

**SMARTER Balanced Assessment Consortium Common Core  
State Standards Analysis: Eligible Content for the Summative  
Assessment**

**Final Report**

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## EXECUTIVE SUMMARY

This report is a descriptive analysis of the Common Core State Standards (CCSS), intended to determine which content is eligible for the Consortium’s end-of-year summative assessment for English language arts (ELA) and mathematics in grades 3–8 and high school. The high school standards analyzed were those in grades 9–10 and 11–12 for ELA, and all conceptual categories for mathematics. All high school standards were analyzed, since which high school content will be included in the summative grade 11 assessment has yet to be determined. Outcomes of this analysis are intended as a starting point to inform discussion as the Consortium designs its summative assessment and develops its test and item specifications. This report is intended to be used with other documents the Consortium has or is developing that provide more conceptual, construct-centered, and evidence-based frameworks for its assessment design and development.

### Key Questions

This analysis addressed the following key questions:

1. Which CCSS are eligible for the SBAC summative assessment?
2. What is the range of depth of knowledge of the eligible CCSS?

The primary audience for this report is the content and curriculum specialists and test and item development experts who will be involved in the next steps of determining which specific standards should be tested on the summative assessment and by which item types, and how the standards should be clustered, if at all, for testing multiple standards with given assessment items/tasks, as well as developing the test and item specifications and test blueprints.

### Methodology

In order to determine eligibility of content for summative assessment, content standards were coded according to the following criteria, based on the information provided in the CCSS documents:

1. Learnable within the school year
2. Expected content for all students at the grade level/span

Content standards were also coded according to the following criteria, based on expert judgment:

3. Measurable via on-demand tasks in an end-of-year summative assessment (i.e., item types, response types)
4. Depth of knowledge (DOK)

A standard would be rated as eligible for the summative assessment if it was rated as “yes” for all of the first three criteria (i.e., learnable, expected, and measurable), and would be rated as not eligible if it was rated as “no” for any of the first three criteria.

### Findings

The organization of the standards in the CCSS differs between ELA and mathematics, both in the way the content is categorized (e.g., by strand, domain, or conceptual category) and across grade levels/spans (ELA has cross-grade College and Career Readiness [CCR] Anchor Standards, whereas the mathematics standards are organized based on domains that vary across grade levels/spans according to grade-

appropriate content). The results of this study are organized and presented in a manner consistent with the organization of each content area in the CCSS.

### **ELA**

Of the 333 grade-level standards in grades 3–8 and high school, all standards were judged to be learnable during the school year and expected of all students; 285 standards were judged to be measurable via on-demand summative assessment and 48 not measurable. The standards judged to be measurable via on-demand summative assessment are all eligible; the remaining 48 standards are not eligible.

Eligibility is distributed across the grades as follows:

- In grade 3, 35 of 42 standards are eligible.
- In grades 4 and 5, 35 of 43 standards are eligible.
- In grades 6–12, 36 of 41 standards are eligible.

The following standards are *not* eligible at all grades:

- Reading standard 10 (for both Literature and Informational Text)
- Writing standards 6 and 10
- Speaking and Listening standard 1

Additional standards *not* eligible in grades 3–5 are:

- Grades 4 and 5 Reading Foundational Skills standard 3
- Grades 3–5 Reading Foundational Skills standard 4
- Grades 3–5 Writing standard 7

### **Mathematics**

Of the 316 grade-level and conceptual category–level standards in grades 3–8 and high school, 270 were judged to be eligible for the summative assessment; 46 were not eligible. The eligibility was distributed across the grades as follows:

- In grades 3–7, all standards were eligible.
- In grade 8, 27 of 28 standards were eligible. One grade 8 standard in the Geometry domain was ineligible; this standard was judged to be not measurable via on-demand assessment.
- In high school, 111 of 156 standards were eligible and 45 were not eligible.
- Of the 45 ineligible high school standards, 43 were not expected of all students. The largest number of standards not expected of all students was in the Number and Quantity conceptual category, but every conceptual category included some standards not expected of all students. The remaining two ineligible standards, both in Geometry, were judged to be not measurable via on-demand assessment and more appropriate for classroom assessment.

### **Next Steps**

The information presented in this report is a starting point for the Consortium’s efforts related to test and item development. The Consortium should use this study’s data and recommendations to inform its further explication of the content to be assessed; that is, in terms of what is to be measured and why, what is *not* to be measured and why not, how to best measure the content, and how to ensure accessibility to all students of the content measured.

There are numerous considerations and trade-offs to be made when designing a summative assessment (e.g., content coverage, emphasis, burden). Therefore, coordinated discussion across Consortium groups (e.g., Test Design, Item Development, Technology Approach, and Accessibility and Accommodations Work Groups and the content specifications committee) must occur in order to verify the need for and conditions under which the eligible content identified in this report should ultimately be included or excluded on the summative assessment.

Subsequent discussions should focus on issues such as whether and how assessable content can be reasonably clustered to reduce the number of assessed constructs (i.e., which content could and should be clustered), the prioritization of the standards/clusters to be assessed, and the cognitive demands and types of evidence required by the standards/clusters to be assessed. These discussions should occur within the context of understanding the explicit purpose of the summative assessment, relevant cognitive models for the assessed domains (i.e., ELA, mathematics), and what the Consortium ultimately hopes to accomplish with this assessment in terms of student learning and achievement. Doing so will help to inform the subsequent development of an assessment framework and theory of action that can guide the development of a valid summative assessment.

While considering what students are to learn and the claims to be made about students from the results of the summative assessment, it is essential that the characteristics of the students be understood and considered—that is, the characteristics of *all* students who will be administered the summative assessment, including English learner (EL) students and students with disabilities (SWDs). These students' capacities as well as their challenges must be considered upfront and throughout the test and item design and development processes. EL students and SWDs have characteristics (e.g., sensory, cognitive, physical, linguistic, socio-cultural) that require certain supports (via accessibility strategies and/or accommodations) that interact with assessment content, item formats, and administration conditions. Therefore, in order to best ensure the development of a summative assessment that yields valid interpretations and appropriate consequences for students, the Consortium's summative design and development discussions must always consider all our students.

This final report incorporates comments received from SBAC member states, work groups, and other key constituencies (e.g., Technical Advisory Committee). Suggestions intended to generate and/or guide further discussion of this study's data among Consortium work groups and committees (e.g., Test Design, Item Development, Technology Approach, and Accessibility and Accommodations Work Groups, content specifications committee) are provided in this report. Examples that help to illustrate how to navigate and use the information from this analysis (e.g., consideration of the content standards, comment codes, DOK) also are provided.

