**Criteria Discussion Guide – Mathematics**

**Purpose**

This criteria guide is intended for use by facilitators to guide conversations during norming or calibration sessions.

**Overall Guidance**

As reviewers work to norm and/or calibrate judgments, facilitators should be prepared to guide conversations among table and whole groups in order to surface and resolve misconceptions about the interpretation of the criteria in each dimension. After reviewers have checked dimensional criteria, recorded observations and discussed their feedback as a group, ask tables to share reflections with the room.

* *Use the examples of criterion-based feedback and ratings in the slides to guide reviewers to reflect on the quality of the observations and feedback they have generated.*
* Compare both the degree to which commentary is based on the examples found in the common unit and the degree to which the suggestions are framed in the language and spirit of the criteria.
* Explain that criteria may only be checked if there is clear and substantial evidence of the criterion (there are no “half-checks”). *There may be instances when reviewers find clear and substantial evidence of a criterion and there are still constructive suggestions that can be made. In such cases, reviewers should provide feedback related to criteria that have been checked.*

**Guidance by Dimension**

**Dimension I: Alignment**

Dimension I is non-negotiable. In order for the review to continue, a rating of 2 or 3 is required. If the review is discontinued, consider general feedback that might be given to developers regarding next steps.

As reviewers apply the criteria in Dimension I it is helpful to ask the following clarifying questions regarding criteria 1, 2, and 3:

* For criterion 1 – Does the lesson/unit articulate alignment to a reasonable standard or set of standards? Do the assignments, tasks, and activities suggest that a standard or set of standards has been targeted for instruction? Does the lesson/unit make a distinction between targeted and supporting standards? Do the assignments and activities make sense given the standards listed? Does the lesson/unit address the targeted standards at the full depth defined in the standards?
* For criterion 2 – Which Standards for Mathematical Practice are identified? Which mathematical practices do the assignments and activities provide opportunity for students to demonstrate? Is a focused set of mathematical practices identified that are central to the lesson/unit? Are the mathematical practices tied closely to the content of the lesson or unit?
* For criterion 3 – Do the assignments and activities provide opportunities for students to practice mathematical procedures and deepen the emphasized concepts with a balance appropriate for the content and for the grade level?

**Dimension II: Key Shifts**

As reviewers apply the criteria in Dimension II it is helpful to ask the following questions regarding criteria 1, 2, and 3:

* For criterion 1 –Does the content of the lesson/unit belong to the Common Core State Standards’ emphases (major work) for the grade? Are any aspects of the lesson that relate to supporting work of the grade closely tied to this grade-level focus?
* For criterion 2 – Does the lesson/unit provide teachers with connections to related expectations in earlier and later grades? Does it address the “big picture” as specified in the relevant cluster heading? Does it help students make connections among standards within a cluster, clusters within a domain, or domains within a grade?
* For criterion 3 – The three aspects of rigor are concepts, procedures/fluency and application. Does the lesson or unit emphasize some aspect(s) more than others? (For example, the lesson or unit might emphasize conceptual understanding but not application or procedure.) Given the goals of the lesson or unit, is the emphasis appropriate and logical? (Facilitators should inform raters that a lesson involving only a single aspect of rigor can receive a score of 3 for Dimension II, provided the single aspect of rigor that is present is handled well in the lesson.) For a unit or longer lesson: How do the instructional materials present a balance of application, conceptual understanding, and procedural skill and fluency?

**Dimension III: Instruction**

As reviewers apply the criteria in Dimension III refer them to the language used in each criterion. It may also be helpful to ask the following questions regarding the criteria:

* For criterion 1 – Does the lesson/unit provide clear directions and guidance so that even an inexperienced teacher can successfully guide students to an understanding of the targeted standards? If appropriate, are technology and/or media applied in the lesson/unit?
* For criterion 2 – Does this set of instructional materials clearly identify and work to develop key academic language and accurate and precise mathematics?
* For criterion 3 – Do you see evidence that all students are given opportunities to engage in a productive struggle through thought-provoking questions with little scaffolding?
* For criterion 4 – Does the lesson include expectations for how the instruction should take place and whether the overall organization/format is easy to understand and use?
* For criterion 5 – Is there evidence in the lesson/unit that support is provided for a range of learners, including students working both below and above grade level and those who are English language learners?
* For criteria 6 through 8 – Is there a mix of instructional approaches, a gradual removal of supports, and an effective sequence for the activities of the lesson/unit? Is there opportunity for student understanding to deepen over the course of the lesson/unit?
* For criterion 9 – Does the lesson/unit emphasize and support an appropriate balance of procedural and conceptual understanding?

NOTE: There is an important distinction to be made between criterion 3, which is primarily about opportunity and criterion 5 through 8, which are primarily about access.

* + Note that criterion 3 asks reviewers to look for evidence that all students are given opportunities to engage with problems and tasks that require them to struggle productively in their solution. Criterion 3 ***does not require*** evidence of scaffolds specific to special learning or language needs. Rather, criterion 3 asks for evidence that all students are expected to and given opportunity to do challenging mathematical work.
	+ Note that criterion 5 ***does require*** evidence that the lesson/unit includes supports that address a range of learning and language needs.

**Dimension IV: Assessment**

As reviewers apply the criteria for Dimension IV it is helpful to ask the following questions regarding criteria 1, 2, and 3:

* For criterion 1 – Does the lesson/unit provide opportunities for students to independently demonstrate their understanding?
* For criterion 2 – Do students have multiple ways to show what they have learned?
* For criterion 3 – Is there evidence that the assessments produce a description of how close students have come to meeting expectations (e.g., annotated student work, descriptive rubrics/checklists)?