



Topic	Title	Number of Minutes	Materials	Example/Description
Math Read Aloud	Math Read Aloud and Related Activity	20	 Materials Betcha! By Stuart J. Murphy Math vocabulary card for the math word wall 	 Read the story to the class and be sure to put lots of enthusiasm into your voice! You might want to have the campers sit in a circle on the floor so that it is easier for you to show them the pictures. Math vocabulary word/concept for the story is <i>estimation</i>. The read aloud activity for <u>Betcha!</u> By Stuart J. Murphy is found on page 32 in the book. Review page 32 <u>prior</u> to reading the book to the students and select the activities you would like to do.
Number Worlds Level F	Unit: Addition and Subtraction Week 2 Lesson 1 p. 12A-13	50	Materials Teacher Manual pages 12A – 13 (includes math background/intro.) Campers Workbook pages 12 – 13 Base-Ten Blocks Place Value Mat (page B2 – Blackline Master) Number Construction Mats (page B1 – Blackline Master)	 Topic: Sharpening Computation Skills Lesson objective should be stated and posted - Week 2 Lesson 1 Objective: Campers add two and three-digit numbers. Week 2 Lesson 1 math vocabulary: Base-Ten Blocks, regrouping, sum and trade. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up – Concept Building section on page 12C. Under the Engage heading on page 12C, complete Skill Building section Trading at the Top. Review the Key Idea box with the campers on page 12. Complete problems #1, 5, and 7 with the campers. Have the campers complete problems #2, 3, 4, 6, 8, 9, 10, 11, and 12 independently. Once the problems are completed, review with the campers problems #2, 3, 4, 6, 8, 9, 10, 11, and 12 as a whole group.

	 Math vocabulary cards for the math word wall Paper Chart paper Pencils Advertisements (Needed for "Day 12" lesson) 	 If there are not enough Base-Ten Blocks for each camper, you can partner them up. Exit Slip: All campers must complete the <i>Reflect</i> problems at the bottom of page 13. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response today. Get advertisements from the newspaper and complete the Real -World Application section tomorrow.
Differentiated Instruction and Independent Problem Solving Task Introduction	 Materials Chart paper with an outline of differentiated instruction procedures Copy of Preparing a Birthday Dinner Open Response for each student Tool-kit clocks Pencils Manila folders Teacher pages 63 – 67. Copies of the PPS Intermediate Problem Solving Rubric 	 Differentiated Instruction Procedures: Take this opportunity to review with the campers your procedures for a successful differentiated instruction session. Questions to ponder when giving the campers information are as follows:

pages 65-67 when having the campers present their papers and for additional information.
 Review quarter-hours and make a visual representation of ¼ hour. The campers will be using the PPS Intermediate Problem Solving rubric to evaluate their work. Review the rubric with campers before requiring them to apply and use it.
The campers will continue working on this problem during the week as outlined in the lesson plans. Each camper should have a manila folder so they will be able to independently work on the task.





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction and Independent Problem Solving Task	Preparing a Birthday Dinner	20	 Materials: Preparing a Birthday Dinner Task Tool-kit clocks Intermediate Problem Solving Rubric Pencils Manila folders for campers Beat the Calculator (Addition) directions calculator 	 Differentiated Instruction Menu: ~Beat the Calculator (Skill: Mental addition skills) "Preparing a Birthday Dinner" – Campers should work independently on the task until it is their turn to be taught Beat the Calculator. Campers should refer to the rubric to help them meet the problem's expectations. A rotation schedule for DI activities would be useful to keep track of campers' daily activities.
Number Worlds Level F	Unit: Addition and Subtraction Week 2 Lesson 2 p. 14A-15	50	Materials: Teacher Manual pages 14A - 15 Campers Workbook pages 14 - 15 Base-Ten Blocks Place Value Mat (page B2 -	 Topic: Sharpening Computation Skills Lesson objective should be stated and posted - Week 2 Lesson 2 Objective: Campers subtract two- and three- digit numbers. Week 2 Lesson 2 math vocabulary: difference, trade, place value, and Base-Ten Blocks. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 14A.

			Blackline Master) Number Construction Mats (page B1 – Blackline Master) Math vocabulary cards for the math word wall Paper Pencils	 Under the Engage heading on page 14A, complete Skill Building section May I Regroup Blocks? Review the Key Idea box with campers on page 14. Complete problems #1, 5, and 7 with the campers. Have the campers complete problems #2, 3, 4, 6, 8, 9, 10, 11, and 12 independently. Once the problems are completed, review with the campers problems #2, 3, 4, 6, 8, 9, 10, 11, and 12 as a whole group. If there are not enough Base-Ten Blocks for each camper, you can partner them up. Exit Slip: All campers must complete the Reflect problem at the bottom of page 15. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day.
Problem of the Week (POTW): S.D.A. Cookout	Skill Focus: Estimation	20	MaterialsPOTW copies for the campersPencils	 Skill Focus: Estimation Distribute the problem to the class. The teacher will introduce the problem to the campers by using the following overarching questions (consider posting the overarching questions as reference for all problem solving): What does the problem already tell me? What do I want to find out? What information will help me find the answer? Do I know a way or strategy to get started? (ex. Draw a picture) Have campers turn to a partner to retell the problem in their own words prior to solving the task.





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction and Independent Problem Solving Task	Preparing a Birthday Dinner	30	 Materials Preparing a Birthday Dinner Task Tool-kit clocks PPS Intermediate Problem Solving Rubric Pencils Campers' Manila folders Everyday Math cards Beat the Calculator (Addition) directions Calculator Less Than You! directions Subtraction Top- It directions 	 Differentiated Instruction Menu: ~Beat the Calculator (Addition) (Skill: Mental addition skills). ~Less Than You! (Skill: Mental addition skills; developing a winning game strategy) ~Subtraction Top-It (Skill: Subtraction facts) "Preparing a Birthday Dinner" – Campers should work independently on the task until it is their turn to be taught Less Than You! and Subtraction Top It. The campers should refer to the rubric to help them meet the problem's expectations. A rotation schedule for DI activities would be useful to keep track of campers' daily activities.

Number Worlds Level F	Unit: Addition and Subtraction Week 2 Lesson 3 p. 16A-17	60	Materials: • Teacher Manual pages 16A - 17 • Campers Workbook pages 16 - 17 • Everyday Math cards (0 - 9) • 3-Digit Window (page B4 - Blackline Master) • Math vocabulary cards for the math word wall • Paper • Pencils	 Topic: Sharpening Computation Skills Lesson objective should be stated and posted - Week 2 Lesson 3 math vocabulary: greatest sum and least sum. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 16A. Under the Engage heading on page 16A, complete Skill Building section Window Addition Game and Strategy Building section 600 Addition Game. Review the Key Idea box with campers on page 16. Complete problems #1, 4, and 8 with the campers. Have the campers complete problems #2, 3, 5, 6, 7, 9, 10, 11, 12, 13, and 14 independently. Once the problems are completed, review with the campers problems #2, 3, 5, 6, 7, 9, 10, 11, 12, 13, and 14 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 17. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day.
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Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction and Independent Problem Solving Task	Preparing a Birthday Dinner	20	 Materials Preparing a Birthday Dinner Task Tool-kit clocks PPS Intermediate Problem Solving Rubric Pencils Campers' Manila folders Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions calculator Less Than You! directions Subtraction Top-It directions 	 Differentiated Instruction Menu: ~Beat the Calculator (Addition) (Skill: Mental addition skills). ~Less Than You! (Skill: Mental addition skills; developing a winning game strategy) ~Subtraction Top-It (Skill: Subtraction facts) ~Addition Top-It (Skill: Addition facts 0 to 10) – You can teach this new differentiated instruction activity to the campers at this time. • "Preparing a Birthday Dinner" – The campers will continue to work independently on the task. The campers need to complete the "Preparing a Birthday Dinner" task during this time so that his/her peer will be able to use the rubric to analyze his/ her work during the peer review session that will occur today. The campers should refer to the rubric to help them meet the problem's expectations. A rotation schedule for DI activities would be useful to keep track of campers' daily activities.

