



Tutor English Learner (EL) Support Math Resource Sample

RESOURCE SAMPLES FROM GRADES K–8

This resource includes sample excerpts from our Tutor English Learner (EL) Support materials—resources we provide to tutors, organized by grade level and content area. These materials offer practical strategies that tutors can implement to support English Learners during reading and math tutoring. The following pages highlight sample sections from our tutor math resources across different grade levels.

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Language-Friendly vs. Language-Limiting Practices

Instructional moves that promote language development, engagement, and understanding—alongside common missteps that may unintentionally hinder student progress.

★ Language-Friendly Practices	✕ Language-Limiting Practices
<p>Integrate and revisit key math vocabulary throughout the lesson—highlight academic terms during instruction, discussion, and problem-solving, and prompt students to use them when justifying reasoning, comparing strategies, analyzing errors, or describing relationships between quantities/ideas/processes.</p>	<p>Limiting vocabulary use and not revisiting math terms during instruction and discussion.</p>
<p>Connect academic vocabulary to meaning using visuals and manipulatives (e.g., number lines, diagrams, coordinate planes), and gestures—especially for more abstract or multi-step concepts.</p>	<p>Teaching vocabulary abstractly, without concrete examples, visual cues, or physical models.</p>
<p>Model and reinforce precise math language using sentence starters or frames (e.g., “My equation represents ___ because ___,” or “The rate of change shows ___, so I knew ___.”). Encourage student discourse that uses these terms to compare, clarify, or revise ideas.</p>	<p>Asking ELs to explain their thinking without providing language support or examples.</p>
<p>Invite students to represent mathematical thinking in multiple ways—such as diagrams, number lines, equations, expressions, graphs, or written and verbal justifications—and prompt them to describe how each representation connects to their solution.</p>	<p>Expecting only verbal or written answers without offering or validating alternate ways to represent thinking.</p>
<p>Provide wait time after asking questions and allow students to use manipulatives, drawings, or plan their responses. Follow up with prompts that invite clarification or detail.</p>	<p>Rushing students to respond or interrupting before they’ve had a chance to process or express their thinking.</p>
<p>Use repeated, familiar routines for problem-solving and math discourse to support consistency and confidence in expressing ideas.</p>	<p>Frequently changing routines without scaffolds.</p>
<p>Acknowledge partial responses as entry points and guide students to expand or revise with more precise math language (e.g., “Let’s be more specific—can you describe the type of relationship between the variables?”).</p>	<p>Correcting or dismissing partial or incomplete responses without helping students develop their language and ideas further.</p>
<p>Honor students’ home languages as a tool to help them process, clarify, or explain their thinking— while also modeling English math terms and encouraging their use in supported ways.</p>	<p>Discouraging or ignoring home language use entirely, or relying on it instead of encouraging engagement with English math language.</p>

Additional Best Practices for Supporting EL Students During Math Instruction

- ✓ Embed opportunities for structured peer discussion and math talk, with support (e.g., sentence frames/starters, modeling, visuals).
- ✓ Encourage comparison and justification of strategies by asking students to explain how or why their methods work, using visual models and math language as support.
- ✓ Prompt analysis of errors, patterns, or multiple solution paths to deepen reasoning and academic talk.
- ✓ Check for understanding frequently and in varied ways, such as asking students to show with drawings or manipulatives, explain using math terms, or use sentence frames/starters to share what they noticed or did.

SAMPLE TUTOR RESOURCE CONTENT: GRADES 4–5

Supporting Expressive Language

Tutor questions and sample student sentence starters/frames to support practice and development of expressive language.

FOCUS: Create conjecture using definitions, patterns, and rules

Tutor Question	Sample Student Sentence Starters/Frames
Relating verbs (<i>have, belong to, be</i>) to make a claim (<i>9/15 is equivalent to 3/5 and 6/10 is an equivalent fraction too because they are all multiples</i>)	
What are you noticing about the numbers, shapes, or patterns?	They have the same __ because __.
How do you know it is or is not part of the pattern?	It doesn't belong because __.
Adverbial phrases (<i>for qualities, quantities, frequency</i>) to add precision related to conjecture (<i>The interior angles of a triangle will always add up to 180°</i>)	
Can you describe how often this pattern appears?	It only happens if __.
What does this tell us?	In all cases, __ happens when __.

FOCUS: Generalize commonalities and differences across cases

Tutor Question	Sample Student Sentence Starters/Frames
Conditional clauses (<i>when, if</i>) to extend conjecture (<i>If you remember the inverse operations, you can figure out the missing quantity by...</i>)	
What happens when you try this with other numbers or shapes?	When I try this with __, I notice __.
How could this work in a different example?	If the problem had __, then I would __.
Declarative statements to present generalizable processes (<i>The divisibility rules can help you find all the factor pairs of a product.</i>)	
Can you describe a process that could help someone else solve this?	To solve this kind of problem, first __, then __.