# SMARTER Balanced Assessment Consortium Common Core State Standards Analysis: Eligible Content for the Summative Assessment

## INTRODUCTION

The SMARTER Balanced Assessment Consortium (SBAC) contracted with the Assessment and Standards Development Services (ASDS) program at WestEd to conduct an analysis of the Common Core State Standards (CCSS) in English language arts (ELA) and mathematics as part of its broader efforts to define the eligible content of the CCSS for its various assessments. This report presents the findings of the analysis of eligible content for the summative assessment.

The report is organized as follows:

- Introduction, including the purpose of the study, organization of the CCSS, and background on the SBAC summative assessment;
- Methodology, including the analysis criteria and study protocol;
- Summary of findings for ELA and mathematics;
- Considerations for next steps, including considerations for content clustering, test design, item development, test administration, and use of technology;
- References; and
- Appendices, containing standard-level ratings and supplementary information.

### Project Purpose

This report is a descriptive analysis of the CCSS, intended to determine which content is eligible for the Consortium's end-of-year summative assessment for ELA and mathematics in grades 3–8 and high school. The high school standards analyzed were those in grades 9–10 and 11–12 for ELA, and all conceptual categories for mathematics. All high school standards were analyzed, since which high school content will be included in the summative grade 11 assessment has yet to be determined (e.g., by the Consortium's Test Design Work Group and content specifications committee). Outcomes of this analysis are intended as a starting point to inform discussion as the Consortium designs its summative assessment and develops its test and item specifications. This report is intended to be used with other documents the Consortium has or is developing that provide more conceptual, construct-centered, and evidence-based frameworks for its assessment design and development.

While all CCSS content is assessable and should be assessed in the classroom throughout the school year, important choices need to be made about which standards, or parts of standards, are best assessed via the required summative accountability assessment proposed by the Consortium. The purpose of this study is to determine the total set of standards eligible for the summative assessment only. Given the purpose of this study, and given that its findings are being presented in the early stages of the Consortium's assessment design and development activities, the information in this report should in no way be interpreted to constrain the Consortium's discussions and decisions. Rather, the findings presented in this report and suggested considerations for next steps should help inform the Consortium in its further examination and discussion of the study's descriptive data and their implications for the design and development of the summative assessment.

For the purposes of this study, a standard was considered eligible for the summative assessment if it was judged to be learnable during the school year, expected of all students, and measurable via the range of on-demand assessment item types included in the SBAC proposal. In addition, analysts

determined which item types proposed for the summative assessment seem appropriate for assessing the content of each standard or part of a standard. Finally, analysts judged the range of cognitive complexity of the skills and knowledge described in each standard. The protocol and criteria used in this study are described in greater detail in the Methodology section of this report.

### **Key Questions**

This analysis addressed the following key questions:

5. Which CCSS are eligible for the SBAC summative assessment?
6. What is the range of depth of knowledge of the eligible CCSS?

The primary audience for this report is the content and curriculum specialists and test and item development experts who will be involved in the next steps of determining which specific standards should be tested on the summative assessment and by which item types, and how the standards should be clustered, if at all, for testing multiple standards with given assessment items/tasks, as well as developing the test and item specifications and test blueprints. In particular, this report should be useful to the Consortium's Test Design and Item Development Work Groups, along with the content specifications committee.

It is important to underscore that the goal of this analysis was to provide the Consortium's item and test developers with information to consider about the assessable content of the CCSS vis-à-vis the Consortium's summative assessment. It was *not* an analysis of the quality of the standards, an unpacking of the standards, or an alignment study. The findings of this study are *not* intended to serve as the Consortium's summative test specifications or as a test blueprint. Rather, the findings of this study are intended (along with other documents) to provide information that will inform the development of test and item specifications and should be considered as providing neither a final or restrictive determination nor a compulsory list of individual standards that must be included on the summative assessment. The Consortium's work groups, state members, staff, and consultants necessarily engaging in further discussion to develop test and item specifications (e.g., the Test Design and Item Development Work Groups) should consider the findings of this study as they work towards determining which specific content is to be tested and how it should be tested.

### **A Note Regarding a Preliminary Review and Comment on the Report**

A preliminary draft version of this report, including all findings, was distributed to key Consortium stakeholders for review and comment, in order to best ensure that the information presented in the report was clear and the findings usable vis-à-vis the intent and purpose of this analysis and this report. These stakeholders included all Consortium State members, Consortium work groups, Executive Committee members, and the Consortium's Technical Advisory Committee. All comments received were considered and addressed in this final version of the report.

Many comments required responses that fell beyond the scope of this report. Nonetheless, these comments offer direction for possible next steps and would be best addressed with further discussion by Consortium work groups and committees, the Executive Committee, and the Technical Advisory Committee. Appendix F presents a listing of all comments received from the preliminary review with recommendations for follow-up with relevant stakeholder groups. Cross-work group/committee communication and coordination are encouraged and noted accordingly in the appendix.

## Background and Organization of the Common Core State Standards for English Language Arts and Mathematics

The CCSS were developed through an effort coordinated by the Council of Chief State School Officers and the National Governors Association, with the intention of producing a set of common standards that are “(1) research and evidence based, (2) aligned with college and work expectations, (3) rigorous, and (4) internationally benchmarked” (CCSSO and NGA, 2010a, p. 3). The standards for ELA and mathematics have different organizational structures. The ELA standards are organized based on cross-grade College and Career Readiness (CCR) Anchor Standards, whereas the mathematics standards are organized based on domains that vary from grade to grade according to grade-appropriate content. This subsection provides an overview of the organization of the CCSS in each content area in order to provide some context for the analysis.

### English Language Arts

The ELA standards are divided into four strands: Reading, Writing, Speaking and Listening, and Language. As explained in the introduction of the CCSS for English Language Arts, “each strand is headed by a strand-specific set of College and Career Readiness (CCR) Anchor Standards that is identical across all grades” (CCSSO and NGA, 2010a, p. 8). Grade-specific standards corresponding to the CCR Anchor Standards are provided for each individual grade from grades 3–8, and for grade spans 9–10 and 11–12 in high school. Table 1 provides an overview of the organization of the ELA standards by CCR Anchor Standard, strand, and grade level.

