Mathematics Resource Alignment Tool[1]

1. **Rate the resource against the criteria in the Mathematics Resource Alignment Tool**. Use the dimensions and the evidence statements in the tool to guide your ratings. Record strengths and weaknesses for each key criterion (Focus, Coherence, and Rigor).

2. **Determine the high-value actions needed to fill gaps for the dimensions that make up each criterion.** Identify the high-value action(s) related to each criterion that will strengthen the alignment of the resource to your college and career readiness (CCR) standards. High-value actions are those that will bring your resource into much closer alignment to the standards. In many cases, while the actions take some effort, they can be efficiently executed.

3. **Give an overall score for the resource.** Summarize the overall strengths and weaknesses of the resource with respect to the three criteria to score the resource.

4. **Begin the lesson revision process.** Review the ratings and the high-value actions you identified and choose one lesson in the resource to begin the revision process. Use the Focus on the Major Work of the Level (#4) and the Mathematics Lesson Revision Template (#5) to catalogue your improvements to the lesson. To assist with the revisions, use your CCR standards and other support documents, such as the CCR Content Progressions (#2) and Standards for Mathematical Practice (#3).

Individual Dimension Rating Descriptors

Meets	There is evidence in the resource to indicate that this dimension is met.
Partially Meets	There is evidence in the resource to indicate that the dimension can be met with some revision.
Does Not Meet (Insufficient Evidence)	There is little or no evidence in the resource to indicate that this dimension is being met. Substantial revision is needed for alignment.

[1] Adapted from *Publishers' Criteria for the Common Core State Standards in Mathematics.* Washington, DC. Accessed January 13, 2015. http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_K-8_Spring_2013_FINAL1.pdf and http://www.corestandards.org/wp-content/uploads/Math_Publishers_Criteria_HS_Spring_2013_FINAL1.pdf; *Toolkit for Evaluating Alignment of Instructional and Assessment Materials to the Common Core State Standards*. http://achievethecore.org/content/upload/Materials-Alignment-Toolkit_Version2%20(9)[1].pdf

Criterion #1—Focus: Does the resource focus strongly where the standards focus, including relevant Standards for Mathematical Practice?

Dimension 1.1	**Meets**	**Partially Meets**	**Does Not Meet (Insufficient Evidence)**
Major Work of the Level (MWOTL): *Most* lessons in the resource are focused on the most critical concepts for that level. *(Support document: CCR Content Progressions [#2])*	Evidence: • Standards addressing the MWOTL are targeted by the resource (as noted in the table of contents or the sample of lessons). • Extensive work is provided with on-level problems and activities that are tied to the MWOTL. • Activities and tasks addressing supporting standards focus on enhancing the MWOTL.		
Dimension 1.2	**Meets**	**Partially Meets**	**Does Not Meet (Insufficient Evidence)**
Standards for Mathematical Practice: *Each* lesson meaningfully connects mathematical content with the Standards for Mathematical Practice. *(Support document: Standards for Mathematical Practice [#3])*	Evidence: • At least one—but no more than four—of the Standards for Mathematical Practice is targeted in each lesson of the sample reviewed. • The targeted Standards for Mathematical Practice are *central* to the goals of the lessons. • There are descriptions on how to make meaningful connections between the content and the selected Standards for Mathematical Practice in the lessons.		

Criterion #1 (cont.)

Summary of strengths and weaknesses:

High-value actions needed to fill the gaps:

- ☐ Identify the MWOTL in the resource.
- ☐ Identify the MWOTL not covered in the resource that will need to be supplemented by other resources.
- ☐ Identify and add Standards for Mathematical Practice that are central to a lesson (or reduce the number that are addressed) and include a description of how they are related.
- ☐ Other:

Criterion #2—Coherence: Does the resource design learning around coherent progressions between levels and within the level?

