SOAR: Ratios and Proportional Relationship Survey Summary

Grade 6 End Year

Category I	Tier I Intervention *(Classroom Instruction)*	Tier II Intervention *(along with Classroom Instruction)*	Tier III Intervention *(along with Classroom Instruction)*
Making Sense	• Identifies a ratio in all forms whether in a context or in a model: - part-whole, - part-part, - rate, - percent, - speed, and - measurement conversion.	• Is unable to consistently determine a ratio in various forms whether presented in context or in a model: - part-whole, - part-part, - rate, - percent, - speed, and - measurement conversion. *Struggles to differentiate part-part and part-whole information; has difficulty representing percent as a ratio.*	• Is unable to determine a ratio presented in any format. *May identify the components as two independent entities that do not form a ratio relationship.*
Creates Representations	• Represents a ratio presented in a problem situation, using a variety of representations: - manipulatives, - diagrams, - tables, - double number lines, and - ratios.	• Represent a ratio presented in a problem situation, using one or two of the same representations: - manipulatives, - diagrams, - tables, - double number lines, and - ratios. *Tends to use the same representation repeatedly, whether or not it is the most appropriate representation for the context.*	• Cannot represent a ratio presented in a problem situation by using a representation: - manipulatives, - diagrams, - tables, - double number lines, and - ratios. *Tends to repeat the words, numbers, or diagrams presented in the problem.*
Use Reliable Strategy	• Uses a variety of strategies to solve problems involving ratio and rate: - iterating or partitioning an initial group using manipulatives, - using a diagram or creating a table; and - creating equivalent ratios.	• Solves problems involving ratio and rate by using the same strategy repeatedly, whether or not it is the most appropriate representation for the context: - by iterating or partitioning an initial group using manipulatives, - using a diagram, - creating a table; and - creating equivalent ratios.	• Unable to solve problems using correct ratio reasoning. *May use additive thinking instead of multiplicative thinking.*
Provides Explanation	• Consistently identifies and labels parts, and/or whole, or rate correctly and identifies the meaning of variables used in expressions or equations.	• Is able to identify and labels parts, and/or whole, or rate and identifies the meaning of variables used in expressions or equations. *May not be able to identify a percent as part of a whole; may not be able to identify the units involved in a rate.*	• Does not attach labels or meaning to the numbers or variables involved in a problem situation.

SOAR: Ratios and Proportional Relationship Survey Summary

Grade 7 End Year

Category II	Tier I Intervention *(Classroom Instruction)*	Tier II Intervention *(along with Classroom Instruction)*	Tier III Intervention *(Classroom Instruction)*
Makes Sense	• Consistently identifies proportional relationships and solves problems involving unit rate, percent, and speed.	• Inconsistently identifies proportional relationships and solves problems involving unit rate, percent, and speed.	• Unable to identify proportional relationships and cannot solve problems involving unit rate, percent, and speed.
Creates Representations	• Recognizes and represents proportional relationships found in tables, graphs or contexts. • Uses diagrams, tables, graphs, expressions, or equations when solving problems involving proportional relationships.	• Recognizes and represents proportional relationships found in tables, graphs, or contexts.	• Cannot recognize or represent proportional relationships found in tables, graphs, or contexts.
Uses a Reliable Strategy	• Uses a variety of strategies to solve problems involving ratio and rate: - forming equivalent ratios, - determining and using unit rate, - creating a table of values, - drawing a graph, and - writing and solving an equation.	• Uses a limited number of strategies to solve problems involving ratio and rate: - forming equivalent ratios and - determining and using unit rate, creating a table of values, drawing a graph, writing, or solving an equation.	• Unable to use strategies to solve the problems using proportional reasoning.
Provides Explanation	• Correctly identifies and labels ratios, and connects the meaning of numbers and notation to the problem situation.	• Inconsistently identifies and labels ratios, and connects the meaning of numbers and notation to the problem situation.	• Does not attach labels or meaning to the numbers or variables involved in a problem situation.

NOTE: By Grade 8, the expectation is for students to understand ratios and proportional relationships. By grade 8 students are expected to apply what they know about ratios and proportional relationships to work with linear functions (e.g., relating the constant rate of change and unit rate to slope) . Consider this expectation when determining the tier of intervention services that may be needed to support the students beyond Grade 8.