SOAR Summary Addition and Subtraction

Grade 1: Year End, One-Digit Addends

	Tier I Intervention	Tier II Intervention (In Addition to Classroom Instruction)	Tier III Intervention (In Addition to Classroom Instruction)
Makes Sense	 Determines what needs to be done to solve for the unknown in the following: Addition situations with an unknown whole. Subtraction situations with an unknown part. Addition situations with an unknown part in the change position. 	 Determines what needs to be done to solve for the unknown in the following: Addition situations with an unknown whole. Subtraction situations with an unknown part. Unable to determine what needs to be done to solve addition situations with an unknown part in the change position. 	 Unable to determine what needs to be done to solve for the unknown in addition or subtraction situations. Does not recognize words such as altogether, difference, some, part of, or how many are left.
Creates Representations	 Shows situations in multiple ways: Manipulatives Part-Part-Whole Map Drawing/Diagram Hundreds Chart Number Line Uses representations flexibly to make sense of the mathematics of and/or solve situations. 	 Shows similar situations using the same type of representation. Attempts to use different representations when situations change. Misuses a representation (e.g., counts the numbers instead of the spaces on a number line) 	 Shows situations using only one type of representation. Does not change representation type when situation changes results in an incorrect solution or does not consistently use representations which results in an incorrect solution. Records numbers but not equations
Uses Reliable Strategies	 Uses several problem-solving strategies: Counts All Counts On Counts On from Bigger Counts Back Knows facts from memory. Uses a known fact or easier to solve equation and adjusts. 	 Uses the "counts all" strategy to solve addition and subtraction situations (e.g., for subtraction situations, the student uses "counts all" to count the whole, count the part and take it away, and then count the part remaining). Misuses another problem-solving strategy (e.g., counts on from a number but begins counting at the starting number, resulting in an amount 1 more than it is supposed to be). 	 Does not have a reliable means of solving word problems.
Provides Explanations	 Writes and solves addition and/or subtraction equations to represent situations (listed above). Identifies the meaning of the numbers in relationship to the context. Explains the equation and the operation in the context of the word problem. 	 Writes and solves addition equations for addition situations with an unknown whole. Writes and solves addition and/or subtraction equations for subtraction situations with an unknown difference. Provides explanations that include repeating rules or "fact families" (e.g., references numbers and an operation without tending to what is happening in the context). 	 Does not write an equation. Does not write an accurate equation. Unable to explain the meaning of the numbers in relationship to the context.

SOAR Survey Summary Addition and Subtraction

Grade 2: Year End, Two-Digit Addends

	Tier I Intervention	Tier II Intervention (In Addition to Classroom Instruction)	Tier III Intervention (In Addition to Classroom Instruction)
Makes Sense	 Determines what needs to be done to solve for the unknown in all types of addition and subtraction situations. Determines what needs to be done to solve for the unknown difference in compare situations. 	 Determines what needs to be done to solve for the unknown in all types of addition and subtraction situations. Unable to determine what needs to be done to solve for the unknown difference in compare situations. 	 Determines what needs to be done to solve for the unknown in Addition situations with an unknown whole. Subtraction situations with an unknown in part. Unable to determine what needs to be done to solve addition situations with an unknown part in the change position. Unable to determine what needs to be done to solve for the unknown difference in compare situations.
Creates Representations	 Shows situations in multiple ways: Manipulatives (single units or base-ten blocks) Part-Part-Whole Map Drawing/Diagram Hundreds Chart Number Line or Open Number Line Uses representations flexibly to make sense of the mathematics of and/or solve situations. 	 Shows addition situations using the same type of representation. Shows subtraction situations using the same type of representation. Represents two-digit quantities with single units (e.g., 22 as 22 ones rather than 2 tens and 2 ones). 	 Shows addition situations using the same type of representation. Shows subtraction situations using the same type of representation. Makes errors in representing situations when quantities are greater than 20, but not when quantities are within 20. Misuses a representation (e.g., counts the numbers instead of the spaces on a number line).
Uses Reliable Strategies	 Uses several problem-solving strategies based on place value to work with two-digit numbers: Decomposes and recomposes amounts to make easier to work with numbers. Rounds to make it easier to work with numbers and adjust results (compensation). Uses known facts to combine tens and ones (may make use of the standard algorithm, may/may not articulate place value understanding). 	 Attempts to use problem-solving strategies that do not require an understanding of place value or magnitude which may result in an inaccurate solution when working with two-digit numbers: Counts All Counts On and/or Counts On from Bigger Counts Back Uses problem-solving strategies listed above when working with quantities within 20 and arrives at accurate solutions. 	 Uses the "counts all" strategy to solve addition and subtraction situations (e.g., for subtraction situations, the student uses "counts all" to count the whole, count the part and take it away, and then count the part remaining). Misuses another problem-solving strategy (e.g., counts on from a number but begins counting at the starting number, resulting in an amount 1 more than it is supposed to be).
Provides Explanations	 Writes and solves addition and/or subtraction equations to represent situations (listed above). Identifies meaning of the numbers: whole or part, in addition and subtraction situations. quantity of each set and difference, in compare situations. Explains the equation and the operation in the context of the word problem. 	 Writes and solves addition equations for addition situations with an unknown whole or an unknown part. Writes and solves addition and/or subtraction equations for subtraction situations with an unknown difference. Identifies which numbers represent the whole and the parts in addition and subtraction situations. 	 Writes and solves addition equations for addition situations with an unknown whole. Writes and solves addition and/or subtraction equations for subtraction situations with an unknown difference. Provides explanations that include repeating rules or "fact families" (e.g., references numbers and an operation without tending to what is happening in the context).