Dimension 2.1	Meets	Partially Meets	Does Not Meet (Insufficient Evidence)
Coherence Across Levels: The resource *regularly* relates on-level concepts to knowledge from previous levels and to future learning. *(Support document: CCR Content Progressions [#2])*	Evidence: • The content builds on understandings from previous levels. • Mathematics content from previous levels is clearly identified as "review." • Connections are made as to how the content of this lesson supports, and is connected to, future learning.		

Dimension 2.2	Meets	Partially Meets	Does Not Meet (Insufficient Evidence)
Coherence Within a Level: Where appropriate, the resource connects two or more standards within a progression, or two or more progressions within a level. *(Support document: CCR Content Progressions [#2])*	Evidence: • The content builds on understandings from previous lessons (noted in the table of contents or in a series of lessons). • Lessons ask students to connect knowledge and skills within or across lessons when it is important and natural to do so.		

Criterion #2 (cont.)

Summary of strengths and weaknesses:

High-value actions needed to fill the gaps:

- ☐ Add to lesson's knowledge and skills from prior levels needed to understand content that students are currently learning.
- ☐ Identify "as review" student tasks, activities, or assessment items included in lessons that reference learning at previous levels.
- ☐ Recommend that student activities or assessment items addressing learning at subsequent levels be excluded from a lesson or identified as an extension of work at the current level.
- ☐ Suggest rearranging lessons so the sequence of knowledge and skills learned in the resource has a natural and logical flow to support student learning.
- ☐ Other:

Criterion #3—Rigor: Does the resource pursue conceptual understanding, procedural skill and fluency, and application with equal intensity?

Dimension 3.1	**Meets**	**Partially Meets**	**Does Not Meet (Insufficient Evidence)**
Conceptual Understanding: The resource *regularly* develops students' conceptual understanding through tasks, problems, questions, multiple representations, and opportunities for students to write and speak about their understanding.	Evidence: • Scaffolding supports students' conceptual understanding of the most critical concepts for the level. • Discussion questions requiring conceptual understanding are provided with the lessons. • There are opportunities for students to demonstrate, in multiple ways, their understanding of the critical concepts addressed in the lessons.		
Dimension 3.2	**Meets**	**Partially Meets**	**Does Not Meet (Insufficient Evidence)**
Procedural Skill and Fluency: The resource *regularly* asks students to perform calculations and use mathematical procedures quickly and accurately.	Evidence: • The resource is designed so that students attain the fluencies and procedural skills required by CCR standards. • The resource expects core calculations and mathematical procedures for the level to be performed quickly and accurately and provides the requisite support to build that capacity in students.		

Criterion #3 (cont.)			
Dimension 3.3	**Meets**	**Partially Meets**	**Does Not Meet (Insufficient Evidence)**
Application: The resource *regularly* requires students to engage in challenging applications of mathematics in real-world and mathematical contexts.	Evidence: • The resource is designed so that students spend sufficient time working with engaging applications, without losing focus on the MWOTL. • The resource regularly provides opportunities for students to independently apply mathematical concepts in real-world situations and solve challenging problems that require students to choose an appropriate model or strategy.		

Summary of strengths and weaknesses:

High-value actions needed to fill the gaps:

- ☐ Add problems or tasks that are good matches to the standards targeted in a lesson and that focus on the following areas:
  - o Conceptual understanding of the MWOTL
  - o Challenging application problems
  - o Procedural and computational practice
- ☐ Add high-level discussion questions and instructions targeted toward building conceptual understanding.
- ☐ Other:

Overall Rating:

Tight Alignment	Most (four or more) of the dimensions are rated as **Meets**, with the remainder rated as Partially Meets. There are only a few minor revisions (or none at all) needed to improve alignment of the resource to CCR standards.	
Partial Alignment	Most (four or more) of the dimensions are rated at least as **Partially Meets**. Moderate revisions are needed to improve alignment of the resource to CCR standards.	
Weak Alignment	Most (four or more) of the dimensions are rated as **Does Not Meet**. Substantial revisions are needed to improve alignment of the resource to CCR standards.	
Summary of key strengths and weaknesses:		

Notes: