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.[1] 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.

[1] 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 6 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.

Domain	Major Clusters	Supporting Clusters	Additional Clusters
Ratios & Proportional Reasoning	-Understand ratio concepts and use ratio reasoning to solve problems		
The Number System	-Apply and extend previous understandings of multiplication and division to divide fractions by fractions -Apply and extend previous understandings of numbers to the system of rational numbers		-Compute fluently with multi-digit numbers and find common factors and multiples
Expressions & Equations	-Apply and extend previous understandings of arithmetic to algebraic expressions -Reason about and solve one-variable equations and inequalities -Represent and analyze quantitative relationships between dependent and independent variables		
Geometry		-Solve real-world and mathematical problems involving area, surface area, and volume	
Statistics & Probability			-Develop understanding of statistical variability -Summarize and describe distributions

Grade 6 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
Build on previous understanding of multiplication, division, and fractions to study of ratio, unit rate, and proportion **(6.RP)**	**6.NS.1**	Fraction work with **(6.NS.1)** can impact work with equations in **(6.EE.7)**	Representation of proportional relationships **(6.RP)** can be combined with relationships between independent and dependent variables **(6.EE.9)**	**6.RP.3**	Expression work can connect to **(MP.1,2,7)**
Extend understanding of the properties of operations to variable, expressions, and equations **(6.EE)**	**6.NS.2**	Solving problems by writing and solving equations **(6.EE.7)** relies on work with **(6.EE.2)** and **(6.EE.5-6)**	Plotting in the coordinate plane **(6.NS.8)** connects to proportional relationships **(6.RP.3a)**	**6.NS.1**	Equation work can connect to **(MP.3,7,8)**
Extend understanding of the system of rational numbers to include positive and negative numbers **(6.NS.5-7)**	**6.NS.3**	Placing rational numbers on the number line **(6,NS.7)** must precede the placement of ordered pairs of rational numbers on the coordinate plane **(6.NS.8)**	Recognizing common factors **(6.NS.4)** connects to the rewriting of expressions **(6.EE.3)**	**6.NS.8**	Graphs representing proportional relationships can connect to **(MP.2,4,5)**
Work with measurement data extends to statistical thinking **(6.SP)**			Work with expressions **(6.EE.1-4)** and solving equations and inequalities **(6.EE.7-8)** can be combined with volume**(6.G.2)**	**6.EE.3**	Area, surface area, and volume concepts can connect to **(MP.4,6)**
			Work with data sets provides the opportunity to work with estimation and mental computation	**6.EE.7**	Use of variables, expressions, and equations to solve problems **(6.EE.6-7)** connect to **(MP.2,6)**
					Data work connects to **(MP.5)**