**Table 1. Organization of the Common Core State Standards for English Language Arts**

<b>K–12 Anchor Standards</b>	<b>K–5 (K, 1, 2, 3, 4, 5) Grade-Specific Standards</b>		<b>6–12 (6, 7, 8, 9–10, 11–12) Grade-Specific Standards</b>	
<b><i>College and Career Readiness Anchor Standards for Reading</i></b>  <i>1–10</i>	<b><i>Reading Standards for Literature K–5</i></b>  <i>1–10</i> (8 not applicable)	<b><i>Reading Standards for Informational Text K–5</i></b>  <i>1–10</i>	<b><i>Reading Standards for Literature 6–12</i></b>  <i>1–10</i> (8 not applicable)	<b><i>Reading Standards for Informational Text 6–12</i></b>  <i>1–10</i>
	<b><i>Reading Standards: Foundational Skills K–5</i></b> <i>1–4</i> (grades K–1) <i>3–4</i> (grades 2–5)			
<b><i>College and Career Readiness Anchor Standards for Writing</i></b>  <i>1–10</i>	<b><i>Writing Standards K–5</i></b>  <i>1–8</i> (grades K–2) <i>1–8, 10</i> (grade 3) <i>1–10</i> (grades 4–12)		<b><i>Writing Standards 6–12</i></b>  <i>1–10</i>	
<b><i>College and Career Readiness Anchor Standards for Speaking and Listening</i></b>  <i>1–6</i>	<b><i>Speaking and Listening Standards K–5</i></b>  <i>1–6</i>		<b><i>Speaking and Listening Standards 6–12</i></b>  <i>1–6</i>	
<b><i>College and Career Readiness Anchor Standards for Language</i></b>  <i>1–6</i>	<b><i>Language Standards K–5</i></b>  <i>1–6</i>		<b><i>Language Standards 6–12</i></b>  <i>1–6</i>	

Numbers in the table that are **bold-faced** are grades/grade spans. Numbers that are *italicized* are the number of the standards.

## Mathematics

The CCSS for Mathematics consist of two parts: the Standards for Mathematical Practice and the Standards for Mathematical Content. The eight Standards for Mathematical Practice are the same across all grades, while the Standards for Mathematical Content vary from grade to grade. For the purposes of this study, only the Standards for Mathematical Content were individually analyzed, and from here on, “mathematics standards” refers to the Standards for Mathematical Content.

The Standards for Mathematical Practice describe “processes and proficiencies” that all students should develop as they become mathematically proficient (CCSSO and NGA, 2010b, p. 6). These standards are intended to be connected to mathematical content in mathematics instruction, particularly as students engage with content standards that set an expectation of understanding (p. 8). With respect to assessment, key features of the Mathematical Practice standards must be purposefully integrated in classroom assessment and in development of SBAC interim/benchmark, formative, and summative assessment tasks. Due to the integrative and process nature of these standards, an individual item or task would not address a separate Mathematical Practice standard on its own; rather, a collection of formative assessment experiences or summative items or tasks would focus on certain aspects of the Mathematical Practice standards *as applied to concepts of mathematical content* to ensure that students have opportunities to become mathematically proficient and demonstrate their expertise.

The mathematics standards are organized by grade level in grades K–8 and by conceptual category in high school. In grades K–8, the standards are organized into elementary and middle school (K–5 and 6–8, respectively). Each grade level is subdivided into domains, as shown in Tables 2 and 3.

**Table 2. Organization of the Common Core State Standards for Mathematics: Elementary School (K–5)**

K–5 Domains	Grade Levels with Standards in the Domain	Domain Code
Counting and Cardinality	K	CC
Operations and Algebraic Thinking	K–5	OA
Number and Operations in Base Ten	K–5	NBT
Number and Operations—Fractions	3–5	NF
Measurement and Data	K–5	MD
Geometry	K–5	G

**Table 3. Organization of the Common Core State Standards for Mathematics: Middle School (6–8)**

6–8 Domains	Grade Levels with Standards in the Domain	Domain Code
Ratios and Proportional Relationships	6–7	RP
The Number System	6–8	NS
Expressions and Equations	6–8	EE
Functions	8	F
Geometry	6–8	G
Statistics and Probability	6–8	SP

The high school CCSS for mathematics are organized by conceptual category. Within each conceptual category are domains specific to that category, as shown in Table 4.

**Table 4. Organization of the Common Core State Standards for Mathematics: High School (9–12)**

<b>9–12 Conceptual Categories/Domains</b>	<b>Domain Code</b>
<i>Number and Quantity</i>	
The Real Number System	N-RN
Quantities	N-Q
The Complex Number System	N-CN
Vector and Matrix Quantities	N-VM
<i>Algebra</i>	
Seeing Structure in Expressions	A-SSE
Arithmetic with Polynomials and Rational Expressions	A-APR
Creating Equations	A-CED
Reasoning with Equations and Inequalities	A-REI
<i>Functions</i>	
Interpreting Functions	F-IF
Building Functions	F-BF
Linear, Quadratic, and Exponential Models	F-LE
Trigonometric Functions	F-TF
<i>Modeling</i> (Content is integrated with standards in other conceptual categories.)	
<i>Geometry</i>	
Congruence	G-CO
Similarity, Right Triangles, and Trigonometry	G-SRT
Circles	G-C
Expressing Geometric Properties and Equations	G-GPE
Geometric Measurement and Dimension	G-GMD
Modeling with Geometry	G-MG
<i>Statistics and Probability</i>	
Interpreting Categorical and Quantitative Data	S-ID
Making Inferences and Justifying Conclusions	S-IC
Conditional Probabilities and the Rules of Probability	S-CP
Using Probability to Make Decisions	S-MD

### Background on the SBAC Summative Assessment

The results of this analysis are intended to inform the design and development of the Consortium’s summative assessment of the CCSS. The summative assessment is a component of the Consortium’s balanced assessment system, which includes interim assessment, formative assessment tools and practices, and summative assessment. The description of the intent of the Consortium’s summative assessment, as presented in the SBAC proposal dated June 23, 2010 (SBAC, 2010b), was used to inform the parameters established for this analysis. A summary of this description follows.<sup>1</sup>

<sup>1</sup> It is expected that the descriptions presented in the SBAC proposal (SBAC, 2010b) will be further elaborated and refined by the Consortium (e.g., regarding test format, administration conditions, item types).

### ***Purpose of the Summative Assessment***

The summative assessment is intended to measure the “full range of student abilities on the CCSS” in ELA and mathematics, providing information on student achievement and growth for accountability (SBAC, 2010b, p. 37). As described in the proposal, the SBAC’s “system of summative, I/B, and formative assessments will produce instructionally useful information available throughout the instructional year to help guide and support differentiated instruction” (p. 41).

### ***Population***

The summative assessment is intended for all students, including students from special populations<sup>2</sup>. “The SBAC system will ensure meaningful accessibility to students; that is, valid forms of presentation, engagement, and response for students—to address access barriers including vision, hearing, motor, and other sensory, physical, cognitive, processing, and language needs of students—that enable students to fully demonstrate what they know and can do” (pp. 47–48).

### ***Testing Window***

The summative assessment will be administered within 12 weeks of the end of the instructional year. Students will be allowed two testing opportunities during the window.

