Appendix 2-G: Pilot Development Partner Report: Pilot Phase 2 Blueprint and Forms

Blueprints

The academic content and skills measured by a test and distributions of emphasis are set forth in the test blueprints and test specifications along with the number of points possible in each category. Exhibits 1 and 2 illustrate the approximate overall distributions of emphasis by grade for ELA and mathematics for the summative assessments. These overall blueprint weights are reflected across four pilot forms for the Pilot Phase 2.

Exhibit 1. Overall Weights of Content Category by Grade Level (ELA)

ELA Content Category	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8	Gr 11
Reading Literary	30%	30%	30%	20%	20%	20%	15%
Reading Informational	25%	25%	30%	40%	40%	40%	45%
Reading Vocabulary	9%	9%	10%	10%	10%	10%	10%
Reading Foundation	6%	6%					
Writing	30%	30%	30%	30%	30%	30%	30%

Exhibit 2. Overall Weights of Content Category by Grade Level (Mathematics)

Math Content Category	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8	Gr 11
Operations and Algebraic Thinking	30%	30%	10%				
Number and Operations Base Ten	20%	10%	40%				
Number and Operations Fractions	20%	30%	20%				
Measurement and Data	20%	20%	20%				
Geometry	10%	10%	10%	10%	20%	30%	10%
Ratio and Proportions				30%	40%		
Expressions and Equations				20%	10%	20%	
The Number System				30%	20%	10%	
Statistics and Probability				10%	10%	20%	20%
Functions						20%	
Algebra and Functions							50%
Number and Quantity							20%

The NCSC reading, ELA, and mathematics Pilot Phase 2 tests contained both selected-response items, open-response items and constructed-response items. Each item measures a single CCC's focal KSA. Selected-response items have three or two response options and do not use "none of the above" or "all of the above" as response options. In all three content areas, each selected-response item was counted as one point. In reading, each set of open-response items were considered as a single item and worth one point. The mathematics constructed-response items were each counted as one point. The ELA constructed-response items (a "writing prompt"), asked a student to write a composition in response to a prompt. Each prompt response was then scored against three skills, and was worth up to seven points.

Reading Forms

Reading consisted of four forms with two stages or sessions. Session 1 was common across all forms within a grade. It consisted of two literary passages and one informational passage at grades 3 through 5, and two informational and one literary passage at grades 6 through 8 and 11. Session 1 was coupled with one of three Session 2 modules: Session 2A, Session 2B, Session 2C, or Session 2D. Each Session 2 included two passages and was designed to cover different tiers and assess overall literacy skills in the CCSS. The structure of the Pilot Phase 2 test design was intended to mirror the overall operational design intended for spring 2015.

Test forms in grades 3 and 4 also contained foundational items, which were developed in either a verbal or nonverbal form. Two versions of each form were created: verbal and nonverbal. The verbal version of the form contained verbal foundational items, and the nonverbal version contained nonverbal foundational items. All other items were the same. Verbal or nonverbal forms were assigned to students based on need as indicated in their enrollment file.

The approximate number of questions on the test at each grade level that assessed each CCC are provided in Exhibits 3 - 9.

Exhibit 3. Reading—Grade 3

Content Category	CCC	Session 1					Session 2A					1 + 2A			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	3.RL.h1	X		X					X			X		X	
	3.RL.i2	X		X					X			X		X	
	3.RL.k2	X		X					X			X		X	
Reading Informational	3.RI.h1		X				X					X	X		
	3.RI.h4		X			+	X				=	X	X		
	3.RI.i2		X				X					X	X		
	3.RI.k5		X				X					X	X		
Vocabulary	3.RWL.i2	X		X					X			X		X	
Foundational	3.RWL.h2		X						X				X	X	

Content Category	CCC	Session 1					Session 2B					1 + 2B			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	3.RL.h1	X		X				X				X	X	X	
	3.RL.i2	X		X				X				X	X	X	
	3.RL.k2	X		X				X				X	X	X	
Reading Informational	3.RI.h1		X						X				X	X	
	3.RI.h4		X			+			X		=		X	X	
	3.RI.i2		X						X				X	X	
	3.RI.k5		X										X		
Vocabulary	3.RWL.i2	X		X				X	X			X	X	X	
Foundational	3.RWL.h2		X				X					X	X		

Exhibit 3. Reading—Grade 3 (continued)

Content Category	CCC	Session 1					Session 2C					1 + 2C			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	3.RL.h1	X		X			X					XX		X	
	3.RL.i2	X		X			X					XX		X	
	3.RL.k2	X		X			X					XX		X	
Reading Informational	3.RI.h1		X						X				X	X	
	3.RI.h4		X			+			X		=		X	X	
	3.RI.i2		X						X				X	X	
	3.RI.k5		X										X		
Vocabulary	3.RWL.i2	X		X			X		X			XX		X	
Foundational	3.RWL.h2		X							X			X		X

Content Category	CCC	Session 1					Session 2D					1 + 2D			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	3.RL.h1	X		X						X		X		X	X
	3.RL.i2	X		X						X		X		X	X
	3.RL.k2	X		X						X		X		X	X
Reading Informational	3.RI.h1		X					X					X		
	3.RI.h4		X			+		X			=		X		
	3.RI.i2		X					X					X		
	3.RI.k5		X										X		
Vocabulary	3.RWL.i2	X		X				X		X		X	X	X	X
Foundational	3.RWL.h2		X					X					X		

Exhibit 4. Reading—Grade 4

Content Category	CCC	Session 1					Session 2A					1 + 2A			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	4.RL.i1	X		X			X					XX		X	
	4.RL.k2	X		X			X					XX		X	
	4.RL.L1	X		X			X					XX		X	
Reading Informational	4.RI.i3		X						X				X	X	
	4.RI.h4		X			+			X		=		X	X	
	4.RI.L1		X						X				X	X	
Vocabulary	4.RWL.i2		X	X			X					X	X	X	
	4.RWL.j1	X										X			
Foundational	4.RWL.h2		X						X				X	X	

Content Category	CCC	Session 1					Session 2B					1 + 2B			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	4.RL.i1	X		X				X				X	X	X	
	4.RL.k2	X		X				X				X	X	X	
	4.RL.L1	X		X				X				X	X	X	
Reading Informational	4.RI.i3		X						X				X	X	
	4.RI.h4		X			+			X		=		X	X	
	4.RI.L1		X						X				X	X	
Vocabulary	4.RWL.i2		X	X				X					X	X	
	4.RWL.j1	X										X			
Foundational	4.RWL.h2		X				X					X	X		

Exhibit 4. Reading—Grade 4 (continued)

Content Category	CCC	Session 1					Session 2C					1 + 2C			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	4.RL.i1	X		X					X			X		X	
	4.RL.k2	X		X					X			X		X	
	4.RL.L1	X		X					X			X		X	
Reading Informational	4.RI.i3		X			+	X				=	X	X		
	4.RI.h4		X				X					X	X		
	4.RI.L1		X				X					X	X		
Vocabulary	4.RWL.i2		X	X					X				X	X	
	4.RWL.j1	X										X			
Foundational	4.RWL.h2		X							X			X		X

Content Category	CCC	Session 1					Session 2D					1 + 2D			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	4.RL.i1	X		X						X		X		X	X
	4.RL.k2	X		X						X		X		X	X
	4.RL.L1	X		X						X		X		X	X
Reading Informational	4.RI.i3		X			+		X			=		X		
	4.RI.h4		X					X					X		
	4.RI.L1		X					X					X		
Vocabulary	4.RWL.i2		X	X						X			X	X	X
	4.RWL.j1	X										X			
Foundational	4.RWL.h2		X					X					X		

