

Math Content Review Guidance Document

Rubric Indicator	Guidance
<p>Materials support using and encouraging precise and accurate mathematics, academic language, terminology, and concrete or abstract representations (e.g. pictures, symbols, expressions, equations, graphics, and models) in grade appropriate math.</p>	<p>Are students asked to use precise and accurate mathematics, academic language, terminology, and concrete or abstract representations (e.g. pictures, symbols, expressions, equations, graphics, and models) in solving grade appropriate problems? What strategies do the materials provide for students to do so?</p>
<p>Materials provide supports to create structures for grade appropriate arguments and explanations, diagrams, mathematical models, etc., to strengthen student learning.</p>	<p>Do student materials include questions or problems where students are asked to justify a claim with mathematics, make conjectures and build a logical progression of statements to explore the truth of their conjectures, analyze situations by breaking them into cases, and recognizing counterexamples?</p> <p>Do materials include questions or problems where students justify their conclusions, communicate them to others, and respond to the arguments of others?</p> <p>Do materials include questions where students reason inductively about data, making plausible arguments that take into account the context from which the data arose?</p> <p>Are there directions for the teacher, in teacher’s guides, and lesson and unit overviews to assist students in constructing viable arguments and analyzing the arguments of others?</p> <p>Look at the directions to the teacher in lessons for:</p> <ul style="list-style-type: none"> ○ prompts, ○ sample questions to ask, ○ guidance on leading student discussions, and ○ problems to pose to students.
<p>Teacher materials contain full, adult-level explanations and examples of the more advanced mathematics concepts in the lessons so teachers can improve their own knowledge of the subject. Materials are in print or clearly distinguished/accessibile</p>	<p>Do the materials include explanations and examples of the course level mathematics for the teacher that are <i>not</i> designed to be used with students?</p> <p>Do the materials include explanations and examples that build the teacher’s understanding of the mathematics?</p>

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as a teacher's edition in digital materials.	Do the materials include explanations and examples appropriate for teachers of mathematical concepts that extend beyond the current course?
Teacher materials contain supports that explain the role of the mathematical focus of each lesson within the specific grade-level and how it relates to the coherence of the mathematical learning progressions for kindergarten through grade twelve.	<p>How do the instructional materials provide information that explains the progression of the content within the grade-level, and connections to prior and future grade-levels?</p> <p>Is it clear to the teacher how the specific mathematics standards connect to other standards within the series?</p>
Teacher materials provide insight into student ways of thinking with respect to important mathematical concepts - especially anticipating a variety of student responses.	How do the teacher materials provide insight into student ways of thinking with respect to important mathematical concepts? How do the materials anticipate a variety of student responses? Are there specific examples of how the students might think?
Materials provide strategies to elicit mathematical discourse among students.	Do the materials give opportunities for students to discuss the math using specified strategies? Are the strategies for discourse blatant in the materials?
Materials contain strategies for informing parents or caregivers about the mathematics program and suggestions for how they can help support student progress and achievement.	<p>Do the materials provide strategies for informing students, parents, or caregivers about the mathematics program? (Look for items such as newsletters, articles, and web links to share with all.)</p> <p>Do the materials provide suggestions for how parents or caregivers can help support student progress and achievement? (Look for strategies or items that can be shared with parents and caregivers, such as homework help strategies, letters to parents, or online support.)</p>

Resources:

K-8 Math Evidence Guides Combined, edreports.org

HS Math Evidence Guides Combined, edreports.org