# Tri-State Quality Review Rubric for Mathematics Lessons & Units – Version 4

**Grade:** Mathematics  
**Lesson/Unit Title:**

<table>
<thead>
<tr>
<th>I. Alignment to the Rigor of the CCSS</th>
<th>II. Key Areas of Focus in the CCSS</th>
<th>Overall Rating</th>
</tr>
</thead>
</table>
| The lesson/unit aligns with the letter and spirit of the CCSS:  
- Targets a set of grade level mathematics standard(s) at the level of rigor in the CCSS for teaching and learning. **  
- Standards for Mathematical Practice that are central to the lesson are identified, handled in a grade-appropriate way, and well connected to the content being addressed.**  
- Presents a balance of mathematical procedures and deeper conceptual understanding inherent in the CCSS. | The lesson/unit reflects evidence of key shifts that are reflected in the CCSS:  
- **Focus:** Centers on the concepts, foundational knowledge, and level of rigor that are prioritized in the standards. **  
- **Coherence:** Makes connections and provides opportunities for students to transfer knowledge and skills within and across domains and learning progressions.  
- **Rigor:** Requires students to engage with and demonstrate challenging mathematics in the following ways:  
  - **Application:** Provides opportunities for students to independently apply mathematical concepts in real-world situations and problem solve with persistence, choosing and applying an appropriate model or strategy to new situations.  
  - **Conceptual Understanding:** Requires students to demonstrate conceptual understanding through complex problem solving, in addition to writing and speaking about their understanding.  
  - **Procedural Skill and Fluency:** Expects, supports, and provides guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately. | Observations and Comments:  
Suggestions for Improvement:  
Rating: 3 2 1 0 | Observations and Comments:  
Suggestions for Improvement:  
Rating: 3 2 1 0 |

**Rating Scale for Each Dimension:**

- Rating: 3: Meets all "must have" criteria (**) and most of the other criteria in the dimension.  
- Rating: 2: Meets many of the "must have" criteria and many of the other criteria in the dimension.  
- Rating: 1: Meets some of the criteria in the dimension.  
- Rating: 0: Does not meet the criteria in the dimension.  
- Rating: E: Exemplar Lesson/Unit - meets all the "must have" criteria (**) and most of the other criteria in all four dimensions (mainly 3's).  
- Rating: E/I: Exemplar if Improved - needs some improvement in one or more dimensions (mainly 3's and 2's).  
- Rating: R: Needs Revision - is a "work in progress" and requires significant revision in one or more dimensions (mainly 2's and 1's).  
- Rating: N: Not Recommended - does not meet the criteria in the dimensions (mainly 1's and 0's).  
- Rating: N/R: Not ready to review -- use rubric to revise and organize lesson/unit then resubmit for a quality review.

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Quality Rubric created by the Tri-State Collaborative (Massachusetts, New York, Rhode Island) – facilitated by Achieve 5/17/2012. No changes to this rubric will be considered by the Tri-State Collaborative until after September 3, 2012. A state may use this rubric as is. If a state chooses to modify, it must attribute this work to the Tri-State Collaborative.
### III. Instructional Supports

**The lesson/unit is responsive to varied student learning needs:**
- Includes clear and sufficient guidance to support teaching and learning of the targeted standards, including, when appropriate, the use of technology and media. **
- Uses and encourages precise and accurate mathematics, academic language, terminology, and concrete or abstract representations (e.g. pictures, symbols, expressions, equations, graphics, models) in the discipline. **
- Engages students in productive struggle through relevant, thought-provoking questions, problems, and tasks that stimulate interest and elicit mathematical thinking.
- Addresses instructional expectations and is easy to understand and use.

**The lesson/unit is easy to understand and use:**
- Provides appropriate level and type of scaffolding, differentiation, intervention, and support for a broad range of learners.
- Supports diverse cultural and linguistic backgrounds, interests, and styles.
- Provides extra supports for students working below grade level.
- Provides extensions for students with high interest or working above grade level.

**A unit or longer lesson should:**
- Recommend and facilitate a mix of instructional approaches for a variety of learners such as using multiple representations, (including models) using a range of questions, checking for understanding, flexible grouping, pair-share, etc.
- Gradually remove supports, requiring students to demonstrate their mathematical understanding independently.
- Demonstrate an effective sequence and a progression of learning where the concepts or skills advance and deepen over time.
- Expect, supports, and provides guidelines for procedural skill and fluency with core calculations and mathematical procedures (when called for in the standards for the grade) to be performed quickly and accurately.

**Observations and Comments:**

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**Suggestions for Improvement:**

**IV. Assessment**

**The lesson/unit regularly assesses whether students are mastering standards-based content and skills:**
- Is designed to elicit direct, observable evidence of the degree to which a student can independently demonstrate the targeted CCSS. **
- Assesses student proficiency using methods that are accessible and unbiased, including the use of grade level language in student prompts. **
- Includes aligned rubrics, answer keys, and scoring guidelines that provide sufficient guidance for interpreting student performance. **

**A unit or longer lesson should:**
- Use varied modes of curriculum embedded assessments that may include pre-, formative, summative and self-assessment measures.

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**Suggestions for Improvement:**

**Summary Comments:**

**Rating Scale for Each Dimension:**

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2: Meets many of the "must have" criteria and many of the other criteria in the dimension.
1: Meets some of the criteria in the dimension.
0: Does not meet the criteria in the dimension.

**Overall Rating for the Lesson/Unit:**

E: Exemplar Lesson/Unit - meets all the "must have" criteria (**) and most of the other criteria in all four dimensions (mainly 3’s).
E/I: Exemplar if Improved - needs some improvement in one or more dimensions (mainly 3’s and 2’s).
R: Needs Revision - is a "work in progress" and requires significant revision in one or more dimensions (mainly 2’s and 1’s).
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