

# Grade 3 Unit 2 Bridges Preparation List

## Module 1-4

### Introduction to Multiplication

#### \*Unit 2 Module 1:

#### Multiplication in Context

#### Module 1 Session 1 The Pet Store Preparation:

##### Materials

Copies	Kit Materials	Classroom Materials
<b>Problems &amp; Investigations</b> The Pet Store		
<b>TM T1</b> The Pet Store	• colored tiles (optional, for support suggestion)	• student math journals • chart paper
<b>Daily Practice</b>		
<b>SB 34</b> Addition & Subtraction: Mixed Review		

##### Vocabulary

An asterisk [\*] identifies those terms for which Word Resource Cards are available.

columns  
groups of  
rows

HC – Home Connection, SB – Student Book, TM – Teacher Master  
Copy instructions are located at the top of each teacher master.

- Study The Pet Store Teacher Master. Think about what students will see when they look at this picture. Think about how to scaffold what they say so that their observations will lay a foundation for early multiplication skills and strategies. For example, if a student says that she sees a bunch of dog bones, ask her how the dog bones are arranged, how many rows and columns she sees, or how she might figure out how many there are in all. Think about how to write student observations in a way that deepens understanding. If a student says, "I see 3 containers with 2 chew toys in each one," you could write "3 groups of 2" and " $2 + 2 + 2 = 6$ " and "2, 4, 6." As you are not yet introducing the multiplication sign, do not write  $2 \times 3$  or  $3 \times 2$  right now.
- Post a few sheets of chart paper where everyone can see, near the projector or board.
- Students are working in partners today. You may want to plan these partnerships ahead of time or have an easy system for creating them, such as pulling names out of a bag.

## Module 1 Session 2 Unit 2 Pre-Assessment Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Problem String</b> Groups of Stamps		
<b>TM T2</b> Postage Stamps <b>TM T3</b> Groups of Stamps		<ul style="list-style-type: none"> <li>• student math journals</li> <li>• a piece of paper to mask parts of the teacher masters</li> <li>• a few postage stamps, preferably of different costs and from different places (optional)</li> </ul>
<b>Assessment</b> Unit 2 Pre-Assessment		
<b>TM T4–T6</b> Unit 2 Pre-Assessment		<ul style="list-style-type: none"> <li>• scratch paper</li> </ul>
<b>Home Connection</b>		
<b>HC 21–22</b> The Pet Store		
<b>Daily Practice</b>		
<b>SB 35</b> Missing Numbers Fill-In		

HC – Home Connection, SB – Student Book, TM – Teacher Master

Copy instructions are located at the top of each teacher master.

- Note that you will need to score the Unit 2 Pre-Assessment before Session 3. (See XX-XX in the assessment Guide for scoring suggestions.) If you cannot mark the pre-assessment by Session 3, make room for reflection time in another session in this module.

## Module 1 Session 3 Stamps & Assessment Reflections Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Problems &amp; Investigations</b> Stamps		
<b>SB 36–37*</b> More Groups of Stamps <b>TM T7</b> Stamps Forum Planner		<ul style="list-style-type: none"> <li>• Groups of Stamps Teacher Master (from Session 2)</li> <li>• markers</li> </ul>
<b>Assessment</b> Assessment Reflections		
<b>TM T8</b> Unit 2 Pre-Assessment Student Reflection Sheet		<ul style="list-style-type: none"> <li>• scored Unit 2 Pre-Assessments (completed in Session 2)</li> </ul>
<b>Daily Practice</b>		
<b>SB 38</b> Alexandra's Garden		

HC – Home Connection, SB – Student Book, TM – Teacher Master

Copy instructions are located at the top of each teacher master.

\*Run several copies of these pages for display.

- Have students' Unit 2 Pre-Assessments marked and ready to hand back to them. If you cannot have the pre-assessments ready for this session, mark them in the next few days and find time for students to reflect on them before the end of Module 1.
- Read Session 4 to see how students might share their work from today's session. Before tomorrow's forum, use the Stamps Forum Planner to help select students to share their work.

### Module 1 Session 4 Stamps Preparation:

#### Materials

Copies	Kit Materials	Classroom Materials
<b>Math Forum</b> Stamps		
		<ul style="list-style-type: none"> <li>• Student Book pages More Groups of Stamps (SB 36–37, completed in Session 3)</li> <li>• Stamps Forum Planner (TM T7, with notes from Session 3)</li> </ul>
<b>Problem String</b> Stamps & Doubling		
<b>TM T9</b> Even More Groups of Stamps		<ul style="list-style-type: none"> <li>• Student Book pages More Groups of Stamps (SB 36–37, completed in Session 3)</li> <li>• student math journals</li> <li>• a piece of paper to mask portions of the teacher masters</li> </ul>
<b>Home Connection</b>		
<b>HC 23–24</b> Stamp Challenges		
<b>Daily Practice</b>		
<b>SB 39</b> Fruit & Stamps		

HC – Home Connection, SB – Student Book, TM – Teacher Master  
Copy instructions are located at the top of each teacher master.

#### Vocabulary

An asterisk [\*] indicates those terms for which Word Resource Cards are available.

efficient

- Today you will conduct another forum on students' work on the More Groups of Stamps Student Book page. Look over student work and decide which students should present today. As usual, when planning a forum, include at least one example that allows all students a point of entry to the discussion.
- Then, try to include strategies that will stretch and challenge student thinking. Look for work that includes a strategy that would elevate other students' understanding of and thinking about multiplication.