Exhibit 5. Reading—Grade 5

Content Category	CCC	Session 1 Tier 1	Session 1 Tier 2	Session 1 Tier 3	Session 1 Tier 4	+	Session 2A Tier 1	Session 2A Tier 2	Session 2A Tier 3	Session 2A Tier 4	=	1 + 2A Tier 1	1 + 2A Tier 2	1 + 2A Tier 3	1 + 2A Tier 4
Reading Literary	5.RL.b1	X		X			X					XX		X	
	5.RL.c2	X		X			X					XX		X	
	5.RL.d1	X		X			X					XX		X	
Reading Informational	5.RI.c4		X						X				X	X	
	5.RI.e2		X						X				X	X	
	5.RI.d5		X										X		
Vocabulary	5.RWL.a2	X		X			X		X			XX		X	

Content Category	CCC	Session 1 Tier 1	Session 1 Tier 2	Session 1 Tier 3	Session 1 Tier 4	+	Session 2B Tier 1	Session 2B Tier 2	Session 2B Tier 3	Session 2B Tier 4	=	1 + 2B Tier 1	1 + 2B Tier 2	1 + 2B Tier 3	1 + 2B Tier 4
Reading Literary	5.RL.b1	X		X				X				X	X	X	
	5.RL.c2	X		X				X				X	X	X	
	5.RL.d1	X		X				X				X	X	X	
Reading Informational	5.RI.c4		X						X				X	X	
	5.RI.e2		X						X				X	X	
	5.RI.d5		X										X		
Vocabulary	5.RWL.a2	X		X				X	X			X	X	X	

Content Category	CCC	Session 1 Tier 1	Session 1 Tier 2	Session 1 Tier 3	Session 1 Tier 4	+	Session 2C Tier 1	Session 2C Tier 2	Session 2C Tier 3	Session 2C Tier 4	=	1 + 2C Tier 1	1 + 2C Tier 2	1 + 2C Tier 3	1 + 2C Tier 4
Reading Literary	5.RL.b1	X		X					X			X		X	
	5.RL.c2	X		X					X			X		X	
	5.RL.d1	X		X					X			X		X	
Reading Informational	5.RI.c4		X				X					X	X		
	5.RI.e2		X				X					X	X		
	5.RI.d5		X										X		
Vocabulary	5.RWL.a2	X		X			X		X			X		X	

Content Category	CCC	Session 1 Tier 1	Session 1 Tier 2	Session 1 Tier 3	Session 1 Tier 4	+	Session 2D Tier 1	Session 2D Tier 2	Session 2D Tier 3	Session 2D Tier 4	=	1 + 2D Tier 1	1 + 2D Tier 2	1 + 2D Tier 3	1 + 2D Tier 4
Reading Literary	5.RL.b1	X		X						X		X		X	X
	5.RL.c2	X		X						X		X		X	X
	5.RL.d1	X		X						X		X		X	X
Reading Informational	5.RI.c4		X					X					X		
	5.RI.e2		X					X					X		
	5.RI.d5		X										X		
Vocabulary	5.RWL.a2	X		X				X		X		X	X	X	X

Exhibit 6. Reading—Grade 6

Content Category	CCC	Session 1					Session 2A					1 + 2A			
		Tier 1	Tier 2	Tier 3	Tier 4	+	Tier 1	Tier 2	Tier 3	Tier 4	=	Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	6.RL.b2		X						X				X	X	
	6.RL.b3		X						X				X	X	
	6.RL.c3		X						X				X	X	
Reading Informational	6.RI.b4						X					X			
	6.RI.c2	X		X								X		X	
	6.RI.g4	X		X			X					XX		X	
	6.RI.g6	X		X			X					XX		X	
Vocabulary	6.RWL.a1		X						X				X	X	
	6.RWL.c1	X		X			X					XX		X	

Content Category	CCC	Session 1					Session 2B					1 + 2B			
		Tier 1	Tier 2	Tier 3	Tier 4	+	Tier 1	Tier 2	Tier 3	Tier 4	=	Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	6.RL.b2		X					X					X		
	6.RL.b3		X					X					X		
	6.RL.c3		X					X					X		
Reading Informational	6.RI.b4								X					X	
	6.RI.c2	X		X								X		X	
	6.RI.g4	X		X					X			X		XX	
	6.RI.g6	X		X					X			X		XX	
Vocabulary	6.RWL.a1		X					X					X		
	6.RWL.c1	X		X					X			X		XX	

Exhibit 6. Reading—Grade 6 (continued)

Content Category	CCC	Session 1					Session 2C					1 + 2C			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	6.RL.b2		X						X				X	X	
	6.RL.b3		X						X				X	X	
	6.RL.c3		X						X				X	X	
Reading Informational	6.RI.b4						X					X			
	6.RI.c2	X		X		+					=	X		X	
	6.RI.g4	X		X			X					XX		X	
	6.RI.g6	X		X			X					XX		X	
Vocabulary	6.RWL.a1		X						X				X	X	
	6.RWL.c1	X		X			X					XX		X	

Content Category	CCC	Session 1					Session 2D					1 + 2D			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	6.RL.b2		X					X					X		
	6.RL.b3		X					X					X		
	6.RL.c3		X					X					X		
Reading Informational	6.RI.b4									X					X
	6.RI.c2	X		X		+					=	X		X	
	6.RI.g4	X		X						X		X		X	X
	6.RI.g6	X		X						X		X		X	X
Vocabulary	6.RWL.a1		X					X					X		
	6.RWL.c1	X		X						X		X		X	X

Exhibit 7. Reading—Grade 7

Content Category	CCC	Session 1					Session 2A					1 + 2A			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	7.RL.i2		X						X				X	X	
	7.RL.j1		X						X				X	X	
Reading Informational	7.RI.j1	X		X			X					XX		X	
	7.RI.j5	X		X		+	X				=	XX		X	
	7.RI.l1						X					X			
	7.RI.k4	X		X			X					XX		X	
Vocabulary	7.RWL.g1	X	X	X			X		X			XX	X	X	

Content Category	CCC	Session 1					Session 2B					1 + 2B			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	7.RL.i2		X					X					X		
	7.RL.j1		X					X					X		
Reading Informational	7.RI.j1	X		X					X			X		XX	
	7.RI.j5	X		X		+			X		=	X		XX	
	7.RI.l1								X					X	
	7.RI.k4	X		X					X			X		XX	
Vocabulary	7.RWL.g1	X	X	X				X	X			X	X	XX	

Content Category	CCC	Session 1					Session 2C					1 + 2C			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	7.RL.i2		X						X				X	X	
	7.RL.j1		X						X				X	X	
Reading Informational	7.RI.j1	X		X			X					XX		X	
	7.RI.j5	X		X		+	X				=	XX		X	
	7.RI.l1						X					X			
	7.RI.k4	X		X			X					XX		X	
Vocabulary	7.RWL.g1	X	X	X			X		X			XX	X	X	

Content Category	CCC	Session 1					Session 2D					1 + 2D			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	7.RL.i2		X					X					X		
	7.RL.j1		X					X					X		
Reading Informational	7.RI.j1	X		X						X		X		X	X
	7.RI.j5	X		X		+				X	=	X		X	X
	7.RI.l1									X					X
	7.RI.k4	X		X						X		X		X	X
Vocabulary	7.RWL.g1	X	X	X				X		X		X	X	X	X

