

## Introduction to the PARCC Model Content Frameworks for Mathematics

### Resource Materials

[The PARCC Model Content Frameworks for Mathematics](#) is a document produced by the Partnership for Assessment of Readiness for College and Careers (PARCC) with the intent of creating a link between the *Common Core State Standards* (CCSS) and the upcoming PARCC assessment. As such, it is an invaluable tool when districts are considering the implementation of the CCSS. In its current form, the Frameworks is particularly informative for teachers and curriculum writers for grades 3 through 8.<sup>1</sup> While it does not claim to be an exhaustive document, it offers useful examples of such things as opportunities to connect the Standards for Mathematical Content with the Standards for Mathematical Practice, key content advances from previous grades, and expected fluencies for a grade. Additionally, the document offers a breakdown of content clusters with respect to the instructional emphasis they should receive for a grade level. These three categories, Major, Supporting, and Additional, are also indicative of the amount of emphasis clusters will receive on the PARCC summative assessment.

RIDE has developed a summary of the essential content of the Frameworks for grades 3-8 into a table format. This resource is **not** meant to supplant the formal document which is rich in narrative and description, but to provide educators with a reference sheet for these grades. The intention of this document is to inspire educators to take a deeper dive into the Frameworks and use it to better inform design of curriculum, instruction, and assessment.

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<sup>1</sup> To date, the [High School](#) section of the Frameworks is not as comprehensive in its guidance. It is expected that this portion of the Frameworks will offer increased guidance to high school educators. A release of the High School section is anticipated by August 2012.

## Grade 3 Mathematics Content Emphasis by Cluster Chart

Based on analysis of the Common Core State Standards for Mathematics, the *PARCC Model Content Frameworks* has prioritized clusters of standards at each grade level. These categories, Major, Supporting, and Additional, are based on the depth of the ideas contained in the clusters and the time needed to master these ideas. This is not to say that any cluster can be ignored during instruction for this would produce gaps in student learning. Furthermore, all CCSS standards are eligible for inclusion on the PARCC summative assessment. Suggestions for how concepts in the Supporting Clusters can be linked to the Major Clusters are provided in the full Frameworks document.

<b>Domain</b>	<b>Major Clusters</b>	<b>Supporting Clusters</b>	<b>Additional Clusters</b>
<b><i>Operations &amp; Algebraic Thinking</i></b>	<ul style="list-style-type: none"> <li>-Represent and solve problems involving multiplication and division</li> <li>-Understand properties of multiplication and the relationships between multiplication and division</li> <li>-Multiply and divide within 100</li> <li>-Solve problems involving the four operations, and identify and explain patterns in arithmetic</li> </ul>		
<b><i>Number &amp; Operations in Base Ten</i></b>		-Use place value understanding and properties of operations to perform multi-digit arithmetic	
<b><i>Number &amp; Operation - Fractions</i></b>	-Develop understanding of fractions as numbers		
<b><i>Measurement &amp; Data</i></b>	<ul style="list-style-type: none"> <li>-Solve problems involving measurement and estimation of intervals of time, liquid, volumes, and masses of objects</li> <li>-Geometric measurement: understand concepts of area and relate area to multiplication and addition</li> </ul>	-Represent and interpret data	-Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures
<b><i>Geometry</i></b>		-Reason with shapes and their attributes	

## Grade 3 PARCC Model Content Frameworks Summary Chart

Examples of Key Advances from Previous Grade	Fluency Expectations or Examples of Culminating Standards	Examples of Major Within-Grade Dependencies	Examples of Opportunities for Connections among Standards, Clusters, or Domains	Examples of Opportunities for In-Depth Focus	Examples of Opportunities for Connecting Mathematical Content and Mathematical Practices
Enlarge concept of number to include understanding of fractions as numbers	<b>3.OA.7</b>	<b>(3.MD.5-7)</b> instruction supports the teaching of multiplication and division in <b>(3.OA)</b> ; these standards should be placed at the beginning of the year	<b>(3.G.2)</b> relates to <b>(3.NF)</b>	<b>3.OA.3</b>	Using strategies for finding products and quotients based on properties of operations connects to <b>(MP.3,7)</b>
Move from an understanding of addition and subtraction to multiplication and division	<b>3.NBT.2</b>		<b>(3.MD.3)</b> can provide context for multiplication and division problems	<b>3.OA.7</b>	Analyzing a number of situation types for multiplication and division connects to <b>(MP.4,6,7,8)</b>
				<b>3.NF.2</b>	
				<b>3.MD.2</b>	
				<b>3.MD.7</b>	