## Module 1 Session 5 Seascape Problems Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Work Places</b> Introducing Work Place 2A Loops & Groups		
<b>TM T10</b> Work Place Guide 2A Loops & Groups <b>TM T11</b> 2A Loops & Groups Record Sheet <b>TM T12</b> Unit 2 Work Place Log <b>SB 40*</b> Work Place Instructions 2A Loops & Groups	<ul style="list-style-type: none"> <li>• dice numbered 1–6 (half-class set)</li> </ul>	
<b>Problems &amp; Investigations</b> Seascape: How Long? How Tall?		
<b>TM T13</b> Seascape A <b>TM T14</b> Seascape B <b>TM T15</b> Seascape Forum Planner <b>SB 41</b> Seascape A: How Long? How Tall? <b>SB 42</b> Seascape B: How Long? How Tall?		<ul style="list-style-type: none"> <li>• student math journals</li> <li>• a piece of paper to mask portions of the teacher masters</li> <li>• scrap paper</li> <li>• pictures of coral reef ecosystems or coral reef plants and animals (optional)</li> </ul>
<b>Daily Practice</b>		
<b>SB 43</b> Coral Reef Challenges		

**HC** – Home Connection, **SB** – Student Book, **TM** – Teacher Master

Copy instructions are located at the top of each teacher master.

\*Run 1 copy of this page to be kept in a clear plastic sleeve in the Work Place bin.

- In today's session, you'll introduce Work Place 2A Loops & Groups, which replaces Work Place 1C Blast Off to Space. Before this session, you should review the Work Place Guide and Work Place Instructions. Make copies of the 2A Loops & Groups Record Sheet for use today, and store the rest in the Work Place 2A Loops & Groups bin, along with the materials listed on the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.
- Plan on introducing the Work Place quickly in order to leave plenty of time for the seascape investigation. Try to wrap up the game instruction after the first 15 or 20 minutes of the session.
- Study Seascapes A and B. Think about how you (or your students) could use the length of the clownfish (4 inches) to find the length or height of other living things in the picture. What tools could you create to make your work more

efficient? Think about what will students do with this challenge and how you can support and challenge them as they work.

- Read Session 6 to see how students might share their work from today's session. Before tomorrow's forum, use the Seascapes Forum Planner to help select students to share their work.
- Before Session 6, you will need to staple the Unit 2 Work Place Log to the backs of students' Work Place folders, leaving the Unit 1 Work Place Log in place on the fronts.

Note The Seascapes Teacher Masters are available in full color in digital format. If you would like to display the Seascapes in color, retrieve the PDF for the Unit 2, Module 1 Teacher Masters from the Bridges Educator site.

**Chloe the  
Clownfish**



A tip I found useful last year was to print out several Chloe the Clownfish and put her on the top of a popsicle stick. That way it is easier to use her since she is so small. We just glued her to the top and the kids found it very useful.

## Module 1 Session 6 Seascape Forum Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Math Forum</b> How Long? How Tall?		
		<ul style="list-style-type: none"> <li>Seascapes A and B (TM T13 &amp; T14 from Session 5)</li> <li>Seascape Forum Planner (TM T15, with notes from Session 5)</li> <li>Student Book pages Seascape A: How Long? How Tall? and Seascape B: How Long? How Tall? (SB 41–42, completed in Session 5)</li> </ul>
<b>Work Places in Use</b>		
<b>1D</b> Subtraction Bingo (introduced Unit 1, Module 2, Session 4) <b>1E</b> Carrot Grab (introduced Unit 1, Module 3, Session 4) <b>1F</b> Rabbit Tracks (introduced Unit 1, Module 4, Session 1) <b>1G</b> Target One Hundred (introduced Unit 1, Module 4, Session 3) <b>1H</b> Anything but Five (introduced in Unit 1, Module 4, Session 5) <b>2A</b> Loops & Groups (introduced in Unit 2, Module 1, Session 5)		
<b>Home Connection</b>		
<b>HC 25–26</b> Leaves & Flower Petals		
<b>Daily Practice</b>		
<b>SB 44</b> If You Bake a Cupcake for a Kid ...		

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- Students will visit Work Places today. Beforehand, make sure the Unit 2 Work Place Log is stapled to the back of students' Work Place folders, with the Unit 1 Work Place Log still in place on the fronts. Double-check the bins for the available Work Places to make sure there are enough record sheets.
- Look over the students' work from the previous session, and use the Seascape Forum Planner Teacher Master to make notes about their strategies. Think about which student work should be showcased in the forum, and use the last column on the planner to indicate the order in which you'll have students share their work in today's forum. Use your observations about student understanding to help guide your decisions.
  - If most students are challenged by the problems and using less efficient strategies, choose examples that will help them move toward more efficient strategies, but not those so complex as using partial products or proportional relationships.