### ***Grades/Subjects Tested***

The summative assessment will test the Common Core State Standards in English language arts and mathematics in grades 3–8 and 11.<sup>3</sup>

### ***Test Format***

The selected-response and constructed-response sections of the summative assessment will be administered as a computer-delivered adaptive assessment. “The computer adaptive approach provides maximally accurate assessment for each student to better determine whether students are on track for being college- and career-ready and to support the measurement of the full range of student abilities” (p. 42).

### ***Item Types***

The summative assessment will include the following item types as defined in the SBAC proposal (SBAC, 2010b):

- Selected response
- Extended constructed response<sup>4</sup>
- Technology enhanced

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<sup>2</sup> However, the assessment is not intended for students with severe cognitive disabilities.

<sup>3</sup> For this project, eligible content was defined for ELA and mathematics in grades 3–8 and high school. The high school standards analyzed were those in grades 9–10 and 11–12 for ELA, and all conceptual categories for mathematics.

<sup>4</sup> “Constructed response” is a general term for items requiring the student to generate a response as opposed to selecting a response. As defined in the SBAC proposal, “extended constructed response” describes assessment tasks such as writing a first draft in ELA or solving a multi-step math problem that has more than one possible answer or more than one solution method. The general term “constructed response” includes “extended constructed response” items as well as items requiring response by short answer, grid-in, and short answer with an explanation.

- Performance task (two at each of grades 3–8, up to six by grade 11)

For the purposes of this study, two further item type descriptors were identified for ELA only:

- Writing prompt (an item type designed to measure writing and language standards)
- Oral response required (a response type that applies to technology-enhanced items to measure speaking skills)

The numbers and types of items will vary across grades and content areas. Descriptions of the item types from the SBAC proposal and other SBAC supporting documents are included in Appendix B.

## METHODOLOGY

This section describes the methodology used in this study and begins with a discussion of the guiding principles and considerations that framed this study's analyses. Next, the study criteria, coding protocol, and training and calibration process are described, followed by decision rules and descriptions of the analysts' qualifications.

### Guiding Principles and Considerations

Prior to analyzing the Common Core State Standards (CCSS), guiding principles and considerations were established to help define and make as explicit as possible the parameters of this study, to determine which criteria would be most appropriate for this study's analyses, and to inform the reporting of the results of the analyses. The guiding principles and considerations are presented in Appendix A.

### Study Criteria

Based on the guiding principles and considerations, as well as the study's goals, WestEd developed an analysis protocol to identify content in the CCSS that could be considered eligible for summative assessment. This section describes that protocol and the criteria used in this study by the analysts.

This analysis focused on determining eligible content for summative assessment. Content standards were coded according to the following criteria, based on the information provided in the CCSS documents:

7. Learnable within the school year
8. Expected content for all students at the grade level/span

Content standards were also coded according to the following criteria, based on expert judgment:

9. Measurable via on-demand tasks in an end-of-year summative assessment (i.e., item types, response types)
10. Depth of knowledge (DOK)

A standard would be rated as eligible for the summative assessment if it was rated as "yes" for all of the first three criteria (i.e., learnable, expected, and measurable), and would be rated as not eligible if it was rated as "no" for any of the first three criteria.

Each standard was analyzed according to the criteria described in this section. This level of analysis was selected because it was conducive as a starting point towards yielding information that could inform item specifications and, for example, aggregation or clustering of skills. The standard-by-standard analysis does *not* suggest that the summative assessment be composed of one item per assessable standard, nor does this analysis suggest the assessment test discrete skills. As explained previously in this report, the intention of the information yielded by this protocol and its criteria is to inform discussions about the Consortium's test and item design and development. Further discussion by the Consortium about the content and design of the summative assessment is expected.

The four criteria were operationalized as follows.

### **1. Learnable Within the School Year**

Unless otherwise stated in the CCSS documents, content was considered learnable within the school year<sup>5</sup>; that is, a school year (or a course within a school year) would provide adequate time for a student to learn the content.<sup>6</sup> Analysts thoroughly reviewed the CCSS for each grade level/span. For each content standard, analysts indicated whether:

- content is learnable within the school year (Yes [Y]); or
- CCSS documents indicate that content is not intended to be learned within the year (No [N]).<sup>7</sup>

If the standard was coded N, analysts recorded the specific CCSS source that defines the content standard as not intended to be learned within the school year.

### **2. Expected Content for All Students at the Grade Level/Span**

Unless otherwise stated in the CCSS documents, content was considered expected for all students at the grade level/span; that is, the content is part of what all students should know or be able to do by the end of the given grade level or grade span. Analysts thoroughly reviewed the CCSS for each grade level/span. For each content standard, analysts indicated whether content was:

- expected for all students at the grade level/span (Yes [Y]); or
- not expected for all students at the grade level/span, as indicated in the CCSS documents (No [N]).

If the standard was coded N, analysts recorded the specific CCSS source that defines the content standard as not expected for all students at the grade level/span.

### **3. Measurable Via On-Demand Tasks in an End-of-Year Summative Assessment**

A standard was considered measurable via on-demand summative assessment tasks if it can be assessed by any of the item types listed in the following subsection, as defined in the SBAC proposal (SBAC, 2010b, pp. 42, 52–53). An on-demand task is one that is presented to the student apart from instructional activities and requires the student to provide a specified type of response within the defined time and place parameters of the assessment tool. A standard was considered to *not* be measurable via on-demand tasks if assessment of the standard requires extended time to complete and cumulative collection of results (e.g., portfolio; research project over weeks or months), or if it is best assessed via in-person observation or interaction (e.g., the content needs to be embedded in classroom discussion; the content targets interactive skills). Analysts reviewed each content standard and indicated whether and how each standard was most efficiently measurable using the following criteria.

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<sup>5</sup> This determination focuses on whether each standard analyzed is teachable within a year and not whether the collection of standards in the CCSS is teachable within a year.

<sup>6</sup> Additional analysis by content and curriculum experts will need to be conducted to determine the specific content expected to be learned by the time of the testing window for the end-of-year assessment.

<sup>7</sup> Note that this criterion results in the mathematics standards marked “+” not being considered eligible for the summative assessment, since these standards address advanced content that is not expected of all students to study in order to be college and career ready (CCSSO and NGA, 2010b, p. 57). Exclusion from the summative assessment precludes these standards from being assessed by the Consortium’s other assessments (e.g., formative).