Exhibit 8. Reading—Grade 8

Content Category	CCC	Session 1					Session 2A					1 + 2A			
		Tier 1	Tier 2	Tier 3	Tier 4	+	Tier 1	Tier 2	Tier 3	Tier 4	=	Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	8.RL.i2		X						X				X	X	
	8.RL.j2		X						X				X	X	
Reading Informational	8.RI.j1	X		X			X					XX		X	
	8.RI.k2	X		X			X					XX		X	
	8.RI.k4	X		X			X					XX		X	
	8.RI.L1						X					X			
Vocabulary	8.RWL.g1		X						X				X	X	
	8.RWL.i1	X		X			X					XX		X	

Content Category	CCC	Session 1					Session 2B					1 + 2B			
		Tier 1	Tier 2	Tier 3	Tier 4	+	Tier 1	Tier 2	Tier 3	Tier 4	=	Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	8.RL.i2		X						X				X	X	
	8.RL.j2		X						X				X	X	
Reading Informational	8.RI.j1	X		X				X				X	X	X	
	8.RI.k2	X		X				X				X	X	X	
	8.RI.k4	X		X				X				X	X	X	
	8.RI.L1							X					X		
Vocabulary	8.RWL.g1		X						X				X	X	
	8.RWL.i1	X		X				X				X	X	X	

Content Category	CCC	Session 1					Session 2C					1 + 2C			
		Tier 1	Tier 2	Tier 3	Tier 4	+	Tier 1	Tier 2	Tier 3	Tier 4	=	Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	8.RL.i2		X				X					X	X		
	8.RL.j2		X				X					X	X		
Reading Informational	8.RI.j1	X		X					X			X		X	
	8.RI.k2	X		X					X			X		X	
	8.RI.k4	X		X					X			X		X	
	8.RI.L1								X					X	
Vocabulary	8.RWL.g1		X				X					X	X		
	8.RWL.i1	X		X					X			X		X	

Content Category	CCC	Session 1					Session 2D					1 + 2D			
		Tier 1	Tier 2	Tier 3	Tier 4	+	Tier 1	Tier 2	Tier 3	Tier 4	=	Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	8.RL.i2		X					X					X		
	8.RL.j2		X					X					X		
Reading Informational	8.RI.j1	X		X						X		X		X	X
	8.RI.k2	X		X						X		X		X	X
	8.RI.k4	X		X						X		X		X	X
	8.RI.L1									X					X
Vocabulary	8.RWL.g1		X					X					X		
	8.RWL.i1	X		X						X		X		X	X

Exhibit 9. Reading—Grade 11

Content Category	CCC	Session 1					Session 2A					1 + 2A			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	1112.RL.b1		X				X					X	X		
	1112.RL.d1		X				X					X	X		
Reading Informational	1112.RI.b1	X		X					X			X		XX	
	1112.RI.d1	X		X					X			X		XX	
	1112.RI.b5	X		X		+			X		=	X		XX	
	1112.RI.e1	X										X			
Vocabulary	1112.RWL.b1		X	X					X				X	XX	
	1112.RWL.c3	X					X					X			

Content Category	CCC	Session 1					Session 2B					1 + 2B			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	1112.RL.b1		X						X				X	X	
	1112.RL.d1		X						X				X	X	
Reading Informational	1112.RI.b1	X		X				X				X	X	X	
	1112.RI.d1	X		X				X				X	X	X	
	1112.RI.b5	X		X		+		X			=	X	X	X	
	1112.RI.e1	X										X			
Vocabulary	1112.RWL.b1		X	X				X					X	X	
	1112.RWL.c3	X							X			X		X	

Content Category	CCC	Session 1					Session 2C					1 + 2C			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	1112.RL.b1		X						X				X	X	
	1112.RL.d1		X						X				X	X	
Reading Informational	1112.RI.b1	X		X			X					XX		X	
	1112.RI.d1	X		X			X					XX		X	
	1112.RI.b5	X		X		+	X				=	XX		X	
	1112.RI.e1	X										X			
Vocabulary	1112.RWL.b1		X	X			X					XX	X	X	
	1112.RWL.c3	X							X			X			

Content Category	CCC	Session 1					Session 2D					1 + 2D			
		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Reading Literary	1112.RL.b1		X					X					X		
	1112.RL.d1		X					X					X		
Reading Informational	1112.RI.b1	X		X						X		X		X	X
	1112.RI.d1	X		X						X		X		X	X
	1112.RI.b5	X		X		+				X	=	X		X	X
	1112.RI.e1	X										X			
Vocabulary	1112.RWL.b1		X	X						X			X	X	X
	1112.RWL.c3	X						X				X	X		

Mathematics forms

Mathematics pilot forms consisted of two sessions with 20 items per session. Session 1 was a common (anchor) session across all forms within a grade. Items across both Session 1 and Session 2 consisted of a mix of tiers. Mathematics tier distributions were as follows: Tier 1, 20% representation; Tier 2, 35% representation; Tier 3, 35% representation, Tier 4, 10% representation. These tier percentages were determined through input from TAC and NCSC state partners. In addition, test forms were selected to be similar in difficulty.

The number of test questions on the test at each grade level that assess each CCC are provided in Exhibits 10 through 16. As noted in the tables below, the percentage of assessment coverage of each content standard reflects the emphasis of instruction in the CCSS across grades.

Exhibit 10. Mathematics—Grade 3 Form A

		Session1					+	2A				1 + 2A			
Domain	Int. % Cvg	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Operations and Algebraic Thinking	28 -32%	3.NO.2d3		1	1			1	1			1	2	1	
		3.NO.2e1	1	1					1	1		1	2	1	
		3.PRF.2d1	1		1				1		1	1	1	1	1
Number and Operations Base Ten	17 - 23%	3.NO.1j3		1	1				1	1			2	2	
		3.NO.2c1		1		1		1		1		1	1	1	1
Number and Operations Fractions	17 - 23%	3.NO.1l3		1	1			1			1	1	1	1	1
		3.SE.1g1	1		1				1	1		1	1	2	
Measurement and Data	17 - 23%	3.DPS.1g1	1		1				1	1		1	1	2	
		3.ME.1d2		1	1				1	1			2	2	
Geometry	9 - 11%	3.GM.1i1		1		1		1		1		1	1	1	1

Mathematics—Grade 3 Form B

		Session1					2B				1 + 2B			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Operations and Algebraic Thinking	28 -32%	3.NO.2d3		1	1			1	1			2	2	
		3.NO.2e1	1	1				1	1		1	2	1	
		3.PRF.2d1	1		1			1	1		1	1	2	
Number and Operations Base Ten	17 - 23%	3.NO.1j3		1	1			1		1		2	1	1
		3.NO.2c1		1		1	1		1		1	1	1	1
Number and Operations Fractions	17 - 23%	3.NO.1l3		1	1		1	1			1	2	1	
		3.SE.1g1	1		1			1	1		1	1	2	
Measurement and Data	17 - 23%	3.DPS.1g1	1		1			1		1	1	1	1	1
		3.ME.1d2		1	1		1		1		1	1	2	
Geometry	9 - 11%	3.GM.1i1		1		1	1		1		1	1	1	1