Number Worlds Level F Unit: Addition and Subtraction Week 2, Lesson 4 p.18A -19	50	Materials • Teacher Manual pages 18A - 19 • Camper Workbook pages 18 – 19 • Everyday Math cards (0 – 9) • 3-Digit Window (page B4 – Blackline Master) • Math vocabulary cards for the math word wall • Paper • Pencils	 Topic: Sharpening Computation Skills Lesson objective should be stated and posted - Week 2 Lesson 4 Objective: Campers identify which combination of numbers has a greater difference. Week 2 Lesson 4 math vocabulary: greatest difference and least difference. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 18A. Under the Engage heading on page 18A, complete Skill Building section Window Subtraction Game and Strategy Building section Least Subtraction Game. Review the Key Idea box with the campers page 18. Complete problem #1 with the campers. Have the campers complete problems #2 – 12 independently. Once the problems are completed, review with the campers problems #2 - 12 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 19. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day. (Option: If the campers need additional instruction on the math concept, you may use the information found on Sharpening Computation Skills Week 2, Lesson 5 Review on pages 20A-21 in the teacher's manual.)
Problem Solving Worktime – Peer Review Preparing a Birthday Dinner Peer Review	20	Materials: • Preparing a Birthday Dinner Task	 Independent Problem Solving Task: "Preparing a Birthday Dinner" Description: Campers use addition and subtraction to solve an elapsed time problem.

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- Teacher pages 63 67.
- Tool-kit clocks
- PPS Intermediate
 Problem Solving
 Rubric
- Highlighters (optional)
- Pencils
- Campers' Manila folders

- Focus:
 - 1. Use paper-and-pencil algorithms to solve problems involving the addition and subtraction of whole numbers.
 - 2. Tell and show time on an analog clock.
- Review the rubric on page 64 and the sample of student responses on pages 65-67 when having the campers present their papers and for additional information.
- The campers will be using the PPS Intermediate Problem Solving rubric to evaluate their work.
- Page 64 Rubric and PPS Intermediate Rubric Correlation:

Page 64 Rubric	PPS Intermediate Problem Solving
	Rubric
Level 4	4+ and 4
Level 3	3
Level 2	2
Level 1	1

- You may want to use a problem that you (the teacher) solved or one of the student response samples to model how the campers should use the PPS intermediate Problem Solving Rubric to assess the campers' work. The campers should be instructed to highlight on the rubric where their peer's work falls. Divide the campers in partners and have them assess each other's work using the rubric.
- Divide the campers in partner and have them assess each other's work using the rubric.
- After the peer review is completed, give the campers an opportunity to revise their work.





Topic	Title	Number of Minutes	Materials	Example/Description
Independent Problem Solving Task	Preparing a Birthday Dinner	20	Materials: Preparing a Birthday Dinner Task PPS Intermediate Problem Solving Rubric Pencils Campers' Manila folders	 Independent Problem Solving Task: "Preparing a Birthday Dinner" Give the campers the opportunity to revise their task at this time. (If the campers have revised their problems, they may engage in any of the differentiated instruction activities.) A rotation schedule for DI activities would be useful to keep track of campers' daily activities.
Number Worlds Level F	Unit: Addition and Subtraction Week 3, Lesson 1 p.22A-23	50	Materials • Teacher Manual pages 22A – 23 (includes math background/ intro.) • Camper Workbook pages 22 – 23 • Calculators • Base-Ten Blocks • Math vocabulary	 Topic: Computational Estimation Lesson objective should be stated and posted - Week 3 Lesson 1 Objective: Campers recognize that "nice numbers" close to the numbers in a problem can be used to estimate the answer. Week 3 Lesson 1 math vocabulary: overestimate, underestimate, and show your work. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 22C. Under the Engage heading on page 22C, complete Skill Building section (including Mistake or Not?) Review the Key Idea box with the campers on page 22. Complete problems #1, 5 and 11 with the campers. Have the campers complete problems #2, 3, 4, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19 and 20 independently. Once the problems are

			cards for the math word wall Paper Pencils	 completed, review with the campers problems #2, 3, 4, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19 and 20 as a whole group. Exit Slip: All campers must complete the <i>Reflect</i> problem at the bottom of page 23. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day. 		
Problem Solving Closing –	Solving Preparing a	20	Materials • Preparing a Birthday Dinner Open Response • Pencils • Manila folders • Teacher pages 63	 The campers will present their solutions to Preparing a Birthday Dinner problem. The teacher will select problems that will represent each level from Approaching the Standard - 1 / 2 to Exceeds the Standard - 4+. Page 64 Rubric and PPS Intermediate Rubric Correlation: Page 64 Rubric PPS Intermediate Problem Solving Rubric Categories Level 4 4 4 and 4 Level 3 3 Level 2 2 		
Student Presentation	Task		 67. Copies of the PPS Intermediate Problem Solving Rubric 	 Level 1 Make sure that with the teacher's guidance, campers are able to identify the examples of each of the categories in the rubric Approaching the Standard (Levels 1 and 2), Meets the Standard (Levels 3 and 4), and Exceeds the Standard (Level 4+.) The presentation of the campers' work during the Closing will begin with Approaching the Standard work and end with the Exceeds the Standard work. 		





Topic	Title	Number of Minutes	Materials	Example/Description
Math Read Aloud	Math Read Aloud and Related Activity	20	 Materials The Best of Times by Greg Tang Math vocabulary card for the math word wall Read the story to the class and be sure to put lots of enthusiasm into your voice! You might want to have the campers sit in a circ on the floor so that it is easier for you to show them the pictures. Math vocabulary word/concept for the story is multiplication. The read aloud activities that the campers will be completing for The Best of Times by Greg Tang are the challenge problems four on the pages of the book. 	
Number Worlds Level F	Unit: Addition and Subtraction Week 3, Lesson 2, p. 24A-25	50	 Materials Teacher Manual pages 24A - 25 Camper Workbook pages 24 - 25 Paddle signs (one Quick Estimate and one Exact Answer (page B10 – Blackline Master) Math vocabulary cards for the Topic: Computational Estimation Lesson objective should be stated and posted - Week 3 Lesson 2 Objective: Campers determine when an estimated answer is suffice Week 3 Lesson 2 math vocabulary: exact amount and estimated amount. Math vocabulary words, their definition, and a pictorial representa when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 24A. Under the Engage heading on page 24A, complete Skill Building section on page 24A. Review the Key Idea box with the campers on page 24. Complete problems #1 and 5 with the campers. Have the campers complete problems #2, 3, 4, 6, 7, 8, 9, 10, 11, and 12 independently 	

