Grade 3 Unit 1 Bridges Preparation List Module 1-4 Addition and Subtraction Patterns

*Unit 1 Module 1:

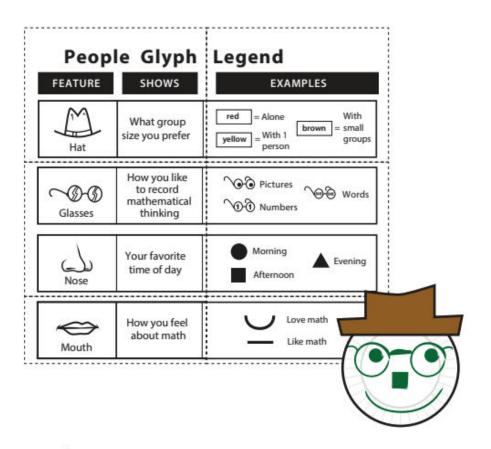
Community Building & Addition Facts to Twenty:

Module 1 Session 1 Making People Glyphs Preparation:

Copies	Kit Materials	Classroom Materials
Problems & Investigations	reating a Learning	Community
	SI	• 24"×36" chart paper
Problems & Investigations A	Making People Glyp	hs
TM T1 People Glyph Legend Assembly Diagram TM T2-T6 People Glyph Legend (see Preparation)		eighteen 3"× 6" strips cut from 3 sheets each of 9"× 12" red, yellow, and brown construction paper class set of 6" uncoated paper plates, plus a few extra crayons, markers, or colored pencils (class set) scissors (class set) glue or glue sticks (class set)
Daily Practice		
SB 1 Summer Vacation Survey, Part 1		

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

- Before introducing today's session, create your own glyph as an example.
 Use the People Glyph Legend—a picture is shown after step 7—to guide the construction of your glyph.
- Also, run 1 copy each of the five pages for the People Glyph Legend. Tape the
 edges together to make a poster as shown on the People Glyph Legend
 Assembly Diagram
- Then display the legend where students can see it.



A Community of Learners...

- o Shares materials
- o Listens to others
- · Keeps hands off math materials when someone is sharing
- o Helps clean up
- o Explains ideas to others
- · Helps people when they make mistakes
- · Disagrees respectfully

Module 1 Session 2 Sorting & Classifying People Glyphs Preparation:

Copies	Kit Materials	Classroom Materials
Problems & Investigations	Sorting & Classify	ring People Glyphs
TM T7 Bar Graph		Community of Learners chart (created in Session 1) People Glyph Legend (created in previous session) students' people glyphs (created in previous session) about twenty 3" x 5" index cards markers permanent marker piece of lined paper student math journals (see Preparation)
Daily Practice		
SB 2 Summer Vacation Survey, Part 2		

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

- Write each student's name on a math journal (composition notebook) with a permanent marker.
- Also, think about what you can do in this session to begin ensuring that students feel safe making contributions and taking risks during math class; the list of behaviors on the Community of Learners chart you created with students in Session 1 is a good place to start.
- Throughout the year, but particularly in the first weeks of school, make an
 effort to establish a classroom environment in which students feel
 comfortable taking risks, exploring new ideas, and engaging in
 mathematical discussions with one another. Invite students to reflect on
 the class chart you created in Session 1 to reinforce the positive behaviors
 you want to establish.

Module 1 Session 3 Unit 1 Pre-Assessment & Number Rack Review Preparation:

Materials

Copies	Kit Materials	Classroom Materials
Assessment Unit 1 Pre-A	ssessment	
TM T8-T10 Unit 1 Pre-Assessment		
Problems & Investigatio	ns Number Rack Review	32
	demonstration number rack	student math journals Community of Learners chart (created in Session 1)
Daily Practice		
SB 3 Story Problems		

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 1 Pre-Assessment before Session 4.
 (See the Assessment Guide for scoring suggestions.) If you cannot mark the pre-assessment by Session 4, make room for reflection time in another session in this module.
- Use the number rack yourself to think of three different ways to represent or solve each of the following addition problems: 8 + 7, 5 + 6, 7 + 7, 6 + 8, 9 + 9, 4 + 5, 8 + 3, 7 + 8.

Module 1 Session 4 The Addition Table, Part 1 Preparation:

Copies	Kit Materials	Classroom Materials	
Assessment Reflecting on th	e Unit 1 Pre-Assessment		
TM T11 Unit 1 Pre-Assessment Student Reflection Sheet		Scored Unit 1 Pre-Assessment for each student (TM TX-X from Unit 1 Module 1, Session 3)	
Problems & Investigations	The Addition Table, Part 1	<u> </u>	
SB 4* Addition Table	demonstration number rack Word Resource Cards for vocabulary listed at right	standard pocket chart overhead pens or markers in red, yellow, blue, green, and orange class set of colored pencils in red, yellow, blue, green, and orange	
Home Connection			
HC 1-2 Addition Fact Review			
Daily Practice			
SB 5 Addition Fact Practice			