## **Item Type**

The SBAC summative assessment will be designed to include problem-solving and performance tasks with some extended responses, to be completed over a number of class periods. Therefore, for each standard, analysts indicated the type(s) of items from the following list that could be used to assess the standard on a summative assessment. That is, for each item type, analysts were asked whether, in their professional judgment, an item of that type could generate sufficient evidence to assess the standard or a key component of the standard. Descriptions of the item types from the SBAC proposal and other SBAC supporting documents are included in Appendix B.<sup>8</sup> Based on these descriptions, when coding standards as measurable by technology-enhanced items or performance tasks, analysts considered it likely that a set of multiple standards would be combined when assessed by these more complex item types. Analysts selected from the following item types:

### *ELA—Reading Item Types*

- Selected response (multiple choice)
- Extended constructed response
- Technology enhanced (multiple choice or constructed response)
- Performance task

### *ELA—Writing, Speaking and Listening, and Language Item Types*

#### *Writing/Language*

- Selected response (multiple choice)
- Technology enhanced (multiple choice or constructed response)
- Writing prompt
- Performance task

#### *Speaking and Listening*

- Technology enhanced (multiple choice or constructed response)
- Oral response required (an item assessing the standard would *require* an oral response in order to address the content of the standard)

### *Mathematics Item Types*

- Selected response (multiple choice)
- Extended constructed response
- Technology enhanced (multiple choice or constructed response)
- Performance task

## **4. Depth of Knowledge (DOK)**

Analysts reviewed each standard to determine the range of cognitive complexity required to perform the skill or demonstrate the knowledge described by the standard. Analysis included consideration of the descriptors in the standard as well as the ways in which students would show what they know and can do with respect to the skills and knowledge described. Norman Webb’s (2005) four levels of cognitive complexity were used for this analysis. These levels were developed specifically for K–12 standards and alignment studies and are widely used in alignment studies throughout the nation. In

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<sup>8</sup> Because the item type definitions require further elaboration and refinement (e.g., by the Item Development, Technology Approach, and Accessibility and Accommodations work groups), analysts were not able at the time of this analysis to prioritize among or recommend the “most appropriate” item type to assess a given standard.

addition, the descriptors for each level include specific examples for ELA and mathematics content, aiding in consistency of ratings.

The four levels are listed below; see Appendix C for the complete descriptions of the levels as they apply to ELA and mathematics.

- Level 1 (Recall)
- Level 2 (Basic Application)
- Level 3 (Strategic Thinking)
- Level 4 (Extended Thinking)

Because some standards describe skills at multiple levels of complexity (e.g., when there are multiple skills in a standard that could be applied at different levels of complexity), analysts indicated all applicable DOK levels to indicate the full range of DOK.

The findings from DOK ratings provide information on the range of cognitive complexity of content in the standards, which groups engaging in the development of test and item specifications, the test blueprint, and item templates can use to inform discussions about which content to test via which item types, and whether and how to cluster standards for summative assessment. It is expected that Consortium work groups (e.g., Item Development) and committees (e.g., those involved in content specifications) will use this information to specify and operationalize the assessed content.

### **Eligibility**

Following the coding of each standard for all criteria, analysts made an overall determination of eligibility. For a standard to be eligible, *all* of the following must apply:

- Learnable within the school year
- Expected content for all students at the grade level/span
- Measurable via on-demand tasks in an end-of-year summative assessment

### **Comments**

In addition to the codings for each criterion, analysts provided comments when additional information about the coding was warranted. Analysts proposed content and wording of comments throughout the coding process. These proposed comments were reviewed and refined to be applicable across grades and content areas, as appropriate, and the wording of the comments was then standardized to ensure consistent use across analysts. A complete list of comments and comment codes is provided in Appendix D.

### **Coding Protocol**

This study employed a double-rater “read-behind” consensus model, accompanied by ongoing calibration between analysts. For each grade or conceptual category, one analyst independently coded the standards. A second analyst then reviewed the outcomes of the first analyst’s ratings and noted agreement or disagreement with the first analyst’s ratings. The two analysts then discussed any discrepancies between their interpretations as necessary. When discrepancies arose between the ratings of analysts with respect to the criteria and coding dimensions (i.e., learnable during the school year, expected of all students, measurable via on-demand assessment, eligible for the summative assessment, response type, and DOK), analysts discussed their ratings and reached consensus. Analysts also reviewed ratings across grade levels and (in mathematics) conceptual categories to ensure that the

protocol was applied consistently. Following coding, project leads reviewed a sample of codes as a further confirmation of consistency of coding across grade levels and conceptual categories. The complete set of standard-level codes is included in Appendix E.

This protocol was selected for use given that the specific outcomes of this particular study were not intended as the end point for high-stakes use, but instead were intended for descriptive purposes to inform further discussions of the CCSS content and its implications for the Consortium’s summative assessment. This model also was selected to be suitable for the development timeline of the Consortium.

### **Training and Calibration**

Analysts were thoroughly trained in the study protocol. Analysts from both content areas began training together, receiving an introduction to the goals and purpose of the study and an in-depth discussion of the study criteria, including the DOK level descriptions. This was done to ensure a common understanding of the study criteria and procedures and to best ensure the accuracy and consistency of the application of the criteria by analysts in each content area. Mathematics and ELA analysts then worked separately to practice applying the protocol to their respective content areas and to calibrate their ratings.

Following the introduction and review of the study criteria, analysts independently coded a set of approximately 5–10 pre-selected standards, representative of a range of grade levels and types of standards, and discussed their ratings as a group. Then, analysts independently coded approximately 5–10 additional pre-selected standards and compared their results to those of the content lead. Any discrepancies in ratings were discussed, and analysts reached consensus, documenting decision rules as necessary.

Training was considered complete and calibration achieved when accuracy and consistency of application of the criteria and implementation of the procedures by all analysts were assured to the satisfaction of the content and project leads.

### **Decision Rules**

When necessary, analysts developed or refined decision rules to document and standardize their interpretations. Decision rules are guidelines related to the application of the criteria and the interpretation of a standard, construct, piece of content, or skill (i.e., its operational definition). WestEd analysts developed decision rules to ensure the accurate and consistent application of the alignment criteria. The decision rules implemented in this study follow.

#### ***General***

1. Verbs in the standards that describe cognitive processes (e.g., “understand,” “determine”) are coded as measurable by the coded item types if the student is able to demonstrate the ability to carry out the cognitive process in a way that is measurable according to this study’s criteria. For example, in mathematics, the student could show understanding of an operation by identifying the result of carrying out the operation; in ELA, the student could demonstrate the ability to determine the central idea of a text by identifying or explaining the central idea.
2. Verbs in the standards that describe activities the student engages in are coded as measurable by the coded item types if the student is able to carry out the activity in a way that is

measurable according to this study’s criteria. For example, in mathematics, for the verb “draw [a graph],” the student is expected to draw a graph as the assessment task; in ELA, for the verbs “trace and evaluate [the argument and specific claims],” the student is expected to trace and evaluate the argument and specific claims orally or in writing in a speaking or writing task.