- If most students are working comfortably and using a variety of efficient strategies, choose examples that feature more sophisticated strategies, such as using proportional relationships, doubling and halving, and partial products. In the forum, have students discuss the discoveries they made about the relationships between the numbers.
- If students' work shows a wide range of ability, select examples that reflect that range. Have students share a variety of strategies, and build your discussion during the forum to support students across the spectrum as they deepen their understanding and expand their use of strategies.
- If students are exploring the multiplication symbol ( $\times$ ), be sure to have these students share their learning with the rest of the class.

Reflect on the Session 4 math forum: think about how to recognize students for what went well and how to make the changes you would like to see. A quick discussion just before the forum about what went well and what students need to work on often makes a significant difference in how the forum will go.



\*Unit 2 Module 2:  
Multiplying with Arrays & Number Lines

Unit 2 Module 2 Session 1 Count-Arounds Preparation:

**Materials**

Copies	Kit Materials	Classroom Materials
<b>Problems &amp; Investigations</b> Count-Arounds		
<b>Assessment</b> Multiplication Checkpoint		
<b>TMT1</b> Multiplication Checkpoint	<ul style="list-style-type: none"> <li>• One Hundred Grid (optional, for support suggestions)</li> <li>• colored tiles (optional, for support suggestion)</li> </ul>	
<b>Work Places in Use</b>		
<b>1D</b> Subtraction Bingo (introduced Unit 1, Module 2, Session 4) <b>1E</b> Carrot Grab (introduced Unit 1, Module 3, Session 4) <b>1F</b> Rabbit Tracks (introduced Unit 1, Module 4, Session 1) <b>1G</b> Target One Hundred (introduced Unit 1, Module 4, Session 3) <b>1H</b> Anything but Five (introduced in Unit 1, Module 4, Session 5) <b>2A</b> Loops & Groups (introduced in Unit 2, Module 1, Session 5)		
<b>Daily Practice</b>		
<b>SB 45</b> Toby Goes Shopping		

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- Post a few sheets of chart paper in your discussion area, or plan to use a whiteboard nearby. You will use it to record all of the multiples of 3, 6, and 9 through 90 during the count-arounds at the beginning of the session.
- Where all students can see it, write the list of Work Places that are available to students today. You can write out just the numbers, or write the full names if you have time.



## Module 2 Session 2 Cube Trains & Multiples Strips Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Problems &amp; Investigations</b> Count-Arounds		
		• chart paper, a few sheets (see Preparation)
<b>Problems &amp; Investigations</b> Cube Trains & Multiples Strips		
	• 30" strip of adding machine tape • a strip of adding machine tape for each student pair (see Preparation)	• scissors • student math journals • interlocking cubes such as Unifix cubes, 1 container for each student pair (see Preparation)
<b>Home Connection</b>		
<b>HC 27-28</b> Skip-Counting & More		
<b>Daily Practice</b>		
<b>SB 46</b> Seascape Challenges		

**HC** – Home Connection, **SB** – Student Book, **TM** – Teacher Master  
Copy instructions are located at the top of each teacher master.

### Vocabulary

An asterisk [\*] identifies those terms for which Word Resource Cards are available.

equation\*  
factor\*  
measuring strip  
multiple\*  
product\*

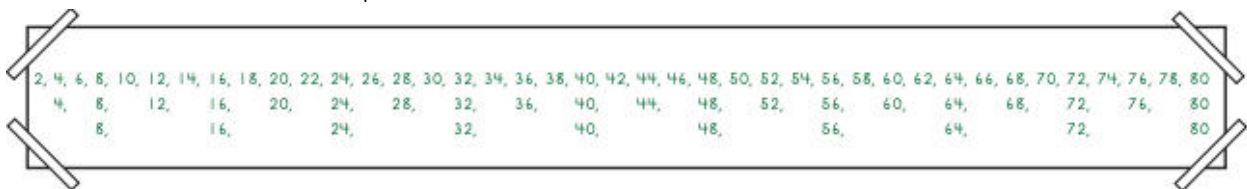
- Post a few sheets of chart paper in your discussion area or plan to use a nearby whiteboard to record the count-arounds.
- Create a measuring strip of 40 interlocking cubes using 2 different colors. Alternate colors in groups of 4 so that you have 4 of one color followed by 4 of the next color. Hang or tape your measuring strip on a whiteboard in or near the discussion area, leaving room underneath to add a 30" strip of adding machine tape later in the lesson.



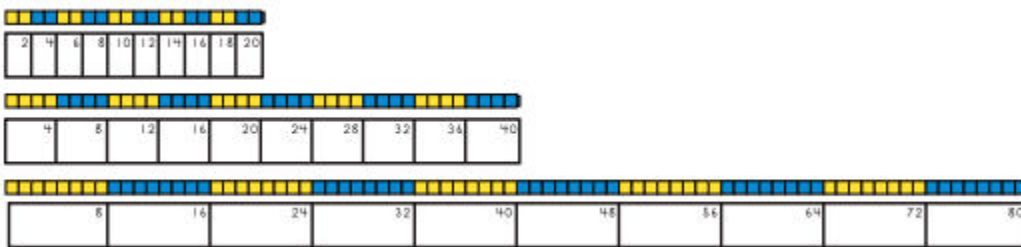
- Assign partners and decide which number (between 2 and 10) each partnership will work with. Each student pair will build a measuring strip and create matching paper number lines to show the multiples of a number between 2 and 10. Think about assigning students who work more slowly a smaller number and students who work more quickly a larger number. If you have more than 18 students in your room, it's fine to have more than one pair work on a particular multiple. For instance, you might have three student pairs each make a measuring strip and paper number line for 2s, three more student pairs each make a strip and number line for 3s, and so on.
- Divide all of the interlocking cubes into containers. You'll need 1 container for every pair of students. Each container should contain equal numbers of cubes in

two different colors. You'll need containers with the following total numbers of cubes: 20, 30, 40, 50, 60, 70, 80, 90, and 100. The numbers you assign to each pair of students will determine how many containers you should prepare with each total number of cubes.