Vocabulary

An asterisk [*] identifies those terms for which Word Resource Cards are available. commutative property of addition* even number* odd number* sum or total*

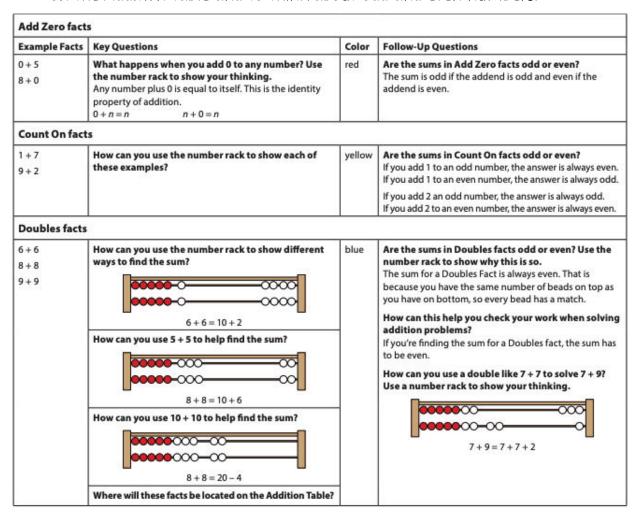
HC – Home Connection, SB – Student Book, TM – Teacher Master Copy instructions are located at the top of each teacher master.

*Run 1 copy of this page for display.

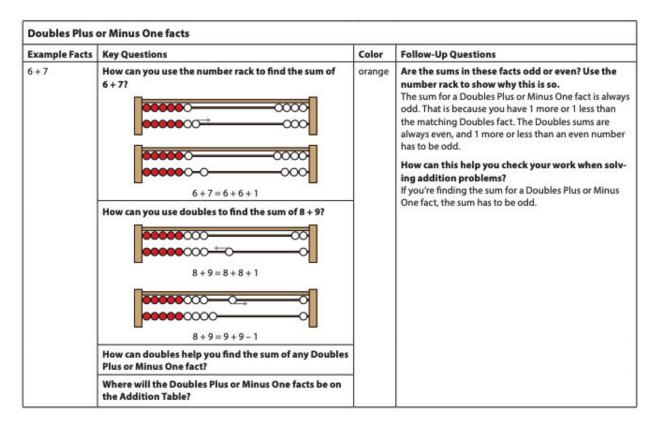
- · Have students' Unit 1 Pre-Assessments marked and ready to hand back to them. If you cannot mark the pre-assessments by this session, mark them in the next few days and find time for students to reflect on them before the end of Module 1
- Review the completed Addition Table shown in Session 5 to become familiar with the categories of facts you will review with students in this session and in Session 5. Also, see the Unit 1 Introduction for more information about these facts.
- Post the VVord Resource Cards listed in the Vocabulary section in a pocket chart or other location where students can see them. Plan to keep the cards displayed for the duration of the unit.
- · Use the table that follows to complete these steps for each set of facts:
 - · First write the example facts on your board or at your projector.
 - · Ask the key questions, and invite students to show their thinking on the number rack
 - Color in the facts on your copy of the Addition Table using the color indicated. Have students do the same on their tables. Encourage them to color lightly so they can still see the facts. Have students outline in the new

color those facts which have already been shaded in. For example, 2 + 2 will be colored yellow to show that it is a Count On fact; ask students to outline the fact in blue to show that it is also a Doubles fact.

- · Label the facts on the legend, and have students do the same on their tables.
- Ask the follow-up questions, which encourage students to note patterns on the Addition Table and to think about odd and even numbers.



• Review the Doubles Plus or Minus One facts with students, and color them in on the Addition Table. Follow the steps outlined in step 10 and use the following table to guide your discussion of these facts.



Module 1 Session 5 The Addition Table, Part 2 Preparation: Materials

Copies	Kit Materials	Classroom Materials
Problems & Investigations Th	ne Addition Table, Part 2	
	demonstration number rack	Addition Table (from Unit 1, Module 1, Session 4) overhead pens or markers in purple, brown, and yellow class set of purple, brown, and yellow colored pencils
Work Places Introducing Work	Place 1A Make the Sum	
TM T12 Work Place Guide 1A Make the Sum SB 6* Work Place Instructions 1A Make the Sum	Number Cards, half-class set	student math journals
Daily Practice	Xo.	-35
SB 7 Addition Mixed Review		
dultion wixed neview		

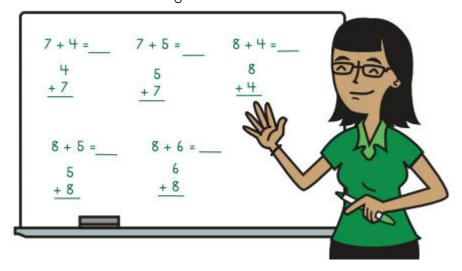
HC - Home Connection, SB - Student Book, TM - Teacher Master

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 VVork Place 1A Make the Sum. Before this session, you should review the Work Place Guide and Work Place Instructions and assemble the bin for Work Place 1A, using the materials listed in the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.