Mathematics—Grade 3 Form C

Domain	% Cvg.	CCC	Session1 Tier 1	Session1 Tier 2	Session1 Tier 3	Session1 Tier 4	2C Tier 1	2C Tier 2	2C Tier 3	2C Tier 4	1 + 2C Tier 1	1 + 2C Tier 2	1 + 2C Tier 3	1 + 2C Tier 4
Operations and Algebraic Thinking	28 - 32%	3.NO.2d3		1	1		1		1		1	1	2	
		3.NO.2e1	1	1					1	1	1	1	1	1
		3.PRF.2d1	1		1			1	1		1	1	2	
Number and Operations Base Ten	17 - 23%	3.NO.1j3		1	1		1		1		1	1	2	
		3.NO.2c1		1		1		1	1			2	1	1
Number and Operations Fractions	17 - 23%	3.NO.1l3		1	1			1	1			2	2	
		3.SE.1g1	1		1		1	1			2	1	1	
Measurement and Data	17 - 23%	3.DPS.1g1	1		1		1	1			2	1	1	
		3.ME.1d2		1	1			1		1		2	1	1
Geometry	9 - 11%	3.GM.1i1		1		1		1	1			2	1	1

Mathematics—Grade 3 Form D

Domain	% Cvg.	CCC	Session1 Tier 1	Session1 Tier 2	Session1 Tier 3	Session1 Tier 4	2D Tier 1	2D Tier 2	2D Tier 3	2D Tier 4	1 + 2D Tier 1	1 + 2D Tier 2	1 + 2D Tier 3	1 + 2D Tier 4
Operations and Algebraic Thinking	28 - 32%	3.NO.2d3		1	1			1		1		2	1	1
		3.NO.2e1	1	1			1		1		2	1	1	
		3.PRF.2d1	1		1		1	1			2	1	1	
Number and Operations Base Ten	17 - 23%	3.NO.1j3		1	1		1		1		1	1	2	
		3.NO.2c1		1		1		1	1			2	1	1
Number and Operations Fractions	17 - 23%	3.NO.1l3		1	1			1	1			2	2	
		3.SE.1g1	1		1			1		1	1	1	1	1
Measurement and Data	17 - 23%	3.DPS.1g1	1		1			1	1			2	1	1
		3.ME.1d2		1	1		1		1		1	1	2	
Geometry	9 - 11%	3.GM.1i1		1		1		1	1			2	1	1

Exhibit 11. Mathematics—Grade 4 Form A

			Session1				+	2A				1 + 2A			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Operations and Algebraic Thinking	28 - 32%	4.NO.2d7		1	1				1	1			2	2	
		4.PRF.1e3		1		1		1		1		2	1	1	1
		4.NO.2e2	1		1				1	1		1	1	2	
Number and Operations Base Ten	9 - 11%	4.NO.1j5		1	1			1			1	1	1	1	1
Number and Operations Fractions	28 - 32%	4.NO.1m1	1	1					1	1		1	2	1	
		4.NO.1n2		1	1			1	1			1	2	1	
		4.SE.1g2		1		1		1		1		1	1	1	1
Measurement and Data	17 - 23%	4.ME.1g2		1	1				1	1			2	2	
		4.DPS.1g3	1		1				1	1		1	1	2	
Geometry	9 - 11%	4.GM.1h2	1		1				1		1	1	1	1	1

Mathematics—Grade 4 Form B

			Session1				+	2B				1 + 2B			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Operations and Algebraic Thinking	28 -32%	4.NO.2d7		1	1				1		1		2	1	1
		4.PRF.1e3		1		1		1		1		1	1	1	1
		4.NO.2e2	1		1				1	1		1	1	2	
Number and Operations Base Ten	9 - 11%	4.NO.1j5		1	1			1	1			1	2	1	
Number and Operations Fractions	28 -32%	4.NO.1m1	1	1					1	1		1	2	1	
		4.NO.1n2		1	1				1	1			2	2	
		4.SE.1g2		1		1		1		1		1	1	1	1
Measurement and Data	17 - 23%	4.ME.1g2		1	1			1		1		1	1	2	
		4.DPS.1g3	1		1				1		1	1	1	1	1
Geometry	9 - 11%	4.GM.1h2	1		1				1	1		1	1	2	

Mathematics—Grade 4 Form C

			Session1				+	2C			1 + 2C			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Operations and Algebraic Thinking	28 -32%	4.NO.2d7		1	1		1		1		1	1	2	
		4.PRF.1e3		1		1		1	1			2	1	1
		4.NO.2e2	1		1		1	1			2	1	1	
Number and Operations Base Ten	9 - 11%	4.NO.1j5		1	1			1	1			2	2	
Number and Operations Fractions	28 -32%	4.NO.1m1	1	1					1	1	1	1	1	1
		4.NO.1n2		1	1		1		1		1	1	2	
		4.SE.1g2		1		1		1	1			2	1	1
Measurement and Data	17 - 23%	4.ME.1g2		1	1			1		1		2	1	1
		4.DPS.1g3	1		1		1	1			2	1	1	
Geometry	9 - 11%	4.GM.1h2	1		1			1	1		1	1	2	

Mathematics—Grade 4 Form D

			Session1				+	2D			1 + 2D			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Operations and Algebraic Thinking	28 -32%	4.NO.2d7		1	1		1		1		1	1	2	
		4.PRF.1e3		1		1		1	1			2	1	1
		4.NO.2e2	1		1			1		1	1	1	1	1
Number and Operations Base Ten	9 - 11%	4.NO.1j5		1	1			1	1			2	2	
Number and Operations Fractions	28 -32%	4.NO.1m1	1	1			1		1		2	1	1	
		4.NO.1n2		1	1			1		1		2	1	1
		4.SE.1g2		1		1		1	1			2	1	1
Measurement and Data	17 - 23%	4.ME.1g2		1	1		1		1		1	1	2	
		4.DPS.1g3	1		1			1	1		1	1	2	
Geometry	9 - 11%	4.GM.1h2	1		1		1	1			2	1	1	

Exhibit 12. Mathematics—Grade 5 Form A

		Session1					+	2A				1 + 2A			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Oper. and Algebraic Thinking	9 - 11%	5.PRF.2b1		1		1		1		1		1	1	1	1
Number and Oper.Base Ten	34 - 40%	5.NO.1b1		1	1			1			1	1	1	1	1
		5.NO.1b4	1		1				1	1		1	1	2	
		5.NO.2c1		1	1				1	1			2	2	
		5.NO.2a5		1		1		1		1		1	1	1	1
Number and Oper. Fractions	17 - 23%	5.NO.2c2		1	1				1	1			2	2	
		5.PRF.1a1	1		1				1	1		1	1	2	
Measurement and Data	17 - 23%	5.ME.1b2		1	1			1	1			1	2	1	
		5.ME.2a1	1	1					1	1		1	2	1	
Geometry	9 - 11%	5.GM.1c3	1		1				1		1	1	1	1	1

Mathematics—Grade 5 Form B

		Session1					+	2B				1 + 2B			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Oper. and Algebraic Thinking	9 - 11%	5.PRF.2b1		1		1		1		1		1	1	1	1
Number and Oper.Base Ten	34 - 40%	5.NO.1b1		1	1			1	1			1	2	1	
		5.NO.1b4	1		1				1	1		1	1	2	
		5.NO.2c1		1	1				1		1		2	1	1
		5.NO.2a5		1		1		1		1		1	1	1	1
Number and Oper. Fractions	17 - 23%	5.NO.2c2		1	1			1		1		1	1	1	
		5.PRF.1a1	1		1				1		1	1	1	1	1
Measurement and Data	17 - 23%	5.ME.1b2		1	1				1	1			2	2	
		5.ME.2a1	1	1					1	1		1	2	1	
Geometry	9 - 11%	5.GM.1c3	1		1				1	1		1	1	2	