- Cut a strip of adding machine tape for each student pair. Pairs working with multiples of 2 will need about 20 inches, pairs working with multiples of 3 need 30 inches, pairs working with multiples of 4 need 40 inches and so on.
- During the lesson, you will post 9 number lines on the wall, each directly below the one above it. The shortest of the 9 lines will be 15" long. The longest will be 75" long. Have space and necessary materials prepared.
- Leave a number line for each multiple, 2-10, posted on the board at the end of this session. Collect and save any extra number lines for use in Module 2 and with individuals later in the year.
- Count around by 2s up to 80. Then, have the students do a count-around for 4s up to 80, just as they did for 2s. Record the multiples of 4 under the multiples of 2. At the end of this count-around, ask students what they notice. Do the count-around with 8s up to 80.

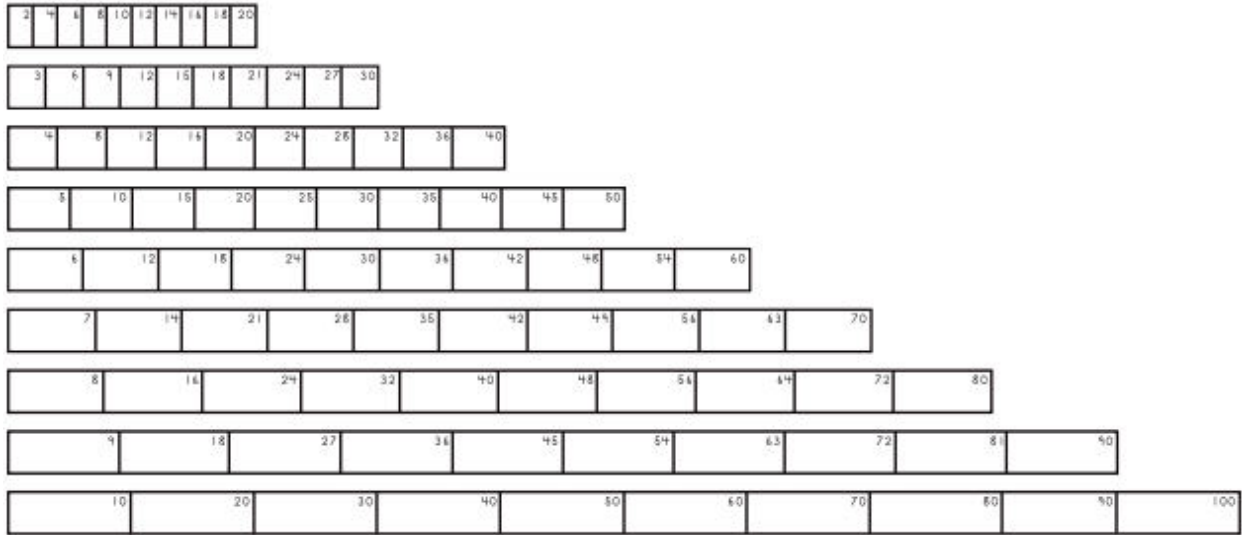


- Tell students that they will get together with their new, bigger group and line up their strips so the smallest strip is at top and the biggest strip is at the bottom. Then, student groups will make as many observations as they can about the strips.



- While groups are making observations, post one paper multiples strip for each multiple on the board, in order from 2 to 10, where everyone can see. When all

groups have made at least a few observations, bring them back together in the discussion area with their journals and pencils.



## Module 2 Session 3 Watertown's Window Washer Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Problem String</b> Watertown's Window Washer		
<b>TM T2</b> Watertown <b>TM T3</b> Watertown School Windows		<ul style="list-style-type: none"> <li>a piece of paper to mask parts of the teacher masters</li> <li>student math journals</li> </ul>
<b>Problems &amp; Investigations</b> Number Line Puzzles		
<b>SB 47*</b> Number Line Puzzles	<ul style="list-style-type: none"> <li>60 interlocking cubes (see Preparation)</li> <li>adding machine tape (see Preparation)</li> </ul>	<ul style="list-style-type: none"> <li>paper multiples strip for 6s (from Session 2)</li> <li>markers or whiteboard markers</li> </ul>
<b>Work Places</b> Introduce Work Place 2B Frog Jump Multiplication		
<b>TM T4</b> Work Place Guide 2B Frog Jump Multiplication <b>TM T5</b> 2B Frog Jump Multiplication Record Sheet <b>SB 48**</b> Work Place Instructions 2B Frog Jump Multiplication		
<b>Daily Practice</b>		
<b>SB 49-50</b> Windows & Number Puzzles		

### Vocabulary

An asterisk [\*] identifies those terms for which Word Resource Cards are available.

commutative property of multiplication\*  
 equation\*  
 factor\*  
 measuring strip  
 multiple\*  
 product\*  
 variable\*

HC – Home Connection, SB – Student Book, TM – Teacher Master

Copy instructions are located at the top of each teacher master.