·Write the ten facts on the Addition Table that remain unshaded, and invite students to talk in pairs about how they could solve each one on the number rack Write some facts vertically and some horizontally to remind students that problems can appear both ways and to promote flexibility in student thinking.



<u>*Unit 1 Module 2:</u> <u>Subtraction Facts to Twenty</u>

Unit 1 Module 2 Session 1 The Subtraction Table, Part 1 Preparation:

Copies	Kit Materials	Classroom Materials
Problems & Investigations	Subtraction Table, Part 1	
TM T1 Subtraction Table	1 demonstration number rack	markers or overhead markers in red, yellow, blue, orange, purple, and brown standard pocket chart red, yellow, blue, orange, purple, and brown colored pencils, class set of each color
Home Connection		
HC 3-5 Addition & Subtraction Review		
Daily Practice	55	- 53
SB 8 Subtraction Fact Practice		

Vocabulary

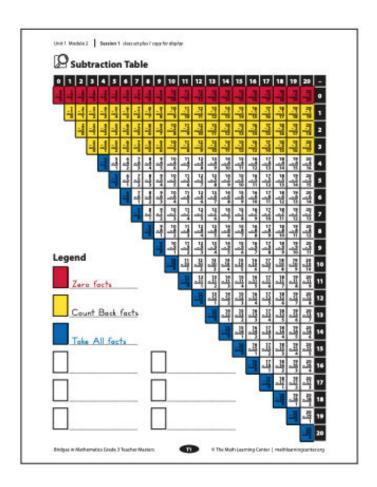
An asterisk [*] identifies those terms for which Word Resource Cards are available.

difference*

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

• In today's session, you will investigate and fill out about half of the Subtraction Table. Before this session, look over the rest of the table in Session 2 so you are familiar with all the strategies. All the subtraction strategies you'll cover in this session were introduced explicitly in Bridges in Mathematics Grade 2.

Zero facts			
Example Facts	Key Questions	Color	Follow-Up Questions
5 – 0 8 – 0	What happens when you subtract 0 from any number? Use the number rack to show your thinking. Any number minus zero is equal to itself. $Any \ \ number - 0 = itself$ $number - 0 = n$	red	If one squirrel has 4 acorns and another squirrel has 0 acorns, how many more acorns does the first squirrel have? 4 - 0 = 4 more acorns If one squirrel has 4 acorns and he gives 0 to the other squirrel, how many acorns does the first squirrel have? 4 - 0 = 4 acorns How are these questions different? In the first question, you find the difference to compare how many acorns each squirrel has. In the second question, you take away to find the number of acorns.
Count Back fa	cts		
5 – 1 7 – 2 9 – 3	How would you solve each of these problems? Counting backward is a common way to solve problems like these.	yellow	Counting back works will with 1, 2, and 3. Would it work for counting back 8 or 11? It would not be efficient, and it would likely result in a counting error.
Take All facts			
4-4 17-17	What happens when you subtract a number from itself? Use the number rack to show your thinking. Any number minus itself is equal to zero. any number $-$ itself $=$ 0 $ 0$	blue	Why do you think these are called the Take All facts? You "take away" all of the first number (minuend). The answer is zero whether taking away a number from itself or comparing two amounts.



Neighbors fac	ts		2/
Example Facts	Key Questions	Color	Follow-Up Questions
7 – 6 7 – 5	What do you notice about these facts when you look at them on the number rack? The numbers are close to each other in consecutive order, i.e., 6 is only 1 less than 7 and 5 is only 2 less than 7. How could you solve each of these problems? Possible strategies for 7 – 6 include: Starting at 7 and counting back 6. Starting at 7 and counting back to 6. Starting at 6 and counting up to 7.	orange	Can we add to solve a subtraction problem? Yes, for the problem 6 – 4, you can start at the subtrahend (4) and count up to the minuend (6). Does this work with other subtraction problems? Yes, the adding up strategy works for all subtraction problems. For the problem 13 – 12, would you rather count back 12 from 13 or start at 13 and count back to 12? Starting at 13 and counting back to 12 is more efficient and less likely to result in a counting error.
Take Away Te	n facts		
12 – 10 15 – 10 18 – 10	Note Write some facts vertically and others horizontally. Ask students for answers as you record the facts. How can you use the number rack to show each of these examples? 12 – 10 15 —10	purple	What do you notice about these equations? On the number rack, students can see that after 10 beads are removed, the number in the ones place from the subtrahend are left over. Why do you think these facts are called Take Away Ten facts?
Back to Ten Fa	ncts		
14 - 4 16 - 6 19 - 9	Note Write some facts vertically and others horizontally. Ask students for answers as you record the facts. How can you use the number rack to show each of these examples? 14 -4 16-6	brown	What do these facts have in common? The number in the ones place is the same in both the minuend and the subtrahend. All of the equations have a difference of 10. Why are these facts called Back to Tens?