			PaperPencils	 #2, 3, 4, 6, 7, 8, 9, 10, 11, and 12 as a whole group. Exit Slip: All campers must complete the <i>Reflect</i> problem at the bottom of page 25. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day.
Independent Problem Solving Task	Factor Patterns	20	Materials • Factor Patterns Open Response for each camper • Pencils • Manila folders • Teacher pages 121 – 125. • Copies of the PPS Intermediate Problem Solving Rubric	 Independent Problem Solving Task: Factor Patterns Description: Campers will identify patterns in the relationships between factors and products and use the pattern to solve a problem. Focus: Use mental arithmetic and paper-and-pencil algorithms to solve problems involving the multiplication of 2-digit whole numbers by 1-digit whole numbers; describe the strategies used. Describe numeric patterns; describe rules for patterns and use them to solve problems. Review the meaning of factor and product with the campers. The campers would be familiar with the terms from the previous school year. Review the rubric on page 122 and the sample of student responses on pages 123-125 when having the campers present their papers and for additional information. The campers will be using the PPS Intermediate Problem Solving rubric to evaluate their work. The campers will work on this problem during the week as outlined in the lesson plans. Problems should be kept in the camper's manila folders so they can work independently.





Topic	Title	Number of Minutes	Materials	Example/Description	
Differentiated Instruction and Independent Problem Solving Task	Factor Patterns	20	 Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Factor Patterns task 	 Differentiated Instruction Menu: ~Beat the Calculator (Addition) (Skill: Mental addition skills). ~Less Than You! (Skill: Mental addition skills; developing a winning game strategy) ~Subtraction Top-It (Skill: Subtraction facts) ~Addition Top-It (Skill: Addition facts 0 to 10) "Factor Patterns" – The campers will continue to work independently on the task. The campers should refer to the rubric to help them meet the problem's expectations. A rotation schedule for DI activities would be useful to keep track of campers' daily activities. 	
Number Worlds Level F	Unit: Addition and Subtraction Week 3, Lesson 3, p.26A-27	50	Materials • Teacher Manual pages 26A - 27 • Camper Workbook pages 26 – 27 • Calculators • Math vocabulary cards for the math word wall • Paper • Pencils	 Topic: Computational Estimation Lesson objective should be stated and posted - Week 3 Lesson 3 Objective: Campers use different strategies for estimating. Week 3 Lesson 3 math vocabulary: Front-End Estimation and Reference-Point Estimation. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 26A. Under the Engage heading on page 26A, complete the Strategy Building section Estimation Strategies. Review the Key Idea box with the campers on page 26. 	

			 Complete problems #1, 5, and 7 with the campers. Have the campers complete problems #2, 3, 4, 6, 8, 9, 10, and 11 independently. Once the problems are completed, review with the campers problems #2, 3, 4, 6, 8, 9, 10, and 11 as a whole group. Exit Slip: All campers must complete the <i>Reflect</i> problem at the bottom of page 27. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day. Independent Problem Solving Task: Factor Patterns Description: Campers will identify patterns in the relationships
Independent Problem Solving Task	tor Patterns 20	 Materials Factor Patterns	 between factors and products and use the pattern to solve a problem. Focus: Use mental arithmetic and paper-and-pencil algorithms to solve problems involving the multiplication of 2-digit whole numbers by 1-digit whole numbers; describe the strategies used. Describe numeric patterns; describe rules for patterns and use them to solve problems. Review the rubric on page 122 and the sample of student responses on pages 123-125 when having the campers present their papers and for additional information. The campers will be using the PPS Intermediate Problem Solving rubric to evaluate their work. The campers will work on this problem during the week as outlined in the lesson plans. Problems should be kept in the camper's manila folders so they can work independently.





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction and Independent Problem Solving Task	Factor Patterns	30	 Materials Factor Patterns task Pencils Manila folders Teacher pages 121 – 125. Copies of the PPS Intermediate Problem Solving Rubric Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions 	 Differentiated Instruction Menu: ~Beat the Calculator (Addition) (Skill: Mental addition skills). ~Less Than You! (Skill: Mental addition skills; developing a winning game strategy) ~Subtraction Top-It (Skill: Subtraction facts) ~Addition Top-It (Skill: Addition facts 0 to 10) "Factor Patterns" – The campers will continue to work independently on the task. The campers should refer to the rubric to help them meet the problem's expectations. A rotation schedule for DI activities would be useful to keep track of campers' daily activities.
	Unit: Addition and	60	Materials	Topic: Computational Estimation

Number Worlds Level F	Subtraction Week 3, Lesson 4, p.28A-29	 Teacher Manual pages 28A - 29 Camper Workbook pages 28 – 29 Calculators Math vocabulary cards for the math word wall Paper Pencils 	 Lesson objective should be stated and posted - Week 3 Lesson 4 Objective: Campers use rounding for estimating. Week 3 Lesson 4 math vocabulary: rounding. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 28A. Under the Engage heading on page 28A, complete the Strategy Building section (including Comparing Strategies). Review the Key Idea box with the campers on page 28. Complete problem #1 with the campers. Have the campers complete problems #2, 3, 4, and 5 independently. Once the problems are completed, review with the campers problems #2, 3, 4, and 5 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 29. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day.
			 math message review the following day. (Option: If the campers need additional instruction on the math concept, you may use the information found on Computational Estimation Week 3, Lesson 5 Review on pages 30A-31 in the teacher's manual.)





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction	Computatio nal Flue ncy	20	 Everyday Math cards Beat the Calculator (Addition) (Skill: Mental addition skills). ~Less Than You! (Skill: Mental addition skills; developing a winning game strategy) ~Subtraction Top-It (Skill: Subtraction facts) ~Addition Top-It (Skill: Addition facts 0 to 10) ~Beat the Calculator (Multiplication) (Skill: Mental multiplication facts) ~Addition Top-It (Skill: Addition facts 0 to 10) ~Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) – You can teach this new differentiated instruction activical campers at this time. Calculators Subtraction Top-It directions Beat the Calculator (Multiplication) (Multiplication) directions 	
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 1, Lesson 1, p. 2A-3	50	 Materials Teacher Manual pages 2A- 3 (includes math background/ Topic: Models for Multiplication Lesson objective should be stated and posted - Week 1 Lesson 1 Objective: Campers use pictures of equal groups to create models multiplication. Week 1 Lesson 1 math vocabulary: match. Math vocabulary words, their definition, and a pictorial represent when applicable must be posted in the classroom on the math 	

			intro.) Camper Workbook pages 2 – 3 Math vocabulary cards for the math word wall Drawing paper Counters Paper Pencils	 vocabulary word wall. Complete the Warm Up - Concept Building section on page 2C. Under the Engage heading on page 2C, complete Skill Building section (including Circle the Groups). Review the Key Idea box with the campers on page 2. Complete problem #1 with the campers. Have the campers complete problems #2 - 7 independently. Once the problems are completed, review with the campers problems #2 - 7 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 3. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day. (**Advanced Preparation: Pictures created in Week 1, Lesson 1 will be used in Week 1, Lesson 3.)
Problem Solving Worktime – Peer Review	Factor Patterns	20	Materials • Factor Patterns Open Response for each camper • Pencils • Manila folders • Teacher pages 121 – 125. • Copies of the PPS Intermediate Problem Solving Rubric	 Independent Problem Solving Task: "Factor Patterns" Description: Campers will identify patterns in the relationships between factors and products and use the pattern to solve a problem. Focus: Use mental arithmetic and paper-and-pencil algorithms to solve problems involving the multiplication of 2-digit whole numbers by 1-digit whole numbers; describe the strategies used. Describe numeric patterns; describe rules for patterns, and use them to solve problems. Review the rubric on page 122 and the sample of student responses on pages 123-125 when having the campers present their papers and for additional information. The campers will be using the PPS Intermediate Problem Solving rubric

	to evaluate their work.	
•	Page 122 Rubric and PPS Interr	mediate Rubric Correlation:
	Page 122 Rubric	PPS Intermediate Problem Solving Rubric
	Level 4	4+ and 4
	Level 3	3
	Level 2	2
	Level 1	1
	response samples to model hor Intermediate Problem Solving I campers should be instructed to peer's work falls. Divide the campers in partner a using the rubric.	n that you solved or one of the student we the campers should use the PPS Rubric to assess the campers' work. The to highlight on the rubric where their and have them assess each other's work eted, give the campers an opportunity





