

## Mathematics CCRS Alignment Evaluation and Rating Tool

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

<p>Dimension 1.1</p> <p><b>Major Work of the Level (MWOTL):</b> Most of the resource is focused on the most critical concepts for that level. (Support document: CCR Content Progressions or Major Works of the Level)</p>	<p>Evidence:</p> <ul style="list-style-type: none"> <li>• Lessons and units targeting the major work of the level (MWOTL) provide an especially in-depth treatment of the standards.</li> <li>• Lessons and units targeting supporting work of the level have a visible connection to a MWOTL and are sufficiently brief.</li> <li>• Extensive work is provided with on-level problems and activities that are tied to the MWOTL.</li> <li>• Activities and tasks addressing supporting standards focus on enhancing the MWOTL.</li> </ul>
<p>Dimension 1.2</p> <p><b>Standards for Mathematical Practice:</b> Each unit meaningfully connects mathematical content with the Standards for Mathematical Practice. (Support document: Standards for Mathematical Practice)</p>	<p>Evidence:</p> <ul style="list-style-type: none"> <li>• At least one—but no more than four—of the Standards for Mathematical Practice is targeted in each lesson of the sample reviewed.</li> <li>• The targeted Standards for Mathematical Practice are <i>central</i> to the goals of the lessons.</li> <li>• Standards for Mathematical Practice are identified and handled in a level-appropriate way.</li> <li>• Lesson(s) make meaningful connections between the content and the selected Standards for Mathematical Practice.</li> </ul>

**Criterion #2—Rigor:** Does the resource pursue conceptual understanding, procedural skill and fluency, and application with equal intensity?

<p>Dimension 2.1</p> <p><b>Conceptual Understanding:</b> The resource <i>regularly</i> develops students' conceptual understanding through tasks, problems, questions, multiple representations, and opportunities for students to <i>write</i> and <i>speak</i> about their understanding.</p>	<p>Evidence:</p> <ul style="list-style-type: none"> <li>• Scaffolding supports students' conceptual understanding of the most critical concepts for the level.</li> <li>• Discussion questions requiring conceptual understanding are provided with the lessons.</li> <li>• Lesson(s) require students to demonstrate, in multiple ways, their understanding of the critical concepts in the lesson.</li> </ul>
<p>Dimension 2.2</p> <p><b>Procedural Skill and Fluency:</b> The resource <i>regularly</i> asks students to perform calculations and use mathematical procedures quickly and accurately.</p>	<p>Evidence:</p> <ul style="list-style-type: none"> <li>• The resource is designed so that students attain the fluencies and procedural skills required by CCR standards in both core calculations and mathematical procedures.</li> <li>• The resource is structured to build students' competencies to perform core calculations and mathematical procedures quickly and accurately. Precision with calculations is emphasized.</li> </ul>
<p>Dimension 2.3</p> <p><b>Application:</b> The resource <i>regularly</i> provides opportunities for students to independently apply mathematical concepts in real-world situations and solve challenging problems.</p>	<p>Evidence:</p> <ul style="list-style-type: none"> <li>• Lessons, and units are designed so that students spend sufficient time working with engaging applications, without losing focus on the MWOTL.</li> <li>• Resource includes lessons and/or units which require students to engage in challenging applications of mathematics in real-world and mathematical contexts.</li> </ul>

**Criterion #3—Coherence:** Does the resource design learning around coherent progressions between levels and within the level?

<p>Dimension 3.1</p> <p><b>Coherence Across Levels:</b> The resource <i>regularly</i> relates on-level concepts to knowledge from previous levels and to future learning. (Support document: CCR Content Progressions)</p>	<p>Evidence:</p> <ul style="list-style-type: none"> <li>• The content builds on understandings from previous levels.</li> <li>• Where appropriate, the lesson/unit provides opportunities for students to connect knowledge and skills from <u>across</u> clusters, domains, and learning progressions.</li> <li>• Mathematics content from previous levels is clearly identified as “review.”</li> <li>• Connections are made as to how the content of this lesson supports, and is connected to, future learning.</li> </ul>
<p>Dimension 3.2</p> <p><b>Coherence Within a Level:</b> 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)</p>	<p>Evidence:</p> <ul style="list-style-type: none"> <li>• Where appropriate, the lessons and/or units provide opportunities for students to connect knowledge and skills from <u>within</u> clusters, domains, and learning progressions.</li> <li>• The content builds on understandings from previous lessons (noted in the table of contents or in a series of lessons).</li> <li>• Lessons ask students to connect knowledge and skills within or across lessons when it is important and natural to do so.</li> </ul>

**Criterion #4—Structure, Support and Assessment:** Does the resource provide structure and support for standards-aligned instruction and assessment?