3. Standards are coded to item types that may measure all or part(s) of the standard.

### ***ELA Only***

1. For the purposes of an on-demand summative assessment, the term “text” is interpreted to refer to an intact piece of authored writing (for example, a complete essay, or an excerpt that can stand alone), which may include pieces of writing that are written, edited, or revised for the purposes of the assessment.
2. The item type “on-demand writing prompt” is interpreted to refer to a task requiring the student to write for the purpose of assessing the student’s skills or knowledge in writing (that is, the Writing and Language standards), and not for the purpose of assessing the student’s skills or knowledge in reading (that is, the Reading standards).

### ***Mathematics Only***

1. Extended constructed-response item types are interpreted as items that require a student response beyond selecting an answer from a provided list (multiple choice). Examples include, but are not limited to, gridded-response, short-answer, open-ended, open-response, or constructed-response items.
2. The phrase “verbal statements” in the standards is interpreted as inclusive of written statements.

### **Project Staff Roles and Responsibilities**

The WestEd staff involved in this study all have expertise and experience in classroom teaching as well as standards and assessment development and evaluation, including in-depth understanding of the CCSS. The project director, Dr. Edynn Sato, was responsible for working with SBAC leaders to conceptualize the study vis-à-vis the Consortium’s needs and planned development activities, directing and monitoring all aspects of the study, ensuring that the processes of analysis and reporting of the findings were grounded in research and best practices, and finalizing the study’s report. The project leads, Dr. Rachel Lagunoff and Mr. Peter Worth, were responsible for designing the analysis protocol and procedures, leading the training of analysts and overseeing their ongoing calibration, interpreting the findings, and drafting report sections. The lead content analysts were responsible for rating standards and guiding consensus discussions with the other analyst(s), and finalizing decision rules agreed on by the analysts. The content analysts were responsible for rating standards, contributing to consensus discussion, and determining decision rules with the lead content analysts. Biographies of the analysts are provided below.

### **Qualifications of Analysts**

The expertise of the analysts in standards analysis and in their respective content areas is essential to the quality of this analysis. Analysts in this study collectively have experience and expertise in analysis of the CCSS for states (e.g., content crosswalks, alignment), the CCSS content areas (i.e., English language arts and mathematics), standards and assessment evaluation and development, curriculum, instruction, and assessment alignment and development. Each has also served as a classroom teacher. A brief description of the qualifications of each analyst follows.

***Beverly Nedrow, English Language Arts Lead Analyst***

Beverly Nedrow, Director of English Language Arts Development for the Assessment and Standards Development Services (ASDS) program at WestEd, oversees the development of reading and language assessments. She works with staff to produce item and passage specifications, training materials, and ancillary materials. She also provides content expertise to the ASDS research division for studies related to the alignment of state standards to the CCSS.

Prior to employment at WestEd, Ms. Nedrow served as the Director of English Language Arts Development, Senior Director of Educational Product Development, and National Consultant for English Language Arts at Harcourt Assessment, Inc. She has been responsible for the development of a comprehensive online assessment system that includes both summative and formative assessments in reading and mathematics in grades 3 through 8, standardized achievement and diagnostic assessments in reading and language, and a number of reading and language assessments for customized state tests developed to measure the states' academic standards in compliance with the No Child Left Behind legislation. In 1998, she received the President's Circle of Excellence Award for her outstanding contribution to Harcourt Assessment, Inc. Ms. Nedrow has also been a teacher and curriculum director, and has taught in Robstown and Paris, Texas; Owensboro, Kentucky; and Ras Tanura, Saudi Arabia.

Ms. Nedrow holds an M.S. in Curriculum and Instruction with Specialization in Reading and English as a Second Language from Texas A&M University, and a B.S. in Elementary Education, English and History, from Murray State University.

***Elizabeth Jameyson, English Language Arts Analyst***

Elizabeth Jameyson is an Assessment Specialist in Reading in WestEd's ASDS program. Ms. Jameyson has written and edited items aligned to individual state standards as well as to the CCSS. Additionally, she has worked as an analyst in studies of the alignment of the CCSS to individual state standards, and has facilitated item writing and content and bias review meetings. Previously, Ms. Jameyson taught English language arts at the middle school and high school levels in Oakland, California.

Ms. Jameyson holds a B.A. in English literature and sociology from Mills College and an M.A. in teacher education and a single-subject English teaching credential from the University of California, Berkeley.

***Scott Firkins, Mathematics Lead Analyst***

Scott Firkins is Associate Director of Mathematics Development in WestEd's ASDS program. He supervises editorial and item-writing staff working on item development in WestEd's large-scale mathematics assessment projects. Mr. Firkins has served as mathematics content lead on assessment projects in Kentucky, Pennsylvania, Utah, and West Virginia. As content lead in Kentucky, he oversaw development of items assessing the CCSS for Mathematics in grades 3–8. Mr. Firkins also edits and reviews mathematics test items for other assessment projects, including that of Nevada. He constructs test forms, develops item specifications, and facilitates content reviews and data reviews with teacher committees. He has developed assessment items and facilitated their review by teacher committees for alternate assessments based on modified academic achievement standards for the Kansas Assessment of Modified Measures (KAMM) and the Pennsylvania System of School Assessment–Modified (PSSA-M), and has developed assessment items for the Keystone Exams, Pennsylvania's end-of-course assessments. Additionally, Mr. Firkins contributes to alignment studies for standards and assessments. He served as lead analyst in a comparison study between the CCSS for Mathematics and the Louisiana Big Ideas. Prior to joining WestEd, Mr. Firkins was a middle school and high school math teacher for over

nine years, and a curriculum supervisor and director of curriculum and assessment for over three years, in Owensboro and Glasgow, Kentucky.

Mr. Firkins holds a Certification: Rank I in Supervision K–12, an M.A. in Secondary Education, and a B.A. in Mathematics from Western Kentucky University.

***Mary Koehler, Mathematics Analyst***

Dr. Mary Koehler has a strong mathematics background combined with classroom experience and research experience at both the K–12 and college levels, in addition to a thorough knowledge of K–12 mathematics curriculum. Dr. Koehler taught in Panorama City, California. She has an understanding of the complexities of curriculum and instruction in a variety of settings through experience working with teachers and students in rural, suburban, and urban areas. She has experience developing large-scale mathematics assessment items and facilitating item content reviews, with particular expertise at the high school level. She also has served as a mathematics analyst for alignment studies.

Dr. Koehler holds a Ph.D. in Curriculum and Instruction—Mathematics Education from the University of Wisconsin, Madison; an M.A. in Mathematics with a Specialization in Applied Mathematics (Statistics) from the University of California, Los Angeles; and a B.A. in Mathematics from San Diego State University.