Mathematics—Grade 5 Form C

		Session1					+	2C				1 + 2C			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Oper. and Algebraic Thinking	9 - 11%	5.PRF.2b1		1		1			1	1			2	1	1
Number and Oper.Base Ten	34 - 40%	5.NO.1b1		1	1				1	1			2	2	
		5.NO.1b4	1		1			1	1			2	1	1	
		5.NO.2c1		1	1			1		1		1	1	2	
		5.NO.2a5		1		1			1	1			2	1	1
Number and Oper. Fractions	17 - 23%	5.NO.2c2		1	1				1		1		2	1	1
		5.PRF.1a1	1		1			1	1			2	1	1	
Measurement and Data	17 - 23%	5.ME.1b2		1	1			1		1		1	1	2	
		5.ME.2a1	1	1						1	1	1	1	1	1
Geometry	9 - 11%	5.GM.1c3	1		1				1	1		1	1	2	

Mathematics—Grade 5 Form D

		Session1					+	2D				1 + 2D			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Oper. and Algebraic Thinking	9 - 11%	5.PRF.2b1		1		1			1	1			2	1	1
Number and Oper.Base Ten	34 - 40%	5.NO.1b1		1	1				1	1			2	2	
		5.NO.1b4	1		1				1		1	1	1	1	1
		5.NO.2c1		1	1			1		1		1	1	2	
		5.NO.2a5		1		1			1	1			2	1	1
Number and Oper. Fractions	17 - 23%	5.NO.2c2		1	1			1		1		1	1	2	
		5.PRF.1a1	1		1				1	1		1	1	2	
Measurement and Data	17 - 23%	5.ME.1b2		1	1				1		1		2	1	1
		5.ME.2a1	1	1				1		1		2	1	1	
Geometry	9 - 11%	5.GM.1c3	1		1			1	1			2	1	1	

Exhibit 13. Mathematics—Grade 6 Form A

		Session1					+	2A				1 + 2A			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Ratio and Proportions	28 -32%	6.PRF.1c1		1	1				1	1			2	2	
		6.ME.2a2		1		1		1		1		1	1	1	1
		6.NO.1f1	1		1				1	1		1	1	2	

Expressions and Equations	17- 23%	6.PRF.1d1	1		1				1	1			1	1	2	
		6.NO.2a6		1	1				1	1				2	2	
The Number System	28 -32%	6.NO.2c3	1	1					1	1			1	2	1	
		6.NO.1d4	1		1				1		1		1	1	1	1
		6.NO.1d2		1	1			1	1				1	2	1	
Statistics and Probability	9 - 11%	6.DPS.1d3		1	1			1			1		1	1	1	1
Geometry	9 - 11%	6.GM.1d1		1		1		1		1			1	1	1	1

Mathematics—Grade 6 Form B

			Session1				+	2B				1 + 2B			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Ratio and Proportions	28 -32%	6.PRF.1c1		1	1				1		1		2	1	1
		6.ME.2a2		1		1		1		1		1	1	1	1
		6.NO.1f1	1		1				1	1		1	1	2	
Expressions and Equations	17- 23%	6.PRF.1d1	1		1				1		1	1	1	1	1
		6.NO.2a6		1	1			1		1		1	1	2	
The Number System	28 -32%	6.NO.2c3	1	1					1	1		1	2	1	
		6.NO.1d4	1		1				1	1		1	1	2	
		6.NO.1d2		1	1				1	1			2	2	
Statistics and Probability	9 - 11%	6.DPS.1d3		1	1			1	1			1	2	1	
Geometry	9 - 11%	6.GM.1d1		1		1		1		1		1	1	1	1

Mathematics—Grade 6 Form C

		Session1					+	2C				1 + 2C			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Ratio and Proportions	28 -32%	6.PRF.1c1		1	1			1		1		1	1	2	
		6.ME.2a2		1		1			1	1			2	1	1
		6.NO.1f1	1		1			1	1			2	1	1	
Expressions and Equations	17- 23%	6.PRF.1d1	1		1			1	1			2	1	1	
		6.NO.2a6		1	1				1		1		2	1	1
The Number System	28 -32%	6.NO.2c3	1	1						1	1	1	1	1	1
		6.NO.1d4	1		1				1	1		1	1	2	
		6.NO.1d2		1	1			1		1		1	1	2	
Statistics and Probability	9 - 11%	6.DPS.1d3		1	1				1	1			2	2	
Geometry	9 - 11%	6.GM.1d1		1		1			1	1			2	1	1

Mathematics—Grade 6 Form D

		Session1					+	2D				1 + 2D			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Ratio and Proportions	28 -32%	6.PRF.1c1		1	1			1		1		1	1	2	
		6.ME.2a2		1		1			1	1			2	1	1
		6.NO.1f1	1		1				1		1	1	1	1	1
Expressions and Equations	17- 23%	6.PRF.1d1	1		1				1	1		1	1	2	
		6.NO.2a6		1	1			1		1		1	1	2	
The Number System	28 -32%	6.NO.2c3	1	1				1		1		2	1	1	
		6.NO.1d4	1		1			1	1			2	1	1	
		6.NO.1d2		1	1				1		1		2	1	1
Statistics and Probability	9 - 11%	6.DPS.1d3		1	1				1	1			2	2	
Geometry	9 - 11%	6.GM.1d1		1		1			1	1			2	1	1

Exhibit 14. Mathematics—Grade 7 Form A

			Session1				+ 2A				1 + 2A			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Ratio and Proportions	34 - 40%	7.NO.2f1		1	1		1			1	1	1	1	1
		7.NO.2f2	1		1			1	1		1	1	2	
		7.NO.2f6		1	1			1	1			2	2	
		7.PRF.1f1		1		1	1		1		1	1	1	1
Expressions and Equations	9 - 11%	7.PRF.1g2		1		1	1		1		1	1	1	1
The Number System	17- 23%	7.NO.2i1		1	1			1	1			2	2	
		7.NO.2i2	1		1			1	1		1	1	2	
Statistics and Probability	9 - 11%	7.DPS.1k1	1		1			1		1	1	1	1	1
Geometry	17- 23%	7.ME.2d1		1	1		1	1			1	2	1	
		7.GM.1h2	1	1				1	1		1	2	1	

Mathematics—Grade 7 Form B

			Session1				+ 2B				1 + 2B			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Ratio and Proportions	34 - 40%	7.NO.2f1		1	1		1	1			1	2	1	
		7.NO.2f2	1		1			1	1		1	1	2	
		7.NO.2f6		1	1			1		1		2	1	1
		7.PRF.1f1		1		1	1		1		1	1	1	1
Expressions and Equations	9 - 11%	7.PRF.1g2		1		1	1		1		1	1	1	1
The Number System	17- 23%	7.NO.2i1		1	1		1		1		1	1	2	
		7.NO.2i2	1		1			1		1	1	1	1	1
Statistics and Probability	9 - 11%	7.DPS.1k1	1		1			1	1		1	1	2	
Geometry	17- 23%	7.ME.2d1		1	1			1	1			2	2	
		7.GM.1h2	1	1				1	1		1	2	1	