\* Run 1 copy of this page for display.

\*\* Run 1 copy to be kept in a clear plastic sleeve stored in the Work Place bin.

- Have the paper number lines for multiples of 2-10 from the previous session posted.
- Make a 60-cube train of interlocking cubes using two different colors. Alternate colors in groups of 6 so that you have 6 of one color followed by 6 of the next color.
- Be prepared to hang up your 60-cube train during the lesson. Ideally, you can hang it up on a whiteboard or chalkboard. If not, plan to hang it up on a bulletin board and post a 45" length of adding machine tape above the 60-cube train.
  - Assign partners for Number Line Puzzles.
- In today's session, you'll introduce Work Place 2B Frog Jump Multiplication, which replaces Work Place 1D Subtraction Bingo. Before this session, you should review the Work Place Guide and Work Place Instructions and assemble the bin for Work Place 2B, using materials listed in the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.

## Module 2 Session 4 Wally Keeps Washing Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Problem String</b> More Windows for Wally		
<b>TM T6</b> More Watertown Windows		• student math journals
<b>Problems &amp; Investigations</b> More Number Line Puzzles		
<b>SB 51*</b> More Number Line Puzzles		• adding machine tape measuring strips for 4s, 5s, 9s, 10s (see Preparation) • tape • student math journals
<b>Home Connection</b>		
<b>HC 29-30</b> Story Problems & Number Line Puzzles		
<b>Daily Practice</b>		
<b>SB 52-53</b> The Watertown Bank		

**HC** – Home Connection, **SB** – Student Book, **TM** – Teacher Master  
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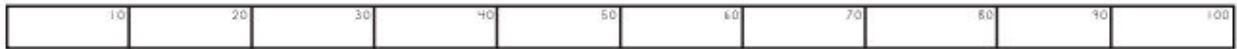
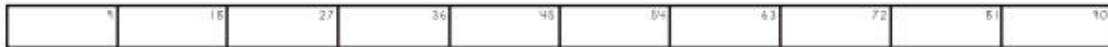
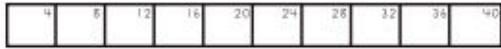
### Vocabulary

An asterisk [\*] identifies those terms for which Word Resource Cards are available.

equation\*  
variable\*

- Create a paper measuring strip for 10 if you have not already done so.
- Post paper measuring strips for 4, 5, 9, and 10 on your whiteboard or chalkboard. Leave space between each one to draw a number line (see step 8). If you don't

have a whiteboard or chalkboard, hang adding machine tape in between each measuring strip.



- Assign partners for pair work, using yesterday's partnerships or choosing different partners.

## Module 2 Session 5 The Watertown Post Office Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Problem String</b> The Watertown Post Office		
<b>TM T7</b> Post Office Mailboxes		<ul style="list-style-type: none"> <li>• 2 pieces of paper to mask portions of the teacher masters</li> <li>• student math journals</li> </ul>
<b>Problems &amp; Investigations</b> The Watertown Post Office Mailboxes		
<b>SB 54*</b> More Post Office Mailboxes		As needed: <ul style="list-style-type: none"> <li>• markers</li> <li>• glue or tape</li> <li>• scissors</li> </ul>
<b>Work Places</b> Introducing Work Place 2C Cover Up		
<b>TM T8</b> Work Place Guide 2C Cover Up <b>TM T9</b> 2C Cover Up Record Sheet <b>SB 55**</b> Work Place Instructions 2C Cover Up	<ul style="list-style-type: none"> <li>• spinner overlay</li> </ul>	<ul style="list-style-type: none"> <li>• colored pencils in 2 different colors</li> </ul>
<b>Daily Practice</b>		
<b>SB 56</b> Watertown Center		

### Vocabulary

An asterisk [\*] identifies those terms for which Word Resource Cards are available.

array\*

equation\*

variable\*

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Copy instructions are located at the top of each teacher master.

\* Run 1 copy of this page for display.

\*\* Run 1 copy of this page to be kept in a clear plastic sleeve in the Work Place bin.



- Assign partners for pair work, using yesterday's partnerships or choosing different partners. In today's session, you'll introduce Work Place 2C Cover Up, which replaces Work Place 1E Carrot Grab. Before this session, you should review the Work Place Guide and Work Place Instructions.
- Make copies of the 2C Cover Up Record Sheet for use today, and store the rest in the Work Place 2A Loops & Groups bin, along with the materials listed on the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.