Topic	Title	Number of Minutes	Materials	Example/Description
Independent Problem Solving Task	Factor Patterns	20	 Materials: Factor Patterns Open Response PPS Intermediate Problem Solving Rubric Pencils Campers' Manila folders Independent Problem Solving Task: "Factor Patterns"	
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 1, Lesson 2, p. 4A-5	50		

			 math word wall Paper Pencils campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day. 			
			Materials • Factor Patterns Open Response • Pencils • Manila folders • Teacher pages 121 – 125. • Copies of the PPS Intermediate Problem Solving Rubric	problem. The teacher will level from Approaching the Standard – 4+.	heir solutions to the "Factor Patterns" select problems that will represent each e Standard - 1 / 2 to Exceeds the ntermediate Rubric Correlation:	
Problem	Factor Patterns	20		Page 122 Rubric Level 4	PPS Intermediate Problem Solving Rubric Categories 4+ and 4	
Solving				Level 3	3	
Closing –				Level 2	2	
Student				Level 1	1	
Presentation				 Make sure that with teacher's guidance, the campers are able to identify the examples of each of the categories in the rubric Approaching the Standard (Levels 1 and 2), Meets the Standard (Levels 3 and 4), and Exceeds the Standard (Level 4+). The presentation of the campers' work during the Closing will begwith Approaching the Standard work and end with the Exceeds the Standard work. 		





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction	Computational Fluency	20	 Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Beat the Calculator (Multiplication) directions 	Differentiated Instruction Menu: Beat the Calculator (Addition) (Skill: Mental addition skills). Less Than You! (Skill: Mental addition skills; developing a winning game strategy) Subtraction Top-It (Skill: Subtraction facts) Addition Top-It (Skill: Addition facts 0 to 10) Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) A rotation schedule for DI activities would be useful to keep track of campers' daily activities.
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 1, Lesson 3, p. 6A-7	50	Materials • Teacher Manual pages 6A - 7 • Camper Workbook pages 6 – 7	 Topic: Models for Multiplication Lesson objective should be stated and posted - Week 1 Lesson 3 Objective: Campers use the X symbol to write multiplication problems. Week 1 Lesson 3 math vocabulary: multiplication sentence and product. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall.

			 Recording Chart (Page B13 – Blackline Master) Pictures created in Week 1, Lesson 1 Counters Math vocabulary cards for the math word wall Paper Pencils 	 Complete the Warm Up - Concept Building section on page 6A. Under the Engage heading on page 6A, complete Skill Building sections (including <i>Draw It, Chart It</i>). Review the <i>Key Idea</i> box with the campers on page 6. Complete problems #1 and 4 with the campers. Have the campers complete problems #2, 3, 5, 6, 7, 8, 9, 10, 11, 12, and 13 independently. Once the problems are completed, review with the campers problems #2, 3, 5, 6, 7, 8, 9, 10, 11, 12, and 13 as a whole group. Exit Slip: All campers must complete the <i>Reflect</i> problem at the bottom of page 7. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day.
Independent Problem Solving Task	Button Dolls	20	 Materials Button Dolls Open Response for each camper Counters Paper for the dolls (if applicable) Pencils Manila folders Teacher pages 105 –109. Copies of the PPS Intermediate Problem Solving 	 Independent Problem Solving Task: "Button Dolls" Description: Campers will solve a multi-step problem involving equal groups. Focus: Find multiples of 2, 5, and 10. Use repeated addition, arrays, and skip counting to model multiplication; use equal group sharing and equal grouping to model division. Use numeric patterns to solve problems. Review the rubric on page 106 and the sample of student responses on pages 107-109 when having the campers present their papers and for additional information. The campers will be using the PPS Intermediate Problem Solving rubric

Rubric	to evaluate their work.
	The campers will continue working on this problem during the week as
	outlined in the lesson plans. Problems should be kept in the camper's
	manila folders so they can work independently.





Topic	Title	Number of Minutes	Materials	Example/Description
Independent Problem Solving Task	Button Dolls	20	Materials Button Dolls Open Response for each camper Counters Paper for the dolls (if applicable) Pencils Manila folders Teacher pages 105 –109. Copies of the PPS Intermediate Problem Solving Rubric	 Independent Problem Solving Task: "Button Dolls" Description: Campers will solve a multi-step problem involving equal groups. Focus: Find multiples of 2, 5, and 10. Use repeated addition, arrays, and skip counting to model multiplication; use equal group sharing and equal grouping to model division. Use numeric patterns to solve problems. Review the rubric on page 106 and the sample of student responses on pages 107-109 when having the campers present their papers and for additional information. The campers will be using the PPS Intermediate Problem Solving rubric to evaluate their work. The campers will continue working on this problem during the week as outlined in the lesson plans. The campers' problem needs to be kept in a manila folder so that they will be able to independently work on the task.
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 1, Lesson 4, p. 8A-9	50	Materials • Teacher Manual pages 8A - 9 • Camper Workbook	 Topic: Models for Multiplication Lesson objective should be stated and posted - Week 1 Lesson 4 Objective: Campers describe groups that come in sets. Week 1 Lesson 4 math vocabulary: skip counting, repeated addition, product, and multiplication sentence. Math vocabulary words, their definition, and a pictorial

			pages 8 – 9 Math vocabulary cards for the math word wall Recording Chart (Page B13 – Blackline Master) Number 1-6 Cube Counters Paper Pencils	representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 8A. Under the Engage heading on page 8A, complete Skill Building section (including <i>A Group by Another Name</i>). Review the <i>Key Idea</i> box with the campers on page 8. Complete problem #1 with the campers. Have the campers complete problems #2, 3, 4, 5, and 6 independently. Once the problems are completed, review with the campers problems #2, 3, 4, 5, and 6 as a whole group. Exit Slip: All campers must complete the <i>Reflect</i> problem at the bottom of page 9. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day. (Option: If the campers need additional instruction on the math concept, you may use the information found on Models for Multiplication Week 1, Lesson 5 Review on pages 10A-11 in the teacher's manual.)
Differentiated Instruction	Computational Fluency	20	Materials Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions	 Differentiated Instruction Menu: ~ Beat the Calculator (Addition) (Skill: Mental addition skills). ~Less Than You! (Skill: Mental addition skills; developing a winning game strategy) ~Subtraction Top-It (Skill: Subtraction facts) ~Addition Top-It (Skill: Addition facts 0 to 10) ~Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) ~Baseball Multiplication (Skill: Multiplication facts 1 to 6) - You can teach this new differentiated instruction activity to the campers at this time.