Module 2 Session 2 The Subtraction Table, Part 2 Preparation:

Copies	Kit Materials	Classroom Materials
Problems & Investigations T	he Subtraction Table, Part 2	
	demonstration number rack	Subtraction Table (TM T1, partly filled in during Session 1) student math journals green and light blue markers or overhead pens green and light blue colored pencils, class set of each color
Work Places Introducing Work	k Place 1B Target Twenty	
TM T2 Work Place Guide 1B Target Twenty TM T3	Number Cards (1 deck, wild cards removed)	
1B Target Twenty Record Sheet SB 9* Work Place Instructions 1B Target Twenty		
Daily Practice		(F)
SB 10 More Subtraction Fact Practice		

Vocabulary

An asterisk [*] identifies terms for which Word Resource Cards are available. associative property of addition* sum or total*

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

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

- In today's session, you'll introduce Work Place 1B Target Twenty.
- ·Before this session, you should review the Work Place Guide and Work Place Instructions and assemble the bin for Work Place 1B, using the materials listed on the guide.
- •The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.

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

If students are able to see groups of facts that can be solved in the same way, circle or loop that group of facts together.

Categories of Leftover Subtraction Facts

Keep the Te	en, Subtract the	Ones			
19 – 4 = 15	18 - 4 = 14	17 – 4 = 13	16 - 4 = 12	15 - 4 = 11	
19 - 5 = 14	18 - 5 = 13	17 - 5 = 12	16 - 5 = 11		
19 - 6 = 13	18 - 6 = 12	17 - 6 = 11			
19 - 7 = 12	18 - 7 = 11				
19 – 8 = 11					
Take Away	Ten, Subtract t	he Ones			
19 – 11 = 8	18 - 11 = 7	17 - 11 = 6	16 – 11 = 5	15 - 11 = 4	14 - 11 = 3
19 - 12 = 7	18 - 12 = 6	17 - 12 = 5	16 - 12 = 4	15 - 12 = 3	
19 - 13 = 6	18 - 13 = 5	17 - 13 = 4	16 - 13 = 3		
19 - 14 = 5	18 - 14 = 4	17 - 14 = 3			
19 - 15 = 4	18 - 15 = 3				
19-16=3	DATES - 121-00151			-9-	
Up to Twen	ty	Twenty Tak	e Away Ones	Only Ones	
20 - 11 = 9		20 - 4 = 16		9-4=5	
20 - 12 = 8		20 - 5 = 15		9 - 5 = 4	
20 - 13 = 7		20 - 6 = 14		9 - 6 = 3	
20 - 14 = 6		20 - 7 = 13		8 - 5 = 3	
20 - 15 = 5		20 - 8 = 12		7 - 4 = 3	
20 - 16 = 4		20 - 9 = 11			
20 - 17 = 3					

Module 2 Session 3 Addition & Subtraction Checkpoint Preparation: Materials

Copies	Kit Materials	Classroom Materials
Assessment Addition & Subtraction Che	ckpoint	
TM T4 Addition & Subtraction Checkpoint Sample Question TM T5-T6 Addition & Subtraction Checkpoint		
Work Places Introducing Work Place 1C	Blast Off to Space	·
TM T7 Work Place Guide 1C Blast Off to Space TM T8 1C Blast Off to Space Record Sheet SB 11* Work Place Instructions 1C Blast Off to Space	2 Blast Off to Space Game Boards 1 single spinner overlay 16 game markers, 8 in each of two different colors	student math journals
Home Connection		
HC 7-8 Of Mice & Moles		
Daily Practice		
SB 12 More Games Story Problems		

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.

- Review the checkpoint, scoring guide, and the sample problem before teaching this session.
- In today's session, you'll introduce Work Place 1C Blast Off to Space. Before this session, you should review the Work Place Guide and Work Place Instructions and assemble the bin for Work Place 1C, using the materials listed on the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.

Module 2 Session 4 Introducing Work Place 1D Subtraction Bingo Preparation:

Materials

Teacher Masters	Kit Materials	Classroom Materials
Problems & Investigations Addition & S	ubtraction Equations	
SB 13* Addition & Subtraction Equations	demonstration number rack	
Work Places Introducing Work Place 1D 5	Subtraction Bingo	
TM T9 Work Place Guide 1D Subtraction Bingo TM T10 1D Subtraction Bingo Record Sheet SB 14** Work Place Instructions 1D Subtraction Bingo	Number Cards, 1 deck	student math journals 2 different colored pencils
Work Places Introducing the Routine for	Going to Work Places	Tr.
TM T11 Unit 1 Work Place Log		Work Place folders (class set; see Preparation)
Work Places in Use		30.
1A Make the Sum (introduced Unit 1, Module 1B Target Twenty (introduced Unit 1, Module 2 Blast Off to Space (introduced Unit 1, Modul 1D Subtraction Bingo (introduced	2, Session 2) ale 2, Session 3)	
Daily Practice		
SB 15 Addition & Subtraction Mixed Review		