**\*Unit 2 Module 3 Ratio Tables & the Multiplication Table**  
**Unit 2 Module 3 Session 1 Doubling String & Pet Store Story Problems**  
**Preparation:**

**Materials**

Copies	Kit Materials	Classroom Materials
<b>Problem String</b> Doubling		
<b>SB 57*</b> Multiplication Table		<ul style="list-style-type: none"> <li>• student math journals</li> <li>• yellow colored pencils (class set)</li> </ul>
<b>Assessment</b> Pet Store Story Problems Work Sample		
<b>TM T1</b> Pet Store Story Problems		
<b>Problems &amp; Investigations</b> Sharing Story Problems		
<b>TM T1</b> Pet Store Story Problems		<ul style="list-style-type: none"> <li>• chart paper (see Preparation)</li> <li>• paper multiples strips 2–10 (for reference; from Unit 2, Module 2, Session 2)</li> </ul>
<b>Home Connection</b>		
<b>HC 31–32</b> More Windows		
<b>Daily Practice</b>		
<b>SB 58</b> Wendell's Windows		

**Vocabulary**

*An asterisk [\*] identifies those terms for which Word Resource Cards are available.*

- equation\*
- factor\*
- multiple\*
- product\*

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*\*Run 1 copy of this page for display.*

- Post a few sheets of chart paper in your discussion area for use at the end of the session. Write the heading Multiplication Strategies on the first piece of chart paper, which you'll use to record students' strategies.

**Multiplication Strategies Sample Poster**

**Draw a Picture**

**Skip-Counting**  
6, 12, 18, 24,  
30, 36, 42

**Using Facts You Know**  
 $6 \times 7 = (6 \times 5) + (6 \times 2)$

$6 \times 5 = 30$        $6 \times 2 = 12$

$30 + 12 = 42$

**Repeated Addition**

**Make a Table**

Bags	Treats
1	6
2	12
3	18
4	24
5	30
6	36
7	42

- If you have taken down the paper multiplication strips for multiples of 2-10 the class made during Module 2, Session 2, put them back up on the board where students can see them.

### Module 3 Session 2 Price Lists Preparation:

#### Materials

Copies	Kit Materials	Classroom Materials
<b>Problem String</b> Cats & Legs		
		• student math journals
<b>Problems &amp; Investigations</b> Rabbit Food Price List		
<b>SB 59*</b> Pet Store Price List: Rabbit Food		• student math journals
<b>Daily Practice</b>		
<b>SB 60</b> Pet Store Lists		

#### Vocabulary

An asterisk [\*] indicates terms for which Word Resource Cards are available.

price per pound  
ratio table\*  
times 10

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\* Run 1 copy of this page for display.

- Study the Pet Store Price Lists: Rabbit Food Price Student Book page. How would you fill in the blanks? What strategies might your students use? Think about how you will represent their strategies on a ratio table.
- Plan how you will partner the students for filling out the price list.



# Module 3 Session 3 Multiplication Strategies, Part 1 of 2 Preparation:

## Materials

Copies	Kit Materials	Classroom Materials
<b>Problem String</b> Doubles & More		
<b>TM T2</b> Grid Paper <b>TM T3</b> Doubles & More Problem String		• student math journals
<b>Problems &amp; Investigations</b> Multiplication Table, Part 1		
<b>TM T2</b> Grid Paper <b>SB 57*</b> Multiplication Table		• red, orange, and brown colored pencils (class set)
<b>Home Connection</b>		
<b>HC 33–34</b> Mixed Practice		
<b>Daily Practice</b>		
<b>SB 61</b> Array Challenges		

## Vocabulary

An asterisk [\*] indicates those terms for which Word Resource Cards are available.

- commutative property of multiplication\*
- equation\*
- factor\*
- multiple\*
- product\*

HC – Home Connection, SB – Student Book, TM – Teacher Master  
Copy instructions are located at the top of each teacher master.

\* Run 1 copy of this page for display.

Fact Category	Multiplier	Featured Facts in Category	Color on Chart
Doubles facts	$\times 2$	(featured in Session 1)	yellow
Double-Doubles facts	$\times 4$	$4 \times 4, 4 \times 8$	red
Double-Double-Doubles facts	$\times 8$	$8 \times 6, 8 \times 7, 8 \times 8$	brown
Doubles Plus One Set facts	$\times 3$	$3 \times 3, 3 \times 4, 3 \times 8$	orange

3rd  
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### Multiplication Table

x	0	1	2	3	4	5	6	7	8	9	10
0	0×0	0×1	0×2	0×3	0×4	0×5	0×6	0×7	0×8	0×9	0×10
1	1×0	1×1	1×2	1×3	1×4	1×5	1×6	1×7	1×8	1×9	1×10
2	2×0	2×1	2×2	2×3	2×4	2×5	2×6	2×7	2×8	2×9	2×10
3	3×0	3×1	3×2	3×3	3×4	3×5	3×6	3×7	3×8	3×9	3×10
4	4×0	4×1	4×2	4×3	4×4	4×5	4×6	4×7	4×8	4×9	4×10
5	5×0	5×1	5×2	5×3	5×4	5×5	5×6	5×7	5×8	5×9	5×10
6	6×0	6×1	6×2	6×3	6×4	6×5	6×6	6×7	6×8	6×9	6×10
7	7×0	7×1	7×2	7×3	7×4	7×5	7×6	7×7	7×8	7×9	7×10
8	8×0	8×1	8×2	8×3	8×4	8×5	8×6	8×7	8×8	8×9	8×10
9	9×0	9×1	9×2	9×3	9×4	9×5	9×6	9×7	9×8	9×9	9×10
10	10×0	10×1	10×2	10×3	10×4	10×5	10×6	10×7	10×8	10×9	10×10