***Ann Muench, Mathematics Analyst***

Ann Muench is a Senior Research Associate and Mathematics Specialist with WestEd’s ASDS program, and has worked extensively with state mathematics content standards analyses and alignment studies in numerous states, including analyses of the CCSS. Her work includes standards and assessments for both general-education and special-populations students. At the national level, she developed mathematics standards for Job Corps student training. In the area of assessment development, Ms. Muench works on test item development for several state tests by editing and reviewing items for mathematics content and bias, and facilitating teacher item writing and review groups. As part of the WestEd Eisenhower Regional Consortium, she collaborated with key state, district, and site personnel to provide technical assistance and staff development in the areas of mathematics education, assessment, and using data to effect change. Ms. Muench has extensive experience in developing educational products; presenting at local, state, regional, and national events; and facilitating educational dialogue and discussion using tools and processes she co-developed. She is a veteran mathematics teacher, and has taught in Aurora, Colorado and Indianapolis, Indiana. She has also written and edited both student and teacher textbook materials, as well as assessment tasks in mathematics and career training.

Ms. Muench completed doctoral studies in Educational Psychology at the University of Colorado, Boulder, and holds an M.S. and B.S. in Mathematics from Purdue University.

## FINDINGS

The organization of the standards in the CCSS differs between ELA and mathematics, both in the way the content is categorized (e.g., by strand, domain, or conceptual category) and across grade levels/spans (ELA has cross-grade College and Career Readiness [CCR] Anchor Standards, whereas the mathematics standards are organized based on domains that vary across grade levels/spans according to grade-appropriate content). Therefore, the results of this study are organized and presented in a manner consistent with the organization of each content area in the CCSS. For more information about the organization of the CCSS, please refer to the CCSS for English Language Arts and Mathematics (CCSSO and NGA, 2010a, 2010b) as well as the Background and Organization of the Common Core State Standards for English Language Arts and Mathematics subsection in the Introduction section of this report.

### ELA Findings

This subsection presents a summary of the overall findings for the analysis of eligible content in ELA. General findings for the three eligibility criteria are presented first, followed by depth of knowledge results. Further details on eligible item types, analyst comments, and range of depth of knowledge are presented in the following Summary of Findings by CCR Anchor Standard subsection.

Discussion of this report’s findings is by SBAC work groups and committees (e.g., Item Development; Performance Tasks; Test Design; Technology Approach; Accessibility and Accommodations; Administration; content specifications) is expected as they undertake further work in designing and developing the summative assessment.

### Eligibility

As described in detail in the Methodology section of this report, standards were considered eligible for the summative assessment if they were judged to be learnable during the school year, expected of all students, and measurable via on-demand assessment. Table 5 shows the number of standards at each grade level/span that were judged to be eligible or not eligible, as determined by the three criteria for eligibility.

**Table 5. Number of ELA CCSS Eligible for Summative Assessment**

Grade	Total	Learnable		Expected		Measurable		Eligible	
		Y	N	Y	N	Y	N	Y	N
3	42	42	0	42	0	35	7	35	7
4	43	43	0	43	0	35	8	35	8
5	43	43	0	43	0	35	8	35	8
6	41	41	0	41	0	36	5	36	5
7	41	41	0	41	0	36	5	36	5
8	41	41	0	41	0	36	5	36	5
9–10	41	41	0	41	0	36	5	36	5
11–12	41	41	0	41	0	36	5	36	5
<b>TOTAL</b>	<b>333</b>	<b>333</b>	<b>0</b>	<b>333</b>	<b>0</b>	<b>285</b>	<b>48</b>	<b>285</b>	<b>48</b>
<b>Percent of Total</b>		<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>86%</b>	<b>14%</b>	<b>86%</b>	<b>14%</b>

Of the 333 grade-level standards in grades 3–8 and high school, all standards were judged to be learnable during the school year and expected of all students; 285 standards were judged to be measurable via on-demand summative assessment and 48 not measurable. The standards judged to be measurable via on-demand summative assessment are all eligible; the remaining 48 standards are not eligible.

Eligibility is distributed across the grades as follows:

- In grade 3, 35 of 42 standards are eligible.
- In grades 4 and 5, 35 of 43 standards are eligible.
- In grades 6–12, 36 of 41 standards are eligible.

The following standards are *not* eligible at all grades:

- Reading standard 10 (for both Literature and Informational Text)
- Writing standards 6 and 10
- Speaking and Listening standard 1

Additional standards *not* eligible in grades 3–5 are:

- Grades 4 and 5 Reading Foundational Skills standard 3
- Grades 3–5 Reading Foundational Skills standard 4
- Grades 3–5 Writing standard 7

Further details on eligibility by CCR Anchor Standard are presented in the following Summary of Findings by CCR Anchor Standard subsection.

### **Measurability by Item Type**

All standards determined to be measurable via on-demand summative assessment were then coded for the types that could be most effectively and efficiently<sup>9</sup> used to assess those standards. In ELA, the types of items included in the analysis were selected response, extended constructed response, technology enhanced, performance task, and writing prompt. In addition, standards were rated for whether an oral response would be required for the assessment task. These ratings do not indicate that a single item type could necessarily assess the full depth and breadth of the standard, but instead indicate that at least a component of the standard is assessable using the item type. Table 6 shows, for the eligible standards, the item types by which the standards were judged to be measurable.

**Table 6. Item Types by Which Eligible ELA Standards Were Judged to Be Measurable**

Grade	Total	Selected Response		Extended Constructed Response		Technology Enhanced		Performance Task		Writing Prompt		Oral Response Required	
		Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
3	35	23	12	17	18	35	0	30	5	8	27	3	32
4	35	23	12	17	18	35	0	30	5	10	25	4	31
5	35	23	12	17	18	35	0	30	5	9	26	4	31
6	36	24	12	17	19	36	0	31	5	10	26	4	32

<sup>9</sup> The efficiency criterion considered the parameters of the summative assessment as described in the SBAC proposal (e.g., range of time typically allotted for a summative assessment; the testing window).

Grade	Total	Selected Response		Extended Constructed Response		Technology Enhanced		Performance Task		Writing Prompt		Oral Response Required	
		Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
7	36	25	11	17	19	36	0	31	5	10	26	4	32
8	36	25	11	17	19	36	0	31	5	10	26	4	32
9–10	36	25	11	17	19	36	0	31	5	10	26	4	32
11–12	36	25	11	17	19	36	0	31	5	10	26	4	32
<b>Total</b>	<b>285</b>	<b>193</b>	<b>92</b>	<b>136</b>	<b>149</b>	<b>285</b>	<b>0</b>	<b>245</b>	<b>40</b>	<b>77</b>	<b>208</b>	<b>31</b>	<b>254</b>
<b>Percent of Total</b>		<b>68%</b>	<b>32%</b>	<b>48%</b>	<b>52%</b>	<b>100%</b>	<b>0%</b>	<b>86%</b>	<b>14%</b>	<b>27%</b>	<b>73%</b>	<b>11%</b>	<b>89%</b>

Of the 285 eligible standards, all were judged to be assessable via technology-enhanced items, 245 via performance tasks, 193 via selected-response items, 136 via extended constructed-response items, and 77 via writing prompts. Four Speaking and Listening standards at grades 4–12 and three at grade 3 were judged to require an oral response for assessment, since the standards specify that the student speaks or presents information and ideas orally. Further details on item types by CCR Anchor Standard are presented in the following Summary of Findings by CCR Anchor Standard subsection.