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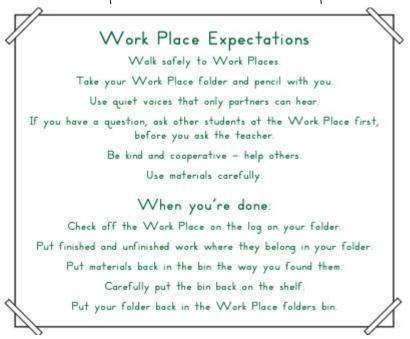
Today students will visit several Work Places. Make sure the necessary materials are prepared to make Work Places run smoothly.

• Prepare a Work Place folder for each student by stapling a Unit 1 Work Place Log to the front of each folder.

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

- There will be four Work Places available to students today, and there should be no more than eight students at each Work Place. If your class is very large, consider making two bins for some of the Work Places so that there will be fewer students using each bin.
- · Double check the Work Place bins to make sure there are enough record sheets.
- If you have taken down your Community of Learners chart from Module 1, post it before this session. Work Place 1D Subtraction Bingo In today's session, you'll introduce 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 1D, using the materials listed on the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.

Introduce expectations and routines for Work Place time, drawing upon students' experience with Work Places from earlier grade levels. (You can create a chart of Work Place Expectations with students' input.)



*Unit 1 Module 3 Double-Digit Addition

Unit 1 Module 3 Session 1 Scavenger Hunt for Lengths Preparation:

Copies	Kit Materials	Classroom Materials
Problems & Investi	gations Count-Around	500
Problems & Investi	gations Length Scavenger Hunt	-2-
	number rack measuring tapes (1 per pair of students)	rulers, class set objects to measure (see Preparation) student math journals
Work Places in Use	, in the second	
1B Target Twenty (intro 1C Blast Off to Space (i	oduced Unit 1, Module 1, Session 5) oduced Unit 1, Module 2, Session 2) ntroduced Unit 1, Module 2, Session 3) (introduced Unit 1, Module 3, Session 4)	
Home Connection		
HC 9-10 Sums & Differences		
Daily Practice		
SB 16		

Vocabulary

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

centimeter (cm)* inch (in.)* measure measuring tape ruler

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Decide how you will pair students for the scavenger hunt.

Students will be measuring objects around your room to find certain lengths. Before you teach this session, find 10 objects in your classroom that either match or approximate the measurements listed below:

- 4 centimeters (e.g., pen lid, small sticky note)
- 15 centimeters (e.g., pen, marker, board eraser)
- · 19 centimeters (e.g., unsharpened pencil)
- · 28 centimeters (e.g., piece of paper)
- 51 centimeters (e.g., seat depth of chair, height between two bookcase shelves)
- 76 centimeters (e.g., width of a door)
- · 95 centimeters (e.g., teacher desk depth)
- · 120 centimeters (e.g., height of a chair back)
- 145 centimeters (e.g., height of shelves, height of filing cabinet)
- · 203 centimeters (e.g., height of a door)

When you have identified the objects you plan to use, list the exact measurement of each on the board for students to use in the scavenger hunt. Just list the measurement of each object, not the name of the object.

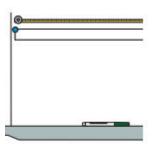
Module 3 Session 2 Adding Lengths Preparation:

Materials

Copies	Kit Materials	Classroom Materials
Problems & Investigations	Count-Around	-
Problems & Investigations	Adding Lengths	
TM T1-T2 Adding Lengths Forum Planner SB 17-18* Adding Lengths	demonstration number rack 1 measuring tape adding machine tape (see Preparation) 4 super magnets	ruler whiteboard magnets or removable painter's tape
Work Places in Use		
1A Make the Sum (Introduced in 1B Target Twenty (Introduced in 1C Blast Off to Space (Introduce 1D Subtraction Bingo (Introduce	Unit 1, Module 2, Session 2) d in Unit 1, Module 2, Session 3)	
Daily Practice		
SB 19 Counting On & Measuring		

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*Run 1 copy of these pages for display.



Positioning of measuring tape and adding machine tape. Leave plenty of space below for the number lines you'll need to draw in Session 3.