Unit Module 3 | Session 1, 3 & 4

<input type="checkbox"/>	Zero facts ( $\times 0$ )
<input type="checkbox"/>	Ones facts ( $\times 1$ )
<input type="checkbox"/>	Doubles facts ( $\times 2$ )
<input type="checkbox"/>	Doubles Plus One Set facts ( $\times 3$ )
<input type="checkbox"/>	Double-Doubles facts ( $\times 4$ )
<input type="checkbox"/>	Half-Tens facts ( $\times 5$ )
<input type="checkbox"/>	Half-Tens Plus One Set facts ( $\times 6$ )
<input type="checkbox"/>	Double-Double-Doubles facts ( $\times 8$ )
<input type="checkbox"/>	Tens Minus One Set facts ( $\times 9$ )
<input type="checkbox"/>	Tens facts ( $\times 10$ )

## Module 3 Session 4 Multiplication Strategies, Part 2 of 2 Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Problem String</b> Tens Facts & More		
<b>TM T2</b> Grid Paper		• student math journals
<b>Problems &amp; Investigations</b> Multiplication Table, Part 2		
<b>SB 57*</b> Multiplication Table		• green, blue, purple, and turquoise colored pencils (class set)
<b>Daily Practice</b>		
<b>SB 62</b> Multiplication Patterns		

### Vocabulary

An asterisk [\*] indicates terms for which Word Resource Cards are available.

commutative property of multiplication\*  
equation\*  
factor\*  
multiple\*  
product\*

HC – Home Connection, SB – Student Book, TM – Teacher Master  
Copy instructions are located at the top of each teacher master.

\* Run 1 copy of this page for display.

Work with students to locate and fill in each set of facts one at a time.

- For each set of facts, ask students to find matching facts in the row and the column.
- Also discuss some of the more challenging facts in each set together as a class and use copies of the Grid Paper Teacher Master to illustrate how they can use Doubles facts to help solve each.

Fact Category	Multiplier	Featured Facts in Category	Color on Chart
Doubles facts	$\times 2$	(featured in Session 1)	yellow
Double-Doubles facts	$\times 4$	(featured in Session 3)	red
Double-Double-Doubles facts	$\times 8$	(featured in Session 3)	brown
Doubles Plus One Set facts	$\times 3$	(featured in Session 3)	orange
Tens facts	$\times 10$		blue
Half-Tens facts	$\times 5$	$5 \times 6, 5 \times 7, 5 \times 8$	green
Half-Tens Plus One Set facts	$\times 6$	$6 \times 6, 6 \times 7, 6 \times 8$	turquoise
Tens Minus One Set facts	$\times 9$	$9 \times 6, 9 \times 7, 9 \times 8, 9 \times 9,$	purple

**Multiplication Table**

x	0	1	2	3	4	5	6	7	8	9	10
0	0×0	0×1	0×2	0×3	0×4	0×5	0×6	0×7	0×8	0×9	0×10
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	8	10	12	14	16	18	20
3	0	3	6	9	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

Zero facts (× 0)  
 Ones facts (× 1)  
 Doubles facts (× 2)  
 Doubles Plus One Set facts (× 3)  
 Double-Doubles facts (× 4)  
 Half-Tens facts (× 5)  
 Half-Tens Plus One Set facts (× 6)  
 Double-Double-Doubles facts (× 8)  
 Tens Minus One Set facts (× 9)  
 Tens facts (× 10)

## Module 3 Session 5 Ice Cream Survey Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Problems &amp; Investigations</b> Ice Cream Survey		
<b>TM T4</b> Ice Cream Cone Markers <b>SB 63*</b> Ice Cream Bar Graph		<ul style="list-style-type: none"> <li>• 8 1/2" by 14" copy paper (half-class set)</li> <li>• 3" by 3" sticky notes (class set)</li> <li>• scissors (class set)</li> <li>• glue sticks (class set)</li> <li>• pencils (class set)</li> <li>• rulers (class set)</li> <li>• crayons (optional)</li> </ul>
<b>Work Places</b> Introducing Work Place 2D Doubles Help		
<b>TM T5–T6</b> Work Place Guide 2D Doubles Help <b>TM T7</b> 2D Doubles Help Record Sheet <b>TM T8</b> 2D Doubles Help Grid Paper <b>SB 64**</b> Work Place Instructions 2D Doubles Help		
<b>Home Connection</b>		
<b>HC 35–36</b> Grocery Shopping		
<b>Daily Practice</b>		
<b>SB 65</b> Favorite Ice Cream		

HC – Home Connection, SB – Student Book, TM – Teacher Master  
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\* Run 1 copy of this page for display.

\*\* Run 1 copy of this page to be kept in a clear plastic sleeve in the Work Place bin.

### Vocabulary

An asterisk [\*] identifies those terms for which Word Resource Cards are available.

bar graph\*  
 picture graph\*

- In today's session, you'll introduce 2D Doubles Help, which replaces Work Place 1F Rabbit Tracks. Before this session, you should review the Work Place Guide and Work Place Instructions.
- Make copies of the 2D Doubles Help Record Sheet for use today, and store the rest in the Work Place 2D Doubles Help bin, along with the materials listed on the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.