		_
		Subtraction Top-
		It directions
		Beat the
		Calculator
		(Multiplication)
		directions
		Baseball
		Multiplication
		directions
		Math Masters
		page 443
		Six-sided dice
		• Counters





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction	Computatio nal Flue ncy	30	 Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Beat the Calculator (Multiplication) directions Baseball Multiplication directions Math Masters page 443 Six-sided dice Counters 	Differentiated Instruction Menu: Beat the Calculator (Addition) (Skill: Mental addition skills). Less Than You! (Skill: Mental addition skills; developing a winning game strategy) Subtraction Top-It (Skill: Subtraction facts) Addition Top-It (Skill: Addition facts 0 to 10) Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) Baseball Multiplication (Skill: Multiplication facts 1 to 6) - You can teach this new differentiated instruction activity to the campers at this time. A rotation schedule for DI activities would be useful to keep track of campers' daily activities.

	Unit: Multiplication and Beginning Division Week 2, Lesson 1, p. 12A13	60	Materials • Teacher Manual pages 12A – 13 (includes math background/ intro.) • Camper Workbook pages 12– 13 • Number line • Math vocabulary cards for the math word wall • Paper • Pencils • Counters	 Topic: Number Lines and Arrays Lesson objective should be stated and posted - Week 2 Lesson 1 Objective: Campers skip count and use a number line to create a model for multiplication. Week 2 Lesson 1 math vocabulary: multiplication sentence, product, number line, and skip counting. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 12C. Under the Engage heading on page 12C, complete Skill Building section (including Jump the Line). Review the Key Idea box with the campers on page 12. Complete problems #1, 3, and 5 with the campers. Have the campers complete problems #2, 4, 6, 7, 8, and 9 independently. Once the problems are completed, review with the campers problems #2, 4, 6, 7, 8, and 9 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 13. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day.
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Topic	Title	Number of Minutes	Materials	Example/Description
Independent Problem Solving Task	Button Dolls	20	Materials: Button Doll Open Response PPS Intermediate Problem Solving Rubric Pencils Campers' Manila folders	 Independent Problem Solving Task: "Button Dolls" Give the campers the opportunity to complete their task at this time. (If the campers have revised their problems, they may engage in any of the differentiated instruction activities.) A rotation schedule for DI activities would be useful to keep track of campers' daily activities.
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 2, Lesson 2, p. 14A15	50	Materials Teacher Manual pages 14A - 15 Camper Workbook pages 14-15 Number Charts 0-99 (page B14 - Blackline Master) Multiplication Bingo (pages B15 - B16) - Blackline Masters Dot Cubes 1-6, 2 Number line Counters Math vocabulary	 Topic: Number Lines and Arrays Lesson objective should be stated and posted - Week 2 Lesson 2 Objective: Campers visualize multiplication as a dot pattern and write multiplication sentences to describe these patterns. Week 2 Lesson 2 math vocabulary: number line, dot pattern, product, and multiplication sentence. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 14A. Under the Engage heading on page 14A, complete Skill Building section Multiplication Bingo. Also, complete Strategy Building section Skip to the Answer. Review the Key Idea box with the campers on page 14. Complete problems #1 and 3 with the campers. Have the campers complete problems #2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14 independently. Once the problems are completed, review with the

			cards for the math word wall Paper Pencils	 campers problems #2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14 as a whole group. Exit Slip: All campers must complete the <i>Reflect</i> problem at the bottom of page 15. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day.
Problem Solving Worktime – Peer Review	Button Dolls	20	Materials Button Doll Open Response task Pencils Highlighters (optional) Campers' manila folders Teacher pages 105 – 109. Copies of the PPS Intermediate Problem Solving Rubric	 Independent Problem Solving Task: "Button Dolls" Description: Campers will solve a multi-step problem involving equal groups. Focus: Find multiples of 2, 5, and 10. Use repeated addition, arrays, and skip counting to model multiplication; use equal group sharing and equal grouping to model division. Use numeric patterns to solve problems. Review the rubric on page 106 and the sample of student responses on pages 107-109 when having the campers present their papers and for additional information. The campers will be using the PPS Intermediate Problem Solving rubric to evaluate their work. Page 106 Rubric and PPS Intermediate Rubric Correlation:

		Level 2 Level 1	1
		 the PPS Intermediate Problem S work. The campers should be in where their peer's work falls. Divide the campers in partner a work using the rubric. 	that you solved or one of the odel how the campers should use solving Rubric to assess the campers' astructed to highlight on the rubric and have them assess each other's ted, give the campers an opportunity





Topic	Title	Number of Minutes	Materials	Example/Description
Independent Problem Solving Task/DI	Button Dolls Differentiated Instruction – Computational Fluency	20	 Materials: Button Doll Open Response Task Pencils Campers' manila folders Teacher pages 105 – 109. Copies of the PPS Intermediate Problem Solving Rubric 	 Independent Problem Solving Task: "Button Dolls" Give the campers the opportunity to revise their Button task at this time. (If the campers have revised their problems, they may engage in any of the differentiated instruction activities.) A rotation schedule for DI activities would be useful to keep track of campers' daily activities.
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 2, Lesson 3, p. 16A-17	50	Materials • Teacher Manual pages 16A - 17 • Camper Workbook pages 16– 17 • Graph paper • Scissors • Crayons • Math vocabulary cards for the	 Topic: Number Lines and Arrays Lesson objective should be stated and posted - Week 2 Lesson 3 Objective: Campers write multiplication sentences to describe information presented in a rectangular array. Week 2 Lesson 3 math vocabulary: array, rows, product, and multiplication sentence. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 16A. Under the Engage heading on page 16A, complete Skill Building section (including Build an Array). Review the Key Idea box with the campers on page 16.

			math word wall • Paper • Pencils	 complete problems #2, 4, 5, 6, 7, problems are completed, review 7, and 8 as a whole group. Exit Slip: All campers must comp bottom of page 17. This problem the campers understanding of th Reflect: Complete the Extended sections. If you do not complete 	n will be used as an exit slip to check
Problem Solving Closing – Student Presentation	Button Dolls	20	Materials • Button Dolls Open Response • Pencils • Manila folders • Teacher pages 105 – 109. • Copies of the PPS Intermediate Problem Solving Rubric	Page 106 Rubric Page 106 Rubric Page 106 Rubric Level 4 Level 3 Level 2 Level 1 Make sure that with teacher identify the examples of each Approaching the Standard (Levels 3 and 4), and Exceeds The presentation of the camp	PPS Intermediate Problem Solving Rubric 4+ and 4 3 2 1 s guidance, the campers are able to n of the categories in the rubric evels 1 and 2), Meets the Standard





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction	Computatio nal Flue ncy	20	 Materials Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Beat the Calculator (Multiplication) directions Baseball Multiplication directions Math Masters page 443 Six-sided dice Counters 	Differentiated Instruction Menu: ~ Beat the Calculator (Addition) (Skill: Mental addition skills). ~Less Than You! (Skill: Mental addition skills; developing a winning game strategy) ~Subtraction Top-It (Skill: Subtraction facts) ~Addition Top-It (Skill: Addition facts 0 to 10) ~Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) ~Baseball Multiplication (Skill: Multiplication facts 1 to 6) A rotation schedule for DI activities would be useful to keep track of campers' daily activities.
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 2, Lesson 4, p. 18A19	50	 Materials Teacher Manual pages 18A - 19 Camper Workbook pages 18–19 Graph paper 	 Topic: Number Lines and Arrays Lesson objective should be stated and posted - Week 2 Lesson 4 Objective: Campers investigate the Commutative Property of Multiplication, using rectangular arrays. Week 2 Lesson 4 math vocabulary: Commutative Property of Multiplication, arrays, multiplication sentence, product, and