FOCUS: Justify conclusion with patterns or rules

Tutor Question	Sample Student Sentence Starters/Frames
Conditional structures (<i>if/then, when</i>) to demonstrate conclusions (<i>Adding 3 to an even number always gives you an odd number and if you add 3 to an odd number, you will get an even number.</i>)	
Can you explain your thinking using “if/then” or “when” language?	When we __, then __.
Technical nouns and noun groups to add precision and details (<i>exponents, decimals, inverse operations, intersecting lines</i>)	
What math words or terms help explain your thinking?	I used __ like __ to __.
What vocabulary would help make your explanation more exact?	We can describe this using the term __.
Drawings, manipulatives, diagrams, graphs, models to demonstrate thinking	
Can you show your thinking with a drawing or manipulative?	This drawing proves __ because __.
How does this visual help support your answer?	You can see from the __ that __.

FOCUS: Create conjecture using definitions, patterns, and rules

Tutor Question	Sample Student Sentence Starters/Frames
Questions (<i>how, what, why</i>) and requests (<i>could, would</i>) to ask for clarification or information (<i>How did you know how to start? Could you explain this part of your diagram?</i>)	
Can you ask your peer about his work?	Could you explain __?
Do you have any questions about the process?	Why did you __?
Declarative statements to disagree/debate (<i>I don't think that's right, I disagree, how did you, I did it differently, let's compare our process</i>)	
Why do you disagree?	I don't think __ is right because __.
What did you do differently?	My process was different because I __.

Building Math Vocabulary and Academic Language

Strategies tutors can use to make abstract terms concrete, promote precise language, and help students explain their mathematical thinking with confidence.

Strategy	Implementation Suggestions
<p>Use Visuals, Real-World Contexts, and Manipulatives to Introduce Vocabulary</p>	<p>Introduce new math terms using visual models, real-life examples, and manipulatives that reflect familiar contexts. For example, demonstrate “array” using counters or “half” using a folded paper strip. Ask students to describe what they notice or what the word reminds them of.</p>
<p>Model and Repeat Academic Vocabulary in Context</p>	<p>Use math terms naturally and repeatedly in complete sentences (e.g., “We decomposed 15 into 10 and 5”). Then invite students to restate or rephrase the explanation using the same math language.</p> <p>Example: “Can you say that using the word decomposed?”</p>
<p>Encourage Use of Sentence Frames for Math Talk</p>	<p>Provide structured frames such as “I noticed ___, so I ___,” “I solved it by ___ because ___,” or “I agree/disagree because ___.” to help students explain how they solved a problem or what they notice confidently and clearly.</p>
<p>Highlight Vocabulary During Hands-On Problem Solving</p>	<p>While working with numbers, shapes, or patterns, name the math terms aloud and prompt students to do the same (e.g., “You’re comparing the sides. What do you notice about the lengths?”).</p> <p>Encourage students to use the terms as they explain or describe.</p>
<p>Celebrate and Expand Student Language</p>	<p>Acknowledge students’ initial ideas in any language or form, and build toward precise academic vocabulary. For example, if a student says “They’re the same,” you might reply, “Yes, they are equal.” Then ask, “Can you say that again using the word equal?”</p> <p>Encourage students to try using new math terms even if they aren’t fully confident yet.</p>

Using and Encouraging Multiple Representations in Math

Strategies tutors can use to model and prompt students to represent mathematical thinking in different ways—such as drawings, symbols, number lines, equations, or verbal explanations.

Strategy	Implementation Suggestions
<p>Follow the Concrete–Representational–Abstract (CRA) Progression</p>	<p>Lean into the curriculum’s progression from concrete (building), to representational (drawing) representations, to abstract (writing using symbols and numbers).</p> <p>Support EL students by pausing to reinforce language at each level and prompting them to describe what they’re doing using visuals, gestures, or sentence frames/starters when appropriate.</p>
<p>Visuals</p>	<p>Use number lines, ten-frames, drawings, or charts to help students visualize math concepts – and encourage student use of these as well. Ask students to point to or describe what they see using language.</p>
<p>Objects & Actions</p>	<p>Encourage students to use manipulatives, or gestures when solving problems or explaining their thinking. Ask prompting questions like: “Can you show me what happened when you added?” or “How do you know ___”</p>
<p>Verbal Explanation</p>	<p>Prompt students to explain what they did or noticed using sentence frames or starters (e.g., “I added ___ and ___” or “I see ___, so I think ___” or “It changed because ___.”). Encourage them to describe steps, compare ideas, or ask peers questions.</p>