first two modules of Unit 5, helping students connect their everyday experiences with division to a more formal understanding of the operation and its relationship to multiplication. Students who are able to interpret and solve sharing problems will be able to access division concepts more easily.	**Focus** Solve story problems involving situations of equal groups (3.OA.3) **On-Grade Work Place Modifications** • Observe students' problem-solving strategies during WP5A Game Store Problems. • See additional support suggestions in Work Place Guides. **Work Places from Earlier in Grade 3** G3 WP2A Loops & Groups G3 WP2B Frog Jump Multiplication **Bridges Intervention Volume 7** Module 1 Sessions 1–4 Activities: • Equal Groups (revised, original) • Equal Groups Problems, Product Unknown (revised, original) • Equal Groups Problems, Number of Groups Unknown (revised, original) • Equal Groups Problems, Number in Each Group Unknown (revised, original)

4. Identify and solve multiplication equations that represent situations involving equal groups (CCSS 3.OA.1, 3.OA.3)

NOTE *If you have already conducted or plan to conduct Number Corner Checkup 2, item 7 will provide additional information about students' ability to solve multiplication story problems and identify equations that represent such situations. Items 1 and 10 offer information about students' fluency with multiplication facts and strategies.*

Draw a line from each problem to the matching equation. Then write the answer.

a. 3 sea stars, 5 legs each. How many legs in all? **3 × 5 = 15**

b. 4 loops, 3 Xs in each. How many Xs in all? **4 × 3 = 12**

c. 5 bikes, 2 wheels each. How many wheels in all? **5 × 2 = 10**

Current expectation	Unit 5 Connections	Activities for Reengagement
Identifies and solves, or writes and solves multiplication equations representing situations that involve equal groups. **MCE** Correct equation and product for all three problems.	Given the instruction in Unit 2 and most months of Number Corner so far, students should be able to select or write multiplication equations to represent situations involving equal groups.	**Focus** Identify and solve multiplication equations to represent situations involving equal groups (CCSS 3.OA.1, 3.OA.3) **On-Grade Work Place Modifications** • Observe students' problem-solving strategies during WP5A Game Store Problems. • See additional support suggestions in Work Place Guides. **Work Places from Earlier in Grade 3** G3 WP2A Loops & Groups G3 WP2B Frog Jump Multiplication **Bridges Intervention Volume 7** Module 1 Sessions 1–4 Warm-Up 2: • Six Story Problems (original) • Six Problem Situations (revised)