### Unit 2 Preparation List for each module

#### Unit 2 Module 1 Session 1 The Pet Store: Preparation

• 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 × 3 or 3 × 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:

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 preassessment by Session 3, make room for reflection time in another session in this module.

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

•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:

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:

• 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 Workplace Guide also includes suggestions for differentiating the game to meet students' needs.

• Plan on introducing the Workplace 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 students will 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 Seascape Forum Planner to help select students to share their work. • Before Session 6, you will need to staple the Unit 2 Workplace Log to the backs of students' Workplace folders, leaving the Unit 1 Workplace Log in place on the fronts.

### Module 1 Session 6 Seascape Forum

### Preparation:

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 (×), 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.

#### Module 2 Session 1 Count-Arounds

#### **Preparation:**

• 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.

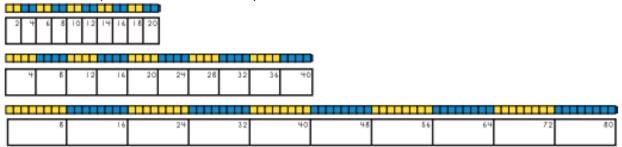
## Module 2 Session 2 Cube Trains & Multiples Strips Preparation:

• 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.

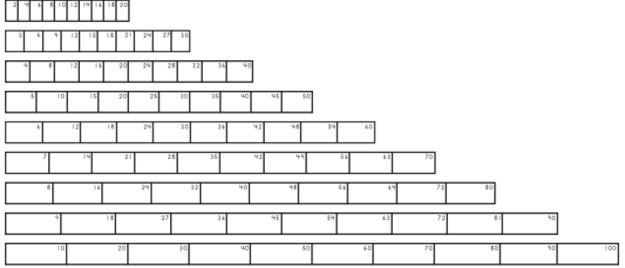
• Assign partners and decide which number (between 2 and 10) each partnership will work with. Each student pair will build a measuring strip and create matching paper number lines to show the multiples of a number between 2 and 10. Think about assigning students who work more slowly a smaller number 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.

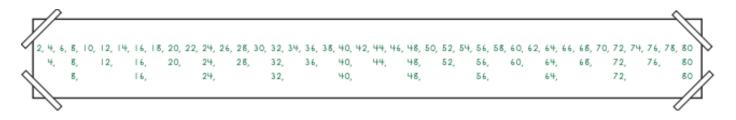
• Cut a strip of adding machine tape for each student pair. Pairs working with multiples of 2 will need about 20 inches, pairs working with multiplies of 3 need 30 inches, pairs working with multiples of 4 need 40 inches and so on.



• 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.

• Do the count-around with 8s up to 80. Then, have the students each turn to a partner to discuss what they noticed about the counting sequence.



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

- 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:**

• 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. 4 8 12 16 20 24 28 32 36 40 5 10 15 20 25 30 35 40 45 50 9 18 27 36 45 54 63 72 81 90 10 20 30 40 50 60 70 80 90 100 • Assign partners for pair work, using yesterday's partnerships or choosing different partners.

# Module 2 Session 5 The Watertown Post Office Preparation:

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.

# Module 3 Session 1 Doubling String & Pet Store Story Problems Preparation:

• 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 Repeated Addition Draw a Picture (HI) (HI ) (HI ) 30 36 12 18 24 42 (HII) (HII) (HII) Make a Table (HII D Bags Treats Skip-Counting 6 L 12 2 6, 12, 18, 24, 18 3 30, 36, 42 24 4 30 5 Using Facts You Know 6 36 7 42  $6 \times 7 = (6 \times 5) + (6 \times 2)$ 6 × 2 = 12  $\times 5 = 30$ 30 + 12 = 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:

• 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 5 Ice Cream Survey Preparation:

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.

# Module 4 Session 1 Book Lovers Survey Preparation:

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:

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:

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.