## \*Unit 2 Module 4 Story Problems with Graphs & Multiple Operations

### Unit 2 Module 4 Session 1 Book Lovers Survey Preparation:

#### Materials

Copies	Kit Materials	Classroom Materials
<b>Problems &amp; Investigations</b> Book Lovers Survey		
<b>TM T1</b> Book Markers <b>SB 66*</b> Book Bar Graph		<ul style="list-style-type: none"> <li>• 8 ½" by 14 " copy paper (half-class set)</li> <li>• 3" by 3" sticky notes (class set)</li> <li>• scissors (class set)</li> <li>• glue sticks (class set)</li> <li>• pencils (class set)</li> <li>• rulers (class set)</li> <li>• crayons or colored pencils (class set)</li> </ul>
<b>Work Places in Use</b>		
<b>1G</b> Target One Hundred (introduced Unit 1, Module 4, Session 3) <b>1H</b> Anything But Five (introduced Unit 1, Module 4, Session 5) <b>2A</b> Loops & Groups (introduced Unit 2, Module 1, Session 5) <b>2B</b> Frog Jump Multiplication (introduced Unit 2, Module 2, Session 3) <b>2C</b> Cover Up (introduced Unit 2, Module 2, Session 5) <b>2D</b> Doubles Help (introduced Unit 2, Module 3, Session 5)		
<b>Home Connection</b>		
<b>HC 37-38</b> Favorite Pets		
<b>Daily Practice</b>		
<b>SB 67</b> Favorite Books		

#### Vocabulary

An asterisk [\*] identifies those terms for which Word Resource Cards are available.

bar graph\*  
 picture graph\*

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 Copy instructions are located at the top of each teacher master.

\* Run 1 copy of this page for display.

- List four book genres on a whiteboard that are popular with your students, such as: animal books, fantasy books, arts and crafts books, and sports books. You will need plenty of empty space to the right of the list. See the example after Action Item 2.

• Where all students can see it, write the list of Work Places that are available to students today. You can write out just the numbers, or write the full names if you have time.

## Module 4 Session 2 Library Books Data Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Problems &amp; Investigations</b> Library Books Data		
<b>SB 68*</b> Library Books Data & Graph	• base ten pieces	
<b>SB 69*</b> Library Books Problems		
<b>Work Places in Use</b>		
<b>1G</b> Target One Hundred (introduced Unit 1, Module 4, Session 3) <b>1H</b> Anything But Five (introduced Unit 1, Module 4, Session 5) <b>2A</b> Loops & Groups (introduced Unit 2, Module 1, Session 5) <b>2B</b> Frog Jump Multiplication (introduced Unit 2, Module 2, Session 3) <b>2C</b> Cover Up (introduced Unit 2, Module 2, Session 5) <b>2D</b> Doubles Help (introduced Unit 2, Module 3, Session 5)		
<b>Daily Practice</b>		
<b>SB 70</b> Gift Wrap Fundraiser		

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### Vocabulary

An asterisk [\*] identifies those terms for which Word Resource Cards are available.

bar graph\*  
table\*

• Where all students can see it, write the list of Work Places that are available to students today. You can write out just the numbers, or write the full names if you have time.



## Module 4 Session 3 Library Books Problems Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Problems &amp; Investigations</b> Library Books Problems		
<b>SB 71*–72</b> More Library Books Problems	<ul style="list-style-type: none"> <li>• base ten area pieces</li> <li>• colored tiles</li> </ul>	
<b>Work Places in Use</b>		
<b>1G</b> Target One Hundred (introduced Unit 1, Module 4, Session 3) <b>1H</b> Anything But Five (introduced Unit 1, Module 4, Session 5) <b>2A</b> Loops & Groups (introduced Unit 2, Module 1, Session 5) <b>2B</b> Frog Jump Multiplication (introduced Unit 2, Module 2, Session 3) <b>2C</b> Cover Up (introduced Unit 2, Module 2, Session 5) <b>2D</b> Doubles Help (introduced Unit 2, Module 3, Session 5)		
<b>Home Connection</b>		
<b>HC 39–40</b> The Pencil Survey		
<b>Daily Practice</b>		
<b>SB 73</b> Mr. White's Pencil Survey		

**HC** – Home Connection, **SB** – Student Book, **TM** – Teacher Master  
 Copy instructions are located at the top of each teacher master.

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- Where all students can see it, write the list of Work Places that are available to students today. You can write out only the numbers, or write the full names if you have time.

## Module 4 Session 4 Unit 2 Post-Assessment Preparation:

### Materials

Copies	Kit Materials	Classroom Materials
<b>Assessment</b> Unit 2 Post-Assessment		
<b>T2–T5</b> Unit 2 Post-Assessment		<ul style="list-style-type: none"> <li>• scratch paper</li> </ul>
<b>Work Places in Use</b>		
<b>1G</b> Target One Hundred (introduced Unit 1, Module 4, Session 3) <b>1H</b> Anything But Five (introduced Unit 1, Module 4, Session 5) <b>2A</b> Loops & Groups (introduced Unit 2, Module 1, Session 5) <b>2B</b> Frog Jump Multiplication (introduced Unit 2, Module 2, Session 3) <b>2C</b> Cover Up (introduced Unit 2, Module 2, Session 5) <b>2D</b> Doubles Help (introduced Unit 2, Module 3, Session 5)		
<b>Daily Practice</b>		
<b>SB 74</b> On Your Own		

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### Vocabulary

An asterisk [\*] identifies those terms for which Word Resource Cards are available. product\*