Mathematics—Grade 7 Form C

			Session1				+	2C				1 + 2C			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Ratio and Proportions	34 - 40%	7.NO.2f1		1	1				1	1			2	2	
		7.NO.2f2	1		1			1	1			2	1	1	
		7.NO.2f6		1	1			1		1		1	1	2	
		7.PRF.1f1		1		1			1	1			2	1	1
Expressions and Equations	9 - 11%	7.PRF.1g2		1		1			1	1			2	1	1
The Number System	17- 23%	7.NO.2i1		1	1				1		1		2	1	1
		7.NO.2i2	1		1			1	1			2	1	1	
Statistics and Probability	9 - 11%	7.DPS.1k1	1		1				1	1		1	1	2	
Geometry	17- 23%	7.ME.2d1		1	1			1		1		1	1	2	
		7.GM.1h2	1	1						1	1	1	1	1	1

Mathematics—Grade 7 Form D

			Session1				+	2D				1 + 2D			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Ratio and Proportions	34 - 40%	7.NO.2f1		1	1				1	1			2	2	
		7.NO.2f2	1		1				1		1	1	1	1	1
		7.NO.2f6		1	1			1		1		1	1	2	
		7.PRF.1f1		1		1			1	1			2	1	1
Expressions and Equations	9 - 11%	7.PRF.1g2		1		1			1	1			2	1	1
The Number System	17- 23%	7.NO.2i1		1	1			1		1		1	1	2	
		7.NO.2i2	1		1				1	1		1	1	2	
Statistics and Probability	9 - 11%	7.DPS.1k1	1		1			1	1			2	1	1	
Geometry	17- 23%	7.ME.2d1		1	1				1		1		2	1	1
		7.GM.1h2	1	1				1		1		2	1	1	

Exhibit 15. Mathematics—Grade 8 Form A

			Session1				+	2A				1 + 2A			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4
Functions	17-23%	8.PRF.2e2		1	1				1	1				2	2	
		8.PRF.1f2		1		1		1		1			1	1	1	1
Expressions and Equations	17-23%	8.PRF.1e2	1		1				1	1			1	1	2	
		8.PRF.1g3		1	1				1	1				2	2	
The Number System	9 - 11%	8.NO.1k3		1	1			1			1		1	1	1	1
Statistics and Probability	17-23%	8.DPS.1h1		1		1		1		1			1	1	1	1
		8.DPS.1k2	1		1				1	1			1	1	2	
Geometry	28 - 32%	8.ME.1e1	1	1					1	1			1	2	1	
		8.GM.1g1		1	1			1	1				1	2	1	
		8.ME.2d2	1		1				1		1		1	1	1	1

Mathematics—Grade 8 Form B

			Session1				+	2B				1 + 2B			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Functions	17- 23%	8.PRF.2e2		1	1				1		1		2	1	1
		8.PRF.1f2		1		1		1		1		1	1	1	1
Expressions and Equations	17- 23%	8.PRF.1e2	1		1				1		1	1	1	1	1
		8.PRF.1g3		1	1			1		1		1	1	2	
The Number System	9 - 11%	8.NO.1k3		1	1			1	1			1	2	1	
Statistics and Probability	17- 23%	8.DPS.1h1		1		1		1		1		1	1	1	1
		8.DPS.1k2	1		1				1	1		1	1	2	
Geometry	28 -32%	8.ME.1e1	1	1					1	1		1	2	1	
		8.GM.1g1		1	1				1	1			2	2	
		8.ME.2d2	1		1				1	1		1	1	2	

Mathematics—Grade 8 Form C

			Session1				+ 2C				1 + 2C			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Functions	17- 23%	8.PRF.2e2		1	1		1		1		1	1	2	
		8.PRF.1f2		1		1		1	1			2	1	1
Expressions and Equations	17- 23%	8.PRF.1e2	1		1		1	1			2	1	1	
		8.PRF.1g3		1	1			1		1		2	1	1
The Number System	9 - 11%	8.NO.1k3		1	1			1	1			2	2	
Statistics and Probability	17- 23%	8.DPS.1h1		1		1		1	1			2	1	1
		8.DPS.1k2	1		1		1	1			2	1	1	
Geometry	28 -32%	8.ME.1e1	1	1					1	1	1	1	1	1
		8.GM.1g1		1	1		1		1		1	1	2	
		8.ME.2d2	1		1			1	1		1	1	2	

Mathematics—Grade 8 Form D

			Session1				+ 2D				1 + 2D			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Functions	17- 23%	8.PRF.2e2		1	1		1		1		1	1	2	
		8.PRF.1f2		1		1		1	1			2	1	1
Expressions and Equations	17- 23%	8.PRF.1e2	1		1			1	1		1	1	2	
		8.PRF.1g3		1	1		1		1		1	1	2	
The Number System	9 - 11%	8.NO.1k3		1	1			1	1			2	2	
Statistics and Probability	17- 23%	8.DPS.1h1		1		1		1	1			2	1	1
		8.DPS.1k2	1		1			1		1	1	1	1	1
Geometry	28 -32%	8.ME.1e1	1	1			1		1		2	1	1	
		8.GM.1g1		1	1			1		1		2	1	1
		8.ME.2d2	1		1		1	1			2	1	1	

Exhibit 16. Mathematics—Grade 11 Form A

			Session1				+ 2A				1 + 2A			

Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Algebra And Functions	47-52%	H.PRF.2b1		1	1		1	1			1	2	1	
		H.PRF.2b2	1		1			1	1		1	1	2	
		H.ME.1b2		1	1			1		1		2	1	1
		H.PRF.1c1		1		1	1		1		1	1	1	1
		H.PRF.2c1	1		1			1	1		1	1	2	
Number and Quantity	17- 23%	H.ME.1a2		1	1			1	1			2	2	
		H.NO.1a1	1	1				1	1		1	2	1	
Statistics and Probability	17- 23%	H.DPS.1b 1		1		1	1		1		1	1	1	1
		H.DPS.1c1	1		1			1		1	1	1	1	1
Geometry	9 - 11%	H.GM.1b1		1	1		1		1		1	1	2	

Mathematics—Grade 11 **Form B**

	Session1	+ 2B	1 + 2B

Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Algebra And Functions	47-52%	H.PRF.2b1		1	1		1			1	1	1	1	1
		H.PRF.2b2	1		1			1	1		1	1	2	
		H.ME.1b2		1	1			1	1			2	2	
		H.PRF.1c1		1		1	1		1		1	1	1	1
		H.PRF.2c1	1		1			1		1	1	1	1	1
Number and Quantity	17- 23%	H.ME.1a2		1	1		1	1			1	2	1	
		H.NO.1a1	1	1				1	1		1	2	1	
Statistics and Probability	17- 23%	H.DPS.1b1		1		1	1		1		1	1	1	1
		H.DPS.1c1	1		1			1	1		1	1	2	
Geometry	9 - 11%	H.GM.1b1		1	1			1	1			2	2	

Mathematics—Grade 11 Form C

			Session1				+	2C				1 + 2C			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Algebra And Functions	47-52%	H.PRF.2b1		1	1				1	1			2	2	
		H.PRF.2b2	1		1			1	1			2	1	1	
		H.ME.1b2		1	1			1		1		1	1	2	
		H.PRF.1c1		1		1			1	1			2	1	1
		H.PRF.2c1	1		1				1	1		1	1	2	
Number and Quantity	17- 23%	H.ME.1a2		1	1			1		1		1	1	2	
		H.NO.1a1	1	1						1	1	1	1	1	1
Statistics and Probability	17- 23%	H.DPS.1b1		1		1			1	1			2	1	1
		H.DPS.1c1	1		1			1	1			2	1	1	
Geometry	9 - 11%	H.GM.1b1		1	1				1		1		2	1	1