			 Scissors Crayons(optional) Math vocabulary cards for the math word wall Paper Pencils 	 Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 18A. Under the Engage heading on page 18A, complete Skill Building section, complete Share and Match. Review the Key Idea box with the campers on page 18. Complete problems #1 and 5 with the campers. Have the campers complete problems #2, 3, 4, 6, 7, and 8 independently. Once the problems are completed, review with the campers problems #2, 3, 4, 6, 7, and 8 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 19. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day. (Option: If the campers need additional instruction on the math concept, you may use the information found on Number Lines and Arrays Week 2, Lesson 5 Review on pages 20A-21 in the teacher's manual.)
Independent Problem Solving Task	A Multiplication Problem	20	 Materials Copy of A Multiplication Problem Open Response for each student Pencils Manila folders Teacher pages 79 – 83. Copies of the PPS Intermediate Problem 	 Independent Problem Solving Task: "A Multiplication Problem" Description: Campers find a pattern that can be used to solve multiplication problems. Focus: Use arrays, mental arithmetic, and paper-and-pencil algorithms to solve problems involving the multiplication of whole numbers.

Solving Rubric	Describe numeric patterns and use them to solve problems.
	 Review the rubric on page 80 and the sample of student responses on pages 81-83 when having the campers present their papers and for additional information. The campers will be using the PPS Intermediate Problem Solving rubric to evaluate their work. The campers will continue working on this problem during the week as outlined in the lesson plans. Problems should be kept in the camper's manila folders so they can work independently.





Topic	Title	Number of Minutes	Materials	Example/Description
Independent Problem Solving Task	A Multiplication Problem	20	Materials Copy of A Multiplication Problem Open Response for each student Pencils Manila folders Teacher pages 79 – 83. Copies of the PPS Intermediate Problem Solving Rubric	 Independent Problem Solving Task: "A Multiplication Problem" Description: Campers find a pattern that can be used to solve multiplication problems. Focus: Use arrays, mental arithmetic, and paper-and-pencil algorithms to solve problems involving the multiplication of whole numbers. Describe numeric patterns and use them to solve problems. Review the rubric on page 80 and the sample of student responses on pages 81-83 when having the campers present their papers and for additional information. The campers will be using the PPS Intermediate Problem Solving rubric to evaluate their work. The campers will continue working on this problem during the week as outlined in the lesson plans. Problems should be kept in the camper's manila folders so they can work independently.
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 3, Lesson 1 p. 22A-23	50	Materials • Teacher Manual pages 22A – 23 (includes math background/intro.)	 Topic: Building Multiplication Facts Lesson objective should be stated and posted - Week 3 Lesson 1 Objective: Campers know multiplication facts for twos and threes. Week 3 Lesson 1 math vocabulary: multiplication sentence, factors, product, and array. Math vocabulary words, their definition, and a pictorial

	 Camper Workbook page 22-23 Index cards Building Facts Charts (page B1 - Blackline Master) Multiplication Table (page B18 - Blackline Master) Math vocabular cards for the math word wall Paper Pencils 	 Complete the Warm Up - Concept Building section on page 22C. Under the Engage heading on page 22C, complete Skill Building section 2 and 3 Flash Cards. Review the Key Idea box with the campers on page 22. Complete problem #1 with the campers. Have the campers complete problems #2 – 14 independently. Once the problems are completed, review with the campers problems #2 - 14 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 23. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World
Differentiated Computational Instruction Fluency	Materials Everyday Math care Beat the Calculator (Addition) direction Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Beat the Calculator (Multiplication) directions Baseball Multiplication	~Less Than You! (Skill: Mental addition skills; developing a winning game strategy) ~Subtraction Top-It (Skill: Subtraction facts) ~Addition Top-It (Skill: Addition facts 0 to 10) ~Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) ~Baseball Multiplication (Skill: Multiplication facts 1 to 6) ~Multiplication Top-It (Skill: Multiplication facts 0 to 10) - You can teach this new differentiated instruction activity to the

directionsMath Masters page443
Six-sided dice
 Counters Multiplication Top-It
directions





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction	Computational Fluency	30	 Materials Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Beat the Calculator (Multiplication) directions Baseball Multiplication directions Math Masters page 443 Six-sided dice Counters Multiplication Top-It directions 	Differentiated Instruction Menu: Beat the Calculator (Addition) (Skill: Mental addition skills). Less Than You! (Skill: Mental addition skills; developing a winning game strategy) Subtraction Top-It (Skill: Subtraction facts) Addition Top-It (Skill: Addition facts 0 to 10) Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) Baseball Multiplication (Skill: Multiplication facts 1 to 6) Multiplication Top-It (Skill: Multiplication facts 0 to 10) A rotation schedule for DI activities would be useful to keep track of campers' daily activities.
Number Worlds	Unit: Multiplication and Beginning Division	60	Materials • Teacher Manual pages 24A - 25	 Topic: Building Multiplication Facts Lesson objective should be stated and posted - Week 3 Lesson 2 Objective: Campers know multiplication facts for fours and fives.

Level F Week 3, Lesson 2 p. 24A-25	 Camper Workbook pages 24– 25 Building Facts Charts (page B17 – Blackline Master) Multiplication Table (page B18 Blackline Master) Multiplication Table (page B18 Blackline Master) Multiplication Memory Game Cards (pages B19 – B20 – Blackline Masters) Scissors Index cards Math vocabulary cards for the math word wall Paper Pencils Week 3 Lesson 2 math vocabulary: multiplication sentence, fact and product. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroor on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 24A. Under the Engage heading on page 24A, complete Skill Building section A and 5 Flash Cards. Also, complete Strategy Building section Multiplication Memory. Review the Key Idea box with the campers on page 24. Complete problems #2 - 22. Once the problems are completed, review with the campers problems #2 - 22 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 25. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application during this lesson, the problem could be used as a memory message review the following day.
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Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction	Computational Fluency	20	 Materials Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Beat the Calculator (Multiplication) directions Baseball Multiplication directions Math Masters page 443 Six-sided dice Counters Multiplication Top-It directions 	Differentiated Instruction Menu: Beat the Calculator (Addition) (Skill: Mental addition skills). Less Than You! (Skill: Mental addition skills; developing a winning game strategy) Subtraction Top-It (Skill: Subtraction facts) Addition Top-It (Skill: Addition facts 0 to 10) Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) Baseball Multiplication (Skill: Multiplication facts 1 to 6) Multiplication Top-It (Skill: Multiplication facts 0 to 10) A rotation schedule for DI activities would be useful to keep track of campers' daily activities.