- · Use adding machine tape to set up a measurement comparison chart.
 - * Cut a strip of adding machine tape approximately 275 centimeters long.
 - * Hang the strip horizontally on your board, about your eye level.
 - Hang the measuring tape horizontally, centimeter side up, directly above the adding machine tape. You can use the super magnets.
- Have several of the items you used in the scavenger hunt last session handy (choose items you can move and hold up easily).
- Read Session 3 to see how students might share their work from today's session. Before tomorrow's forum, use the Adding Lengths Forum Planner to help select students to share their work

Module 3 Session 3 Adding Lengths Forum Preparation: Materials

Copies	Kit Materials	Classroom Materials
Math Forum Adding Lengths		
SB 17–18 Adding Lengths (from Session 2)		student math journals measuring chart and measuring tape posted on the board from the previous session Adding Lengths Forum Planner (TM T1–T2, filled out during and after the previous session)
Assessment Adding Lengths	Work Sample	
TM T3 Adding Lengths Work Sample		
Home Connection	200	
HC 11-12 Adding Tens		
Daily Practice	· ·	
SB 20 Monkeying Around		

Vocabulary

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

friendly number math forum number line*

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

A math forum is a classroom routine in which select students share their solutions to a single problem. Prior to the forum, the teacher carefully plans the order in which students will share to promote specific learning goals. The basic objective of a math forum is to help students make connections among different strategies to develop a deeper understanding of the problem and strategies for solving it.

Today's math forum has four specific goals:

- · Teach the protocol for math forums
- · Highlight how applying the commutative property can make solving addition problems more efficient
- · Examine a place-value splitting strategy for adding multi-digit numbers
- · Consider a strategy that involves adding a friendly number and then adjusting to get the final answer

Prior to today's math forum, use the Adding Lengths Forum Planner you filled out during and after Session 2 to decide which students you will have share and in what order. (See this session's write-up for an example of how you might structure the forum.) You may want to tell students ahead of time which problem and strategy you will be asking them to share so they are prepared. Advise them that you might model it differently than they did, but that you will

be trying to be true to the way they used the number relationships to solve the problem.

As each student describes his or her strategy, you will model it on a number line on the board. If modeling student strategies is new for you, sketch number lines for each of the strategies you selected ahead of time. Make sure that the number lines line up when appropriate, so students can see smaller jumps encompassed by bigger jumps. Plan the jump size so that the jumps are relatively proportional to the jump size (e.g., a jump of 10 should look bigger than a jump of 2).

Module 3 Session 4 Introducing Work Place 1E Carrot Grab Preparation:

Copies	Kit Materials	Classroom Materials
Problem String Adding Tens		
		student math journals
Work Places Introducing Work	Place 1E Carrot Grab	
TM T4 Work Place Guide 1E Carrot Grab SB 21* Work Place Instructions 1E Carrot Grab Instructions	1 Carrot Grab Game Board 2 dice numbered 1–6 1 spinner overlay 2 game markers in different colors 20 game markers in a different (third) color	
Work Places in Use		
1A Make the Sum (Introduced in U 1B Target Twenty (Introduced in U 1C Blast Off to Space (Introduced i 1D Subtraction Bingo (Introduced 1E Carrot Grab (introduced in this	nit 1, Module 2, Session 2) n Unit 1, Module 2, Session 3) in Unit 1, Module 2, Session 4)	
Daily Practice		
SB 22 Counting On & Problem Solving		

Vocabulary

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

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

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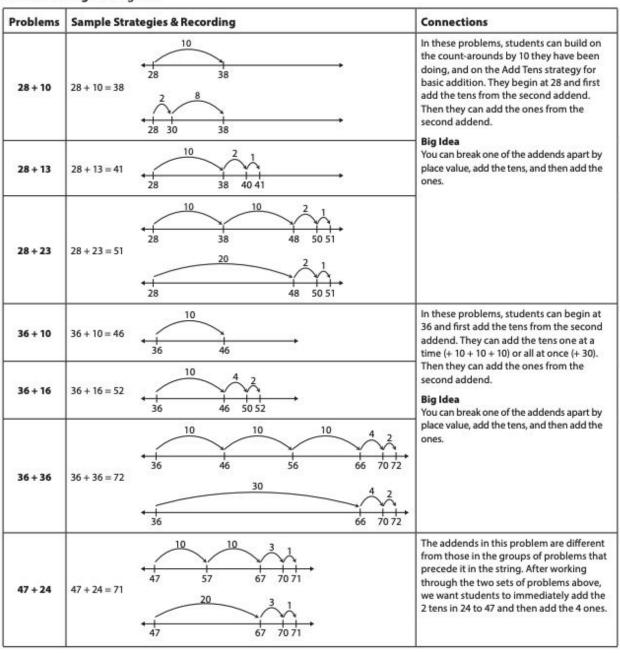
You will do your first problem string today. Students will record their problem strings work in their student journals. Choose an area everyone can see that has plenty of space to write. This can be on a whiteboard, document camera or projector, or on chart paper.

Note that the lesson presumes you will use the discussion area, as sitting close together is conducive to the kind of talking and sharing you want to happen. However, if this is not possible in your classroom, figure out what works best for you.

^{*} 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 1E Carrot Grab. Before this session, you should review the Work Place Guide and Work Place Instructions, and assemble the bin for Work Place 1E, using the materials listed on the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.