Mathematics—Grade 11 Form D

			Session1				+	2D				1 + 2D			
Domain	% Cvg.	CCC	Tier 1	Tier 2	Tier 3	Tier 4		Tier 1	Tier 2	Tier 3	Tier 4	Tier 1	Tier 2	Tier 3	Tier 4
Algebra And Functions	50%	H.PRF.2b1		1	1				1	1			2	2	
		H.PRF.2b2	1		1				1		1	1	1	1	1
		H.ME.1b2		1	1			1		1		1	1	2	
		H.PRF.1c1		1		1			1	1			2	1	1
		H.PRF.2c1	1		1			1	1			2	1	1	
Number and Quantity	17- 23%	H.ME.1a2		1	1				1		1		2	1	1
		H.NO.1a1	1	1				1		1		2	1	1	
Statistics and Probability	17- 23%	H.DPS.1b1		1		1			1	1			2	1	1
		H.DPS.1c1	1		1				1	1		1	1	2	
Geometry	9 - 11%	H.GM.1b1		1	1			1		1		1	1	2	

ELA Forms

The NCSC writing CR items require students to write an essay in response to each of a prompt. The writing portion of the assessment is designed to measure Writing CCSS which requires that "students use the writing process (generate ideas, draft, revise, and edit) to demonstrate narrative, expository, or argument writing.

As displayed below, for Pilot Phase 2, the ELA test forms consisted of both reading and writing content. Two forms were developed at each grade. The first session of the reading Pilot Phase 2 form consisted of reading content, four stand-alone writing selected-response items, and one Tier 1 writing prompt-based set of selected-response items. The reading content was the same reading Session 1 as was on the reading forms. Session 2 consisted of two writing CR items.

Grades 3, 4

- Session One
  - 3 passages = 2 literary and 1 informational (Tier 1: Literary; Tier 2: Informational; Tier 3 Literary)
  - 1 foundational item
  - 4 writing selected-response items (one item per tier)
  - 1 Tier 1 prompt-based item set (4 – 6 items)

- Session 2
  - 1 Tier 2 writing CR (narrative)
  - 1 Tier 3 writing CR (narrative)

Grades 6 – 8

- Session One
  - 3 passages = 2 informational and 1 literary (Tier 1: Informational; Tier 2: Literary; Tier 3 Informational)
  - 4 writing selected-response items (one item per tier)
  - 1 Tier 1 prompt-based item set (6 items)

- Session 2
  - 1 Tier 2 writing CR (expository)
  - 1 Tier 3 writing CR (expository)

Grade 11

- Session One
  - 3 passages = 2 informational and 1 literary (Tier 1: Informational; Tier 2: Literary; Tier 3 Informational)
  - 4 writing selected-response items (one item per tier)
  - 1 Tier 1 prompt-based item set (6 items)

- Session 2
  - 1 Tier 2 writing CR (argument)
  - 1 Tier 3 writing CR (argument)

Pilot Phase 2 Item Selection

Item Selection

Prior to finalizing the Pilot Phase 2 item selection, flagged items were reviewed during the July Item Data Review (IDR). Committees made up of NCSC state representatives evaluated the appropriateness and accessibility of the previously piloted items. Flagged items were reviewed for difficulty (p-value > 90 or <50 for Tier 1 or <40 for Tiers 2-4), discrimination (serial—test item correlation less than 0), tier reversal, and distractor analysis (key check). Committee panelists recommended accepting, accepting with revision, or rejecting items after reviewing the flags and considering the content. Items that were flagged were to be avoided during Pilot Phase 2 form selection. If flagged items could not be avoided, then flagged items that were edited at IDR were also to be avoided. Criteria for form selection now included:

- number of items per session (20)
- number of items per form (40)
- number of forms (up to 4 per grade per content area, depending on Pilot Phase 2 sample)
- number of passages per ELA session (6 passages)
- distribution of tiers within a session
- avoiding flagged items

Form Development

The forms were built using item classical test statistics from Pilot Phase 1 results, content distribution, and distribution of tiers. The first form, Session 1 and Session 2a, was designed to allow maximum accessibility for students who in addition to having significant cognitive disabilities, were blind, deaf, or deaf-blind, and possibly combined with other disabilities.

Forms were randomly assigned at school- or classroom-levels. The sampling plan was based on a minimum of 100 students per item, with a 50% overage to account for students who met the early stopping rules. Per TAC recommendations and state input, Pilot Phase 2 needed to provide a large enough item pool with stable item difficulty estimates to support a stage-adaptive test in spring 2015. To meet a proposed 30-35 item mathematics stage-adaptive operational assessment and a 40 item ELA stage-adaptive operational form in the spring, the TAC and meeting members proposed piloting 100 items per content area per grade. This number of items would provide a robust pool for spring 2015 selections. Thus, four forms were created per grade and content area (two in ELA) to produce sufficient coverage across the operational test blueprint and across tiers. The forms would mirror the proposed two-stage test design for the spring 2015 assessment by dividing the content into two sessions.

Reading: Grades 3-8, 11 Pilot Form Selection Criteria

- Select a 40-item test with approximately 20 items per session (two sessions)
- Designate Session 1 as the anchor session; Sessions 2A-2D will be paired with Session 1 to complete each form
- Select eight forms for grades 3-4 (4 forms with nonverbal foundational items and four forms for verbal foundational items)

- Select four forms for grades 5-8, 11
- Select five passage sets per form
  - Grades 3, 4
    - Session 1: three passages = 2 literary and 1 informational (Tier 1: Literary; Tier 2: Info; Tier 3 Literary)
    - Sessions 2A-2D: two passages = 1 literary and 1 informational (tier may vary as long as overall tier distribution is met)
    - In addition, grades 3 and 4 assessments will include foundational items. Each session will contain a foundational item set. The foundational set is a group of 3 or 4 items but is scored as one item. Foundational items are grouped in the following configurations:
      - Session 1: Tier 2 foundational items
      - Sessions 2A – 2D = Tiers 1-4 foundational items (2A=Tier 3; 2B=Tier 1; 2C=Tier 4; 2D=Tier 2)
  - Grades 5, 6, 7, 8, 11
    - Session 1: three passages = 2 informational and 1 literary (Tier 1: Info; Tier 2: Lit; Tier 3 Info)
    - Sessions 2A-2D: two passages = 1 informational and 1 literary (tier may vary as long as overall tier distribution is followed)
- Distribute tiers within a session (as per tier distribution below)
  - Tier 1: 1-2 passages
  - Tier 2: 1-2 passages
  - Tier 3: 1-2 passages
  - Tier 4: 1 passage
- Select passages with least amount of flags/avoid flagged items (if it is necessary to select flagged items, then try to select flagged items that have not been edited or edited heavily)
- Select two passages identified as “accessible” in Session 1 (per NCSC Accessibility Committee)
- Select two passages identified as “accessible” in a session 2A, 2B, 2C, 2D (per NCSC Accessibility Committee)
  - Place paired passages in Session 2 (grades 5-8, 11), if possible (p-value considerations take precedence over placement in Session 2 considerations)
- Order passages from lowest tier to highest tier in forms
- Follow p-value criteria from Research (when selecting passage sets)
  - Tier 1: mean p-value=0.8; range = 0.7 – 0.9
  - Tier 2: mean p-value=0.6; range = 0.5 – 0.7

- Tier 3: mean p-value=0.5; range = 0.4 – 0.6
- Tier 4: mean p-value=0.4; range = 0.3 – 0.5

- Align to overall blueprint percentages (% reporting category and CCC coverage)
- Check answer choice keys so no more than 3 of an answer choice appears in a row

Note: The criteria were ordered from the large overall test design and format considerations to the granular considerations within each session and within each passage.

