

Sample #9: Mathematical Problem Solving: A Three-Trait Model, Student-Friendly Version (Grades 3–4)

Criterion	Indicator	Rating	Rationale (use words and phrases from the <i>Rubric for Rubrics</i>)
Coverage/ Organization	1A: Covers the Right Content	5	<ul style="list-style-type: none"> The three criteria (traits) are in line with what is considered important in mathematics problem solving, align directly with content standards, and have the “ring of truth.”
	1B: Criteria Are Well Organized	4	<ul style="list-style-type: none"> The rubric is divided into easily understandable criteria that are independent. But, a couple of the details might be misplaced. For example, would the first bullet under <i>Mathematical Knowledge</i> be better placed under <i>Problem Solving</i>?
	1C: Number of Levels Fits Targets and Uses	5	<ul style="list-style-type: none"> Five levels provide enough differentiation between levels for these learning targets.
Clarity	2A: Levels Defined Well	4	<ul style="list-style-type: none"> In a few places indicators could be more descriptive. For example, in level 5 of <i>Mathematical Communication</i>, might a statement like “someone reading my explanation would know exactly what I did” be more helpful to students than “my explanation was clear and organized?” Another example: In <i>Problem Solving</i>, level 3 uses the word “struggle.” Might this be better to describe a performance lower than level 3, “On the way!”? This is a student-friendly version appropriate for the grade levels specified.
	2B: Levels Parallel	4	<ul style="list-style-type: none"> The levels are mostly parallel, but there are a couple of questions. For example, level 5 on <i>Mathematical Communication</i> specifies “words, pictures, and numbers.” How does this play out at the other levels?