Number Worlds Level F	Unit: Multiplication and Beginning Division Week 3, Lesson 3 p. 26A-27	50	 Materials Teacher Manual pages 26A - 27 Camper Workbook pages 26–27 Building Facts Charts (page B17 – Blackline Master) Multiplication Table (page B18 - Blackline Master) Index cards Math vocabulary cards for the math word wall Paper Pencils 	 Topic: Building Multiplication Facts Lesson objective should be stated and posted - Week 3 Lesson 3 Objective: Campers know multiplication facts for sixes and sevens. Week 3 Lesson 3 math vocabulary: multiplication sentence, factors, and product. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 26A. Under the Engage heading on page 26A, complete Strategy Building section Factor, Factor, Product and Skill Building section 6 and 7 Flash Cards. Review the Key Idea box with the campers on page 26. Complete problem #1 with the campers. Have the campers complete problems #2 - 22. Once the problems are completed, review with the campers problems #2 - 22 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 27. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day.
Problem Solving Worktime – Peer Review	A Multiplication Problem	20	 Materials A Multiplication Problem Open Response task Pencils Highlighters (optional) Campers' manila folders Teacher pages 79 – 	 Independent Problem Solving Task: "A Multiplication Problem" Description: Campers find a pattern that can be used to solve multiplication problems. Focus: Use arrays, mental arithmetic, and paper-and-pencil algorithms to solve problems involving the multiplication of whole numbers. Describe numeric patterns and use them to solve problems.

83. • Copies of the PPS Intermediate Problem Solving Rubric	on pages 81-83 when having for additional information.	
	Page 80 Rubric	PPS Intermediate Problem Solving Rubric
	Level 4	4+ and 4
	Level 3	3
	Level 2	2
	Level 1	1

the PPS Intermediate Problem Solving Rubric to assess the campers' work. The campers should be instructed to highlight on the rubric

Divide the campers in partner and have them assess each other's

After the peer review is completed, give the campers an

where their peer's work falls.

opportunity to revise their work.

work using the rubric.





Topic	Title	Number of Minutes	Materials	Example/Description
Independent Problem Solving Task	A Multiplication Problem	20	 Materials: A Multiplication Problem Open Response PPS Intermediate Problem Solving Rubric Pencils Campers' Manila folders Independent Problem Solving Task: "A Multiplication Problem Solving To revise A Multiplication Problem Solving Problem Solving Nultiplication Problem Solving Task: "A Multiplication Problem Solving Problem Solving Task: "A Multiplication Problem Solving Problem Solving	
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 3, Lesson 4 p. 28A-29	50	Materials • Teacher Manual pages 28A - 29 • Camper Workbook pages 28– 29 • Building Facts Charts (page B17 – Blackline Master) • Multiplication Table (page B18 - Blackline Master) • Product Bingo Cards (pages B21 – B22 – Blackline	 Topic: Building Multiplication Facts Lesson objective should be stated and posted - Week 3 Lesson 4 Objective: Campers know multiplication facts for eights and nines. Week 3 Lesson 4 math vocabulary: pattern, multiplication sentence, factors, and product. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 28A. Under the Engage heading on page 28A, complete Strategy Building section Product Bingo and Skill Building section 8 and 9 Flash Cards. Review the Key Idea box with the campers on page 28. Complete problem #1 with the campers. Have the campers complete problems #2 - 22. Once the problems are completed, review with the campers problems #2 - 22 as a whole group. Exit Slip: All campers must complete the Reflect problem at the

			Masters) Index cards Math vocabulary cards for the math word wall Paper Pencils	 check the campers understar Reflect: Complete the Extend Application sections. If you of Application during this lessor message review the following (Option: If the campers need concept you may use the info 	ded Response and Real -World do not complete the Real-World n, the problem could be used as a math g day.
Problem Solving Closing – Student Presentation	A Multiplication Problem	20	Materials Copy of the A Multiplication Problem Open Response Pencils Manila folders Teacher pages 79 – 83. Copies of the PPS Intermediate Problem Solving Rubric	Problem". The teacher we each level from Approach Standard – 4+. Page 80 Rubric and PPS I Page 80 Rubric Level 4 Level 3 Level 2 Level 1 Make sure that with teach identify the examples of examples of examples and 4), and Excellent Examples 2 The presentation of the company of the presentation of the company of the company of the search and the company of t	their solutions to "A Multiplication vill select problems that will represent hing the Standard - 1 / 2 to Exceeds the Intermediate Rubric Correlation: PPS Intermediate Problem Solving Rubric 4+ and 4 3 2 1 her's guidance, the campers are able to each of the categories in the rubric d (Levels 1 and 2), Meets the Standard eeds the Standard (Level 4+). campers' work during the Closing will the Standard work and end with the ork.





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction	Computatio nal Flue ncy	20	 Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Beat the Calculator (Multiplication) directions Baseball Multiplication directions Math Masters page 443 Six-sided dice Counters Multiplication 	Differentiated Instruction Menu: Beat the Calculator (Addition) (Skill: Mental addition skills). Less Than You! (Skill: Mental addition skills; developing a winning game strategy) Subtraction Top-It (Skill: Subtraction facts) Addition Top-It (Skill: Addition facts 0 to 10) Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) Baseball Multiplication (Skill: Multiplication facts 1 to 6) Multiplication Top-It (Skill: Multiplication facts 0 to 10) Name That Number (Skill: Naming numbers with expression) - You can teach this new differentiated instruction activity to the campers at this time. A rotation schedule for DI activities would be useful to keep track of campers' daily activities.

Number Worlds Level F	Unit: Multiplication and Beginning Division Week 4, Lesson 1 p. 32A-33	50	Top-It directions Name That Number directions Materials Teacher Manual pages 32A - 33 (includes math background/intro.) Camper Workbook pages 32- 33 Building Facts Charts (page B17 - Blackline Master) Math vocabulary cards for the math word wall	 Topic: Beyond the Basic Facts Lesson objective should be stated and posted - Week 4 Lesson 1 Objective: Campers multiply by 10 and powers of 10, using mental math. Week 4 Lesson 1 math vocabulary: multiples, multiplication sentence, factors, mental math, and product. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 32C. Under the Engage heading on page 32C, complete Strategy Building section Times 10. Review the Key Idea box with the campers on page 32. Complete problem #1 with the campers. Have the campers complete problems #2 - 14. Once the problems are completed, review with the campers problems #2 - 14 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 33. This problem will be used as an exit slip to check the campers understanding of the lesson. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World
			PaperPencils	Application during this lesson, the problem could be used as a math message review the following day.
Problem Solving Task	Patterns in Our Multiplication Facts	20	Materials: Copies of the problem Pencils	 "Patterns in Our Multiplication Facts" Skill Focus: Algebra-Patterns and Functions: Patterns Distribute the problem to the campers. Review the problem with the campers and have them work on it

	 Manila folders Activities to Undo Math Misconceptions (Grades 3-5) – page 45. 	 independently. The campers will place the problem in their manila folder. You will review the problem with the campers tomorrow.
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Topic	Title	Number of Minutes	Materials	Example/Description
Problem Solving Task	Patterns in Our Multiplication Facts	20	Materials: Copies of the problem Manila folders Pencils Activities to Undo Math Misconceptio ns (Grades 3-5) – page 45	"Patterns in Our Multiplication Facts" Skill Focus: Algebra-Patterns and Function: Patterns Review the campers' answers to the problem. Give them additional time if necessary to complete the problem.
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 4, Lesson 2 p. 34A- 35	50	 Materials Teacher Manual pages 34A - 35 Camper Workbook pages 34-35 Graph paper Math vocabulary cards for the math word wall Paper Pencils 	 Topic: Beyond the Basic Facts Lesson objective should be stated and posted - Week 4 Lesson 2 Objective: Campers use the Distributive Property to find products when factors are greater than 10. Week 4 Lesson 2 math vocabulary: Distributive Property, product, factors, inverse, and array. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 34A. Under the Engage heading on page 34A, complete Skill Building section Distributive Property. Review the Key Idea box with the campers on page 34. Complete problems #1, 2, and 6 with the campers. Have the campers complete problems #3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, and 15