The Pilot Phase 2 forms were to be constructed to meet mean p-value constraints by form, as shown in Exhibit 1 (ELA) The mean p-value specifications were based on empirical mean and standard deviation results from Pilot Phase 1.

Exhibit 1. ELA Research Criteria

Tier	Target Mean P-value	P-value Range	N passages (Form)	N passages Session 1 (anchor)	N foundational items (gr 3-4)	N foundational items (gr 3-4) in Session 1
1	0.8	0.7 – 0.9	1-2	1	1	1
2	0.6	0.5 – 0.7	1-2	1	1	1
3	0.5	0.4 – 0.6	1-2	1	1	1
4	0.4	0.3 – 0.5	1	0	1	1

Finally, selections/solutions that met all criteria were to be reviewed by the vendor's research team and the NCSC consortium's leadership.

Mathematics: Grades 3-8, 11 Pilot Forms/Form Selection Criteria

- Select a 40-item test with 20 items per session (two sessions)
- Designate Session 1 will be anchor session; Sessions 2A-2D will be paired with Session 1 to complete the form
- Select four forms for grades 3-8, 11
- Ensure each CCC will get an equal representation in each session (i.e., 2 items per CCC in each session)
- Distribute tiers within session (following mathematics tier distribution table)
  - For each CCC within each grade: 2 Tier 1 items, 3-4 Tier 2 items, 3-4 Tier 3 items, 1 Tier 4 item will appear on either Session 1, 2A, 2B, 2C, or 2D.
  - Per session, the number of items per tier will be
    - Tier 1: 4 items

        - Tier 2: 7 items
        - Tier 3: 7 items
        - Tier 4: 2 items
- Select items marked as “preferred for accessibility” for Session 1 (per NCSC Accessibility Committee)
- Follow p-value criteria from Research
    - Tier 1: mean p-value=0.7; range =0.6 – 0.8
    - Tier 2: mean p-value=0.5; range = 0.4 – 0.6
    - Tier 3: mean p-value=0.4; range = 0.3 – 0.5
    - Tier 4: mean p-value=0.3; range = 0.2 – 0.4
- Select items with the least number of flags
- Check for family set representativeness (use the most variety possible, making sure items don’t clue each other)
- Check CCC “version pairs” (be sure to include one of each version in Forms 2A and 2B; try to do the same for 2C and 2D, if possible)
- Order items in each session according to the following rules:
    - Start each session with Tier 1 items
    - Order content based on increasing tier and p-value information; avoid placing Tier 4 items as last item(s) on form
    - Mix Domain/CCCS so that there is a mix of skills
    - Check answer choice keys so no more than 3 of an answer choice appears in a row
    - Place calculator items followed by noncalculator items

Note: The criteria are ordered from the large overall test design and format considerations to the granular considerations within each session.

The Pilot Phase 2 forms were to be constructed to meet mean p-value constraints by form, as shown in Exhibit 2 (Mathematics) The mean p-value specifications were based on empirical mean and standard deviation results from Pilot Phase 1.

Exhibit 2. Mathematics Research Criteria

Tier	Target Mean P-value	P-value Range	N items (Form)	N items Session 1 (anchor)
1	0.7	0.6 – 0.8	8	4
2	0.5	0.4 – 0.6	14	7
3	0.4	0.3 – 0.5	14	7
4	0.3	0.2 – 0.4	4	2

Finally, selections/solutions that met all criteria were to be reviewed by the vendor's Research team and the NCSC consortium's leadership.

Session 1 Anchor and Rationale

Session 1 items were common across all forms, and they were used to anchor the Session 2 items to a common scale. The purpose of the anchor set was the determination of a quantifiable relationship between student performance on the anchor set as it relates to student performance on all other items. The anchor set was not intended to cover the breadth and depth of the assessed content.

Session 1 would be an anchor set for all students, containing 20 items for each content area and at each grade, and Sessions 2A, 2B, 2C, or 2D would be combined with the Session 1 anchor set to create four separate forms. (See Exhibits 3 and 4 below.)

Exhibit 3. Mathematics Pilot Phase 2 Forms

Mathematics
Session 1*: 20 items
Session 2A: 20 items
Session 2B: 20 items
Session 2C: 20 items
Session 2D: 20 items

Note: *Session 1 is an anchor set. This set of common items will be combined with 2A, 2B, 2C, or 2D to create four pilot forms.

Exhibit 4. Reading Pilot Phase 2 Forms

Reading	Session Specifications
Session 1*: 20 items**	3 passages: Tier 1, Tier 2, Tier 3
Session 2A: 20 items	2 passages: combination of Tier 1, 2, 3, 4 (no severe jumps, e.g., 1 to 4)
Session 2B: 20 items	2 passages: combination of Tier 1, 2, 3, 4 (no severe jumps, e.g., 1 to 4)
Session 2C: 20 items	2 passages: combination of Tier 1, 2, 3, 4 (no severe jumps, e.g., 1 to 4)
Session 2D: 20 items	2 passages: combination of Tier 1, 2, 3, 4 (no severe jumps, e.g., 1 to 4)

Note: *Session 1 is an anchor set. This set of common items will be combined with 2A, 2B, 2C, or 2D to create four pilot forms. ** Because items per passage may vary, Session 1 will be approximately 20 items as will Sessions 2A-2D.

The ELA forms were constructed to provide an opportunity to evaluate student performance on the anchor set to establish if a relationship exists to student performance on Tier 2 and Tier 3 writing CR items. The first session of the ELA Pilot 2 form consisted of the matching grade's Reading Session 1 content, four stand-alone writing selected-response items, and one Tier 1 writing prompt-based set of selected-response items. Two writing CCCs were prioritized per grade for inclusion on the assessment. Two non-adjacent tiers were represented on Pilot Phase 2 per CCC. Therefore, one CCC was represented by Tiers 1 and 3, and the other CCC was represented by Tiers 2 and 4. The Tier 1 writing prompt-based set of items were analyzed for any cueing with regard to the reading passage items sets in Session 1 and Tier 2 and 3 CR items in Session 2. (See Exhibits 5 and 6 below.) In addition to ensuring to the greatest degree possible that items would be selected in accordance with the guidance of the NCSC Accessibility Committee, item results from the Writing Evaluation Study (WES) were analyzed prior to form construction. Writing item selection was provided to the vendor by NCSC leadership for inclusion on the ELA Pilot Phase 2 forms.

Exhibit 5. ELA Pilot Phase 2 Forms

ELA	Session Specifications
Session 1 (Grades 3 and 4)	• 3 passages = 2 literary and 1 informational (Tier 1: Literary; Tier 2: Informational; Tier 3 Literary) • 1 foundational item • 4 writing selected-response items (one item per tier) • 1 Tier 1 prompt-based item set (4 – 6 items)
Session 1 (Grades 6 – 8, and 11)	• 3 passages = 2 informational and 1 literary (Tier 1: Informational; Tier 2: Literary; Tier 3 Informational) • 4 writing selected-response items (one item per tier) • 1 Tier 1 prompt-based item set (6 items)
Session 2A and 2B (all grades)	• 1 Tier 2 writing CR • 1 Tier 3 writing CR

Exhibit 6. Writing Prompts in Session 2

Grade	Session 2 (combination of Tiers 2 and 3)
3 - 5	2 Narrative writing prompts (per form)
6 - 8	2 Expository writing prompts (per form)
11	2 Argumentative writing prompts (per form)