Problem String Adding Tens



Module 3 Session 5 Strings & Strategies Preparation: Materials

Copies	Kit Materials	Classroom Materials
Problem String Get to a Fr	iendly Number	
	1 Carrot Grab Game Board	student math journals
Problems & Investigation	Strategy Discussion	
	1 Carrot Grab Game Board 2 dice numbered 1–6 1 spinner overlay 2 game marker in different colors 20 game markers in a different color	
Work Places in Use		
- 1 하는 1 [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]	in Unit 1, Module 2, Session 2) ed in Unit 1, Module 2, Session 3) ced in Unit 1, Module 2, Session 4)	
Home Connection		
HC 13-14 More Adding Tens		
Daily Practice	0.969	
SB 23 More Counting On & Problem 5		

Vocabulary

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

friendly number problem string tens

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

- Prepare a place, either on the whiteboard or on a large piece of chart paper, to record student strategies during the problem string. Students will solve six problems, and you'll record their strategies with number lines and equations. (See step 3 for sample recording.)
- Have a Carrot Grab Game Board set up for display as you discuss strategies with students.

Problem String Get to a Friendly Number

Problems	Sample Strategies & Recording	Connections
28+3	28 + 3 = 31	Students can apply their flu- ency with the Make Ten facts to use multiples of 10 when adding larger numbers. In
28+7	28+7 20 8 20+15=35 28 30 35	this case, students take 2 from the second addend to make 30 with 28. Then, they add whatever is left of the second addend (1, 5, and 11,
28 + 13	28 + 13 = 41 28 + 30 28 + 30 28 + 30 40 41	respectively) to 30 to arrive at the final sum. Big Idea Make Ten facts can help you add larger numbers easily when one of those numbers is close to a multiple of 10 (to a friendly number).
39+4	39 + 4 = 43	See above.
39 + 14	39 + 14 = 53 1 10 3 39 40 50 53	→
39 + 23	39 + 23 = 62	2 0 62
	39 40	62

*<u>Unit 1 Module 4 Story Problems & Strategies</u>
Unit 1 Module 4 Session 1 Introducing Work Place 1F Rabbit Tracks Preparation:

Copies	Kit Materials	Classroom Materials
Work Places Introducing Work Place	1F Rabbit Tracks	
TM T1 Work Place Guide 1F Rabbit Tracks SB 24* Work Place 1F Rabbit Tracks Instructions	1 Rabbit Tracks Game Board 2 dice numbered 1–6 1 spinner overlay 1 red and 1 blue game marker 20 game markers of another color	
Work Places in Use	******	
1A Make the Sum (Introduced in Unit 1, N 1B Target Twenty (Introduced in Unit 1, N 1C Blast Off to Space (Introduced in Unit 1D Subtraction Bingo (Introduced in Unit 1E Carrot Grab (Introduced in Unit 1, Mod 1F Rabbit Tracks (Introduced in this session	Nodule 2, Session 2) 1, Module 2, Session 3) 1 , Module 2, Session 4) dule 3, Session 4)	
Daily Practice		
SB 25 Adding & Subtracting		

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

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

In today's session, you'll introduce Work Place 1F Rabbit Tracks. Before this session, you should review the Work Place Guide and Work Place Instructions and assemble the bin for Work Place 1F, using the materials listed on the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.

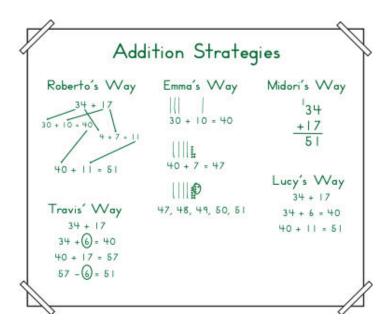
Module 4 Session 2 Two-Digit Addition Story Problems Preparation:

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

Copies	Kit Materials	Classroom Materials
Problems & Investigations	Two-Digit Addition Story Prob	olems
TM T2 Two-Digit Addition Story Problems TM T3 Two-Digit Addition Story Problems Math Forum Planner	base ten pieces (1 set per 2 students) measuring tape (1 per 2 students)	 chart paper, about 40" × 40" student math journals
Work Places in Use		
1A Make the Sum (introduced in 1B Target Twenty (introduced in 1C Blast Off to Space (introduced 1D Subtraction Bingo (introduced 1E Carrot Grab (introduced in Un 1F Rabbit Tracks (introduced in Un	Unit 1, Module 2, Session 2) d in Unit 1, Module 2, Session 3) ed in Unit 1, Module 2, Session 4) hit 1, Module 3, Session 4)	
Home Connection		
HC 15-16 Making Ten		
Daily Practice		97
SB 26 Making Ten & One Hundred		

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

- Prepare chart paper by labeling it Addition Strategies, and post it in the classroom. You will write students' strategies on the chart during the session.
- Read Session 3 to see an example of how students might share their work from today's session, and use the Two-Digit Addition Story Problems Math Forum Planner to help select students to share in Session 3's math forum.