<p>Dimension 4.1</p> <p><b>Structure &amp; Support:</b> The resource is responsive to varied student learning needs.</p>	<p>Evidence:</p> <ul style="list-style-type: none"> <li>• Engages students in productive struggle through relevant, thought provoking questions, problems and tasks that stimulate interest and elicit mathematical thinking.</li> <li>• Provides appropriate level and type of scaffolding, differentiation, intervention and support for a broad range of learners, including students with disabilities and ELs.</li> <li>• <u>Units or longer lessons should:</u> <ul style="list-style-type: none"> <li>• Recommend and facilitate a mix of instructional approaches for a variety of learners such as using multiple representations</li> <li>• Gradually remove supports, requiring students to demonstrate their mathematical understanding independently.</li> <li>• Demonstrate an effective sequence and a progression of learning where the concepts or skills advance and deepen over time.</li> </ul> </li> </ul>
<p>Dimension 4.2</p> <p><b>Assessment:</b> The resource <i>regularly</i> provides opportunities to assess whether students are mastering standards-based content and skills.</p>	<p>Evidence:</p> <ul style="list-style-type: none"> <li>• The resource is designed to elicit direct, observable evidence of the degree to which a student can independently demonstrate the targeted standards.</li> <li>• Includes aligned and unbiased rubrics, answer keys and scoring guidelines that provide sufficient guidance for interpreting student performance.</li> <li>• <u>Units or longer lessons should:</u> <ul style="list-style-type: none"> <li>• Use varied modes of curriculum-embedded assessments that may include pre-, formative, summative and self-assessment measures</li> </ul> </li> </ul>

## Mathematics CCRS Alignment Evaluation and Rating Tool

Title of Resource: Prep for the GED (Math)-Unit 7: Functions & Graphs Source/Publisher: Edmentum (PLATO)

Date of Publication: © 2018 Evaluation Date: March 2018

1. Rate the resource using the dimensions and evidence in the Mathematics CCRS Alignment Evaluation Tool.
2. Give an overall score for the resource and summarize the overall strengths and weaknesses of the resource, including best instructional context for use. (Ex. Resource best used for fluency building, not conceptual understanding)

### Individual Dimension Rating Descriptors

Strong Alignment	Little to no revision needed. There is evidence in the resource to indicate that at least <b>80%</b> of the dimension is met.
Modifications Necessary	There is evidence in the resource to indicate that at least <b>50%</b> of the dimension is met. There <u>may</u> be potential to use the resource with revisions.
Weak Alignment	There is little to no evidence in the resource to indicate the dimension is met. Consider choosing another resource.

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

Dimension	Strong	Modifications Necessary	Weak
Dimension 1.1 <b>Major Work of the Level (MWOTL)</b>	This resource focuses on the MWOTL 8.F.1		
Dimension 1.2 <b>Standards for Mathematical Practice</b>	It also addresses 8.EE.7, 8.F.4 and 8.F.5	Narrow the list of SMP to the ones addressed in this lesson	

### Criterion #2—Rigor: Does the resource pursue conceptual understanding, procedural skill and fluency, and application with equal intensity?

Dimension	Strong	Modifications Necessary	Weak
Dimension 2.1 <b>Conceptual Understanding</b>	X	This resource is aligned with common core; it does a very good job pursuing conceptual understanding, fluency and application. There are frequent self-checks for understanding throughout each module.	
Dimension 2.2 <b>Procedural Skill and Fluency</b>	X		
Dimension 2.3 <b>Application</b>	X		

### Criterion #3—Coherence: Does the resource design learning around coherent progressions between levels and within the level?

Dimension	Strong	Modifications Necessary	Weak
Dimension 3.1 <b>Coherence <u>Across</u> Levels</b>	This resource brings in standards from Level C (6.EE.x) and bridges to Level E (F.IF.x)	X	
Dimension 3.2 <b>Coherence <u>Within</u> a Level</b>	The lesson also incorporates other standards <i>within</i> Level D, & RP, for example.	X	

**Criterion #4—Structure, Support and Assessment: Does the resource provide structure and support for standards-aligned instruction and assessment?**

Dimension	Strong	Modifications Necessary	Weak
Dimension 4.1 <b>Instructional Supports</b>	There are not many instructional supports built-in for students struggling.		X
Dimension 4.2 <b>Assessment</b>	X	PLATO does a good job with assessments. There are several formative assessments built-in to each module, and each module has a Mastery test, as well as a Unit Test for each unit.	

**Overall Rating:** Check one      Strong Alignment          Modifications Necessary          Weak Alignment   

Summary of key strengths and weakness:

PLATO is aligned to Common Core (and, therefore aligned to CCRS). My evaluation focused on one of the nine Units that encompasses the GED Preparation for Mathematics ‘Course’ (v 2.0) in PLATO. The other Units are: 1) Number Sense; 2) Factoring Polynomials; 3) Polynomial and Rational Expressions; 4) Linear Equations and Inequalities; 5) System of Equations; 6) Quadratic Equations; 7) *Functions and Graphs*; 8) Geometry; 9) Probability and Statistics. The lessons/modules are strongly aligned to CCRS. In addition, within each module there are frequent opportunities for Formative assessments to check for understanding. Furthermore, there are Mastery tests (Mastery is 80%) at each Module, Unit and Course.

One of the weaknesses to PLATO’s curriculum is the fact that there are few instructional supports built-in to the modules. If a student does not reach mastery level in a specific module, the module mastery test will “lock.” To ‘unlock’ the assessment and retake it, the student must redo the tutorial portion of the lesson to its completion. Upon completion of the module tutorial the mastery test will re-open.