				•	independently. Once the problems are completed, review problems #3, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, and 15 as a whole group. Exit Slip: All campers must complete the <i>Reflect</i> problem at the bottom of page 35. This problem will be used as an exit slip to check the campers understanding of the math concept. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day.
Differentiated Instruction	Computational Fluency	20	 Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Beat the Calculator (Multiplication) directions Baseball Multiplication directions Math Masters page 443 Six-sided dice 	•	Differentiated Instruction Menu: ~ Beat the Calculator (Addition) (Skill: Mental addition skills). ~Less Than You! (Skill: Mental addition skills; developing a winning game strategy) ~Subtraction Top-It (Skill: Subtraction facts) ~Addition Top-It (Skill: Addition facts 0 to 10) ~Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) ~Baseball Multiplication (Skill: Multiplication facts 1 to 6) ~Multiplication Top-It (Skill: Multiplication facts 0 to 10) ~Name That Number (Skill: Naming numbers with expression)

CountersMultiplication
Top-It directions
Name That
Number directions





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction	Computatio nal Flue ncy	30	 Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Beat the Calculator (Multiplication) directions Baseball Multiplication directions Math Masters page 443 Six-sided dice Counters Multiplication 	A rotation schedule for DI activities would be useful to keep track of campers' daily activities.

		Top-It directions Name That Number directions	 Topic: Beyond the Basic Facts Lesson objective should be stated and posted - Week 4 Lesson 3
Number Worlds Level F Week 4, Lesson 3 p. 36A- 37	60	 Materials Teacher Manual pages 36A - 37 Camper Workbook pages 36-37 Graph paper Scissors Counters Math vocabulary cards for the math word wall Paper Pencils 	 Objective: Campers use their knowledge of the basic facts and the Distributive Property to multiply and divide numbers. Week 4 Lesson 3 math vocabulary: operation sign, Distributive Property, product, factors, multiplication sentence, and array. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 36A. Under the Engage heading on page 36A, complete Skill Building section How Many Ways? Review the Key Idea box with the campers on page 36. Complete problems #1 and 3 with the campers. Have the campers complete problems #2, 4, 5, 6, 7, and 8 independently. Once the problems are completed, review problems #2, 4, 5, 6, 7, and 8 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 37. This problem will be used as an exit slip to check the campers understanding of the math concept. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day.





Topic	Title	Number of Minutes	Materials	Example/Description
Differentiated Instruction	Computational Fluency	20	 Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculators Less Than You! directions Subtraction Top-It directions Beat the Calculator (Multiplication) directions Baseball Multiplication directions Math Masters page 443 Six-sided dice Counters Multiplication Top-It directions Name That Number 	Differentiated Instruction Menu: Beat the Calculator (Addition) (Skill: Mental addition skills). Less Than You! (Skill: Mental addition skills; developing a winning game strategy) Subtraction Top-It (Skill: Subtraction facts) Addition Top-It (Skill: Addition facts 0 to 10) Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) Baseball Multiplication (Skill: Multiplication facts 1 to 6) Multiplication Top-It (Skill: Multiplication facts 0 to 10) Name That Number (Skill: Naming numbers with expression) A rotation schedule for DI activities would be useful to keep track of campers' daily activities.

			directions	
Number Worlds Level F	Unit: Multiplication and Beginning Division Week 4, Lesson 4 p. 38A-39	50	Materials • Teacher Manual pages 38A - 39 • Camper Workbook pages 38–39 • Cover Up game board (page B23 – Blackline Masters) • Number 1-6 Cubes, 2 • Graph paper • Crayons • Counters • Paper bags • Math vocabulary cards for the math word wall • Paper • Pencils	 Topic: Beyond the Basic Facts Lesson objective should be stated and posted - Week 4 Lesson 4 Objective: Campers are introduced to division and play a game to practice their basic multiplication facts. Week 4 Lesson 4 math vocabulary: division sentences, factor, quotient, and inverse. Math vocabulary words, their definition, and a pictorial representation when applicable must be posted in the classroom on the math vocabulary word wall. Complete the Warm Up - Concept Building section on page 38A. Under the Engage heading on page 38A, complete Skill Building section Multiplication and Division. Review the Key Idea box with the campers on page 38. Complete problems #1 and 4 with the campers. Have the campers complete problems #2, 3, 5, 6, 7, 8, 9, 10 and 11 independently. Once the problems are completed, review problems #2, 3, 5, 6, 7, 8, 9, 10 and 11 as a whole group. Exit Slip: All campers must complete the Reflect problem at the bottom of page 39. This problem will be used as an exit slip to check the campers understanding of the math concept. Reflect: Complete the Extended Response and Real -World Application sections. If you do not complete the Real-World Application during this lesson, the problem could be used as a math message review the following day. (Option: If the campers need additional instruction on the math concept, you may use the information found on Beyond the Basic Facts Week 4, Lesson 5 Review on pages 40A-41 in the teacher's manual.)
Problem Solving Task	Choices: 1)Using a Graph to Add and Subtract 2) Addition and	20	Materials:Copies of the problemPencils	Using a Graph to Add and Subtract or Addition and Subtraction Story Problem Skill Focus: Addition and Subtraction Concepts • Distribute the problem to the campers.

Subtraction Story Problems • Manila fold • Activities to Undo Math Misconcep (Grades 3-5 pages 9 and	independently. The campers will place the problem in their manila folder. You will review the problem with the campers tomorrow. The campers will place the problem in their manila folder. You will review the problem with the campers tomorrow.
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Topic	Title	Number of Minutes	Materials	Example/Description
Problem Solving Task	Choices: 1)Using a Graph to Add and Subtract 2) Addition and Subtraction Story Problems	20	Materials:	Using a Graph to Add and Subtract or Addition and Subtraction Story Problem Skill Focus: Addition and Subtraction Concepts • Review the campers' answers to the problem. Give them additional time if necessary to complete the problem.
Number Worlds Level F	TBD	50	TBD	The teacher can use this day to wrap up any of the Number Worlds instruction.
Differentiated Instruction	Computational Fluency	20	Materials Everyday Math cards Beat the Calculator (Addition) directions Addition Top-It directions Calculator Less Than You! directions	Differentiated Instruction Menu: ~ Beat the Calculator (Addition) (Skill: Mental addition skills). ~Less Than You! (Skill: Mental addition skills; developing a winning game strategy) ~Subtraction Top-It (Skill: Subtraction facts) ~Addition Top-It (Skill: Addition facts 0 to 10) ~Beat the Calculator (Multiplication) (Skill: Mental multiplication skills) ~Baseball Multiplication (Skill: Multiplication facts 1 to 6) ~Multiplication Top-It (Skill: Multiplication facts 0 to 10) ~Name That Number (Skill: Naming numbers with expression)

 Subtraction Top-It directions Beat the Calculator (Multiplication) directions Baseball Multiplication directions Math Masters page 443 Six-sided dice Counters Multiplication Top-It directions Name That Number 	A rotation schedule for DI activities would be useful to keep track of campers' daily activities.
• Name That Number directions	