Module 4 Session 3 Two-Digit Addition Story Problems Forum Preparation:

Copies	Kit Materials	Classroom Materials
Math Forum Two-Digit Addition	on Story Problems	
		piece of chart paper student math journals for students selected to share in the forum Two-Digit Addition Story Problems Forum Planner filled out during and after Unit 1, Module 4, Session 2
Work Places Introducing Work	Place 1G Target One Hundred	75.5
TM T4 Work Place Guide 1G Target One Hundred TM T5 1G Target One Hundred Record Sheet SB 27* Work Place Instructions 1G Target One Hundred	Number Cards (1 deck per 2 students, wild cards removed)	Addition Strategies chart (from Session 2) scratch paper, class set
Work Places in Use		
1B Target Twenty (introduced in Ur 1C Blast Off to Space (introduced ir 1D Subtraction Bingo (introduced i 1E Carrot Grab (introduced in Unit 1F Rabbit Tracks (introduced in Unit 1G Target One Hundred (introduced	n Unit 1, Module 2, Session 3) in Unit 1, Module 2, Session 4) 1, Module 3, Session 4) it 1, Module 4, Session 1)	
Daily Practice	04	68.0
SB 28 Two-Step Problems		

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

- · Use the Two-Digit Addition Story Problems Forum Planner to decide which four or five students you want have to share in todays forum and in what order.
- · While students share, you'll record their strategies on a class chart using the open number line model. Consider preparing the chart ahead of time by drawing an unmarked number line for each student who will be sharing.
- In today's session, you'll introduce Work Place 1G Target One Hundred, which replaces Work Place 1A Make the Sum. Before this session, you should review the Work Place Guide and Work Place Instructions, and assemble the bin for Work Place 1G, using the materials listed on the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.

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

Module 4 Session 4 Strategies for Subtracting Two-Digit Numbers Preparation: Materials

Copies	Kit Materials	Classroom Materials
Problems & Investigation	s Strategies for Subtracting	Two-Digit Numbers
TM T6 Subtraction Story Problems		 2 pieces of chart paper, each about 40" × 40" student math journals
Work Places in Use		
1C Blast Off to Space (introduct 1D Subtraction Bingo (introduct 1E Carrot Grab (introduced in 1F Rabbit Tracks (introduced in 1G Target One Hundred (introduced in 1	ced in Unit 1, Module 2, Sessior Unit 1, Module 3, Session 4) n Unit 1, Module 4, Session 1)	14)
Home Connection		
HC 17-18 Double-Digit Addition		
Daily Practice		
SB 29		δ

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

Prepare chart paper by labeling it Subtraction Strategies, and post it in the classroom. You will write students' strategies on the chart during this session and keep it posted for students to reference in Session 5. You'll also use the chart again in Unit 3, Module 2.

Module 4 Session 5 Multi-Step Subtraction Problems Preparation:

Copies	Kit Materials	Classroom Materials
Problems & Investigations Multi-Step S	ubtraction Problems	
SB 30* More Story Problems		student math journals Subtraction Strategies chart (from Session 4)
Work Places Introducing Work Place 1H	Anything But Five	53
TM T7 Work Place Guide 1H Anything But Five TM T8 1H Anything But Five Record Sheet SB 31** Work Place Instructions 1H Anything But Five	2 dice numbered 4–9 (per 2 students)	
Work Places in Use		
1C Blast Off to Space (introduced in Unit 1, Mo 1D Subtraction Bingo (introduced in Unit 1, Mo 1E Carrot Grab (introduced in Unit 1, Module : 1F Rabbit Tracks (introduced in Unit 1, Module 1G Target One Hundred (introduced in Unit 1, 1H Anything But Five (introduced in this session	odule 2, Session 4) 3, Session 4) e 4, Session 1) Module 4, Session 3)	
Daily Practice		
SB 32 Alfonso's Money Problem		

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 1H Anything But Five, which replaces Work Place 1B Target Twenty. Before this session, you should review the Work Place Guide and Work Place Instructions and assemble the bin for Work Place 1H, using the materials listed on the guide. The Work Place Guide also includes suggestions for differentiating the game to meet students' needs.
- · If possible, play the game prior to the session to familiarize yourself with the rules and procedures.
- · Be sure the class Subtraction Strategies chart is posted where it is clearly visible to all.

Module 4 Session 6 Unit 1 Post-Assessment Preparation:

Copies	Kit Materials	Classroom Materials
Assessment Unit 1 Post-Asse	ssment	
TM T9-T12 Unit 1 Post-Assessment		
Work Places in Use		
1C Blast Off to Space (introduced 1D Subtraction Bingo (introduced 1E Carrot Grab (introduced in Uni 1F Rabbit Tracks (introduced in U 1G Target One Hundred (introduc 1H Work Place Anything But Five Home Connection	d in Unit 1, Module 2, Sessior it 1, Module 3, Session 4) init 1, Module 4, Session 1) ced in Unit 1, Module 4, Sessi	n 4) ion 3)
HC 19–20 Patterns & Sums		
Daily Practice		
SB 33 Measuring, Rides & Newspapers		

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