SOAR Survey Summary Addition and Subtraction

Grade 3: Year End, Three-Digit Addends

	Tier I Intervention	Tier II Intervention (In Addition to Classroom Instruction)	Tier III Intervention (In Addition to Classroom Instruction)
Makes Sense	 Determines what needs to be done to solve for the unknown in all types of addition and subtraction situations. Determines what needs to be done to solve for the unknown difference in compare situations. 	 Determines what needs to be done to solve for the unknown in all types of addition and subtraction situations. Unable to determine what needs to be done to solve for the unknown difference in compare situations. 	 Determines what needs to be done to solve for the unknown in Addition situations with an unknown whole. Subtraction situations with an unknown in part. Unable to determine what needs to be done to solve addition situations with an unknown part in the change position. Unable to determine what needs to be done to solve for the unknown difference in compare situations.
Creates Representations	 Shows situations in multiple ways: Manipulatives (base-ten blocks) Drawing/Diagram (using place value models) Number Line or Open Number Line Uses representations flexibly to make sense of the mathematics of and/or solve situations. 	 Shows situations in one or more ways: Manipulatives (single units or base-ten blocks) Drawing/Diagram Number Line or Open Number Line 	 Shows addition situations using the same type of representation. Shows subtraction situations using the same type of representation. Represents two-digit quantities with single units (e.g., 22 as 22 ones rather than 2 tens and 2 ones).
Uses Reliable Strategies	 Uses several problem-solving strategies based on place value to work with three-digit numbers: Decomposes and recomposes amounts to make easier to work with numbers. Rounds to make easier to work with numbers and adjust results (compensation). Uses known facts to combine numbers by place value (may make use of the standard algorithm, but not refer to place value). 	 Uses problem-solving strategies that do not require an understanding of place value or magnitude which result in an accurate solution when working with two-digit numbers: Counts On and/or Counts On from Bigger Counts Back 	 Uses the "counts all" strategy to solve addition and subtraction situations (e.g., for subtraction situations, the student uses "counts all" to count the whole, count the part and take it away, and then count the part remaining). Misuses another problem-solving strategy (e.g., counts on from a number but begins counting at the starting number, resulting in an amount 1 more than it is supposed to be).
Provides Explanations	 Writes and solves addition and/or subtraction equations to represent situations (listed above). Identifies meaning of the numbers, whole or part, in addition and subtraction situations. quantity of each set and difference, in compare situations. Explains the equation and the operation in the context of the word problem. 	 Writes and solves addition equations for addition situations with an unknown whole or an unknown part. Writes and solves addition and/or subtraction equations for subtraction situations with an unknown difference. Identifies which numbers represent the whole and the parts in addition and subtraction situations. 	 Writes and solves addition equations for addition situations with an unknown whole. Writes and solves addition and/or subtraction equations for subtraction situations with an unknown difference. Provides explanations that include repeating rules or "fact families" (e.g., references numbers and an operation without tending to what is happening in the context).

NOTE: By Grade 4 and Grade 5, the expectation is for students to fluently add and subtract multi-digit numbers. Consider this expectation when determining the tier of intervention services that may be needed to support the student.