**Mathematics Resource Alignment Tool[[1]](#footnote-1)**

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| 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.
 | 1. **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.
2. **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).
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**Individual Dimension Rating Descriptors**

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| **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. |

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

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| **Dimension 1.1**  | **Meets** | **Partially Meets** | **Does Not Meet(Insufficient Evidence)** |
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| **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.
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| **Dimension 1.2** | **Meets** | **Partially Meets** | **Does Not Meet(Insufficient Evidence)** |
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| **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.
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| **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:
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**Criterion #2—Coherence: Does the resource design learning around coherent progressions between levels and within the level?**

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| **Dimension 2.1** | **Meets** | **Partially Meets** | **Does Not Meet(Insufficient Evidence)** |
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| **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.
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| **Dimension 2.2** | **Meets** | **Partially Meets** | **Does Not Meet(Insufficient Evidence)** |
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| **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.
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| **Summary of strengths and weaknesses:** **High-value actions needed to fill the gaps:*** Add to lessons 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:
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**Criterion #3—Rigor: Does the resource pursue conceptual understanding, procedural skill and fluency, and application with equal intensity?**

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| **Dimension 3.1** | **Meets** | **Partially Meets** | **Does Not Meet****(Insufficient Evidence)** |
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| **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.
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| **Dimension 3.2** | **Meets** | **Partially Meets** | **Does Not Meet****(Insufficient Evidence)** |
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| **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.
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| **Dimension 3.3** | **Meets** | **Partially Meets** | **Does Not Meet****(Insufficient Evidence)** |
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| **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.
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| **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:
	+ - Conceptual understanding of the MWOTL
		- Challenging application problems
		- Procedural and computational practice
	+ Add high-level discussion questions and instructions targeted toward building conceptual understanding.
	+ Other:
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**Overall Rating:**

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| **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:

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 [↑](#footnote-ref-1)