### ***Depth of Knowledge***

As described in the Methodology section of this report, each standard was analyzed to determine the range of depth of knowledge levels in the standard. Table 7 shows, for all standards, the number of standards to which each depth of knowledge level was assigned. Table 8 shows, for all eligible standards, the number of standards to which each depth of knowledge level was assigned.

**Table 7. Depth of Knowledge of All ELA Standards**

Grade	Total	DOK Level			
		1	2	3	4
3	42	27	34	27	10
4	43	25	32	31	11
5	43	22	36	33	16
6	41	18	30	33	16
7	41	19	30	33	19
8	41	18	30	33	19
9–10	41	18	30	33	19
11–12	41	18	30	33	22
<b>TOTAL</b>	<b>333</b>	<b>165</b>	<b>252</b>	<b>256</b>	<b>132</b>
<b>Percentage of Total Standards at DOK Level</b> (Standards may cover a range of DOK levels)		<b>50%</b>	<b>76%</b>	<b>77%</b>	<b>40%</b>

**Table 8. Depth of Knowledge of Eligible ELA Standards**

Grade	Total	DOK Level			
		1	2	3	4
3	35	20	27	24	7
4	35	18	26	28	9
5	35	16	30	29	12
6	36	13	25	31	15
7	36	14	25	31	18
8	36	13	25	31	18
9–10	36	13	25	31	18
11–12	36	13	25	31	21
<b>TOTAL</b>	<b>285</b>	<b>120</b>	<b>208</b>	<b>236</b>	<b>118</b>
<b>Percentage of Total Standards at DOK Level</b> (Standards may cover a range of DOK levels)		<b>42%</b>	<b>73%</b>	<b>83%</b>	<b>41%</b>

The pattern for DOK levels is similar for all standards and eligible standards. Across all grades, the majority of standards were coded to DOK Levels 2 and 3, with the number coded to DOK Level 2 decreasing slightly and the number coded to DOK 3 increasing slightly from the elementary grades to the secondary grades. Standards coded to DOK Level 4 increased from grades 3 through 6, and became constant between grades 7 and 9–10, rising slightly at grades 11–12. Standards coded to DOK Level 1 followed the reverse pattern, decreasing from grades 3 through 5, and remaining about the same at grades 6 through 12.

Depth of knowledge can also be examined by looking at the range of depth of knowledge of the standards. Range of depth of knowledge is presented for standards at each grade level by CCR Anchor Standard in the following subsection.

***Summary of Findings by CCR Anchor Standard***

The CCSS for English Language Arts are organized across grade levels by the Career and College Readiness (CCR) Anchor Standards, which are intended to help show how content and concepts change and progress across the grade levels. To support consistent interpretation of the content of the standards for assessment purposes, this subsection presents the results of the analysis for eligible content by CCR Anchor Standard, grouping the standards into their conceptual subdivisions (for example, the first three Reading standards are grouped as addressing “Key Ideas and Details”).

Overall, as seen in the following tables in this subsection, the results for eligible item types are consistent across grade levels. The range of DOK across grade levels is provided for all eligible standards or sets of standards. This range may be useful during the development of item specifications and item templates, to ensure that the appropriate cognitive depth of content is addressed in the items, based on grade level, item type, and selection of standards to be clustered (for items that address multiple standards).

In some cases, the DOK ranges for the same Anchor Standard may vary across grade levels. In such cases, special consideration may need to be taken in interpreting the intent of the standards in order to

represent progression of skills across grade levels (DOK levels for each grade-level standard were determined by analysts based on the particular use of verbs and other relevant descriptors in the standard).

For each of the following sets of CCR Anchor Standards, the text of the standards is provided first, followed by tables showing the item types, comment codes, and DOK ranges for the eligible standards. Following each table is discussion of inconsistencies across grades, and discussion of the comments. Any standards that were determined to be not eligible are followed by an explanation.

The codes for the ELA standards were determined as follows: “Individual CCR anchor standards can be identified by their strand, CCR status, and number (R.CCR.6, for example). Individual grade-specific standards can be identified by their strand, grade, and number (or number and letter<sup>10</sup>, where applicable), so that RI.4.3, for example, stands for Reading, Informational Text, grade 4, standard 3 and W.5.1a stands for Writing, grade 5, standard 1a” (CCSSO and NGA, 2010a, p. 8). References to grade-specific standards that apply across grades are indicated by replacing the grade position with an “x,” so that RL.x.2, for example, stands for Reading, Literature, unspecified grade, standard 2.

This section also includes the following acronyms for item types:

- SR—Selected response
- ECR—Extended constructed response
- TE—Technology enhanced
- PT—Performance task
- WP—Writing prompt
- OR—Oral response required

Comment codes that appear in the tables are defined in the text following each set of tables, as well as in Appendix D.

### **Reading Standards for Literature and Informational Text, Grades 3–12**

#### *Key Ideas and Details*

1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.

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<sup>10</sup> For the purposes of this study, lettered content was not coded, although the content was considered, as it informed understanding of the numbered standard.

**Table 9. Summary of Reading Standards for Literature Coding (Part 1)**

Literature Standard	Eligible Item Types	Comments*	DOK Range**
RL.x.1	SR, ECR, TE, PT	301 (grades 3, 5, 7) 308	1–3
RL.x.2	SR, ECR, TE, PT	301 308	2–3 (grades 3–10) 2–4 (grades 11–12)
RL.x.3	SR, ECR, TE, PT	308 (grades 3–6)	1–3 (grades 3, 4) 2–3 (grades 5–10) 2–4 (grades 11–12)

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

**Table 10. Summary of Reading Standards for Informational Text Coding (Part 1)**

Informational Text Standard	Eligible Item Types	Comments*	DOK Range**
RI.x.1	SR, ECR, TE, PT	301 (grade 3) 308	1–3
RI.x.2	SR, ECR, TE, PT	301 308	1–3 (grade 3) 2–3 (grades 4–6, 9–10) 2–4 (grades 7, 8, 11–12)
RI.x.3	SR, ECR, TE, PT	308 (grades 3, 6)	2–3 (grades 3, 7–12) 1–3 (grades 4, 5) 2–4 (grade 6)

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

For both literature and informational text standards, all four item types proposed for the reading assessment are eligible item types for all standards at all grades, though analysts noted that, for many of the grade-level standards, “at least one verb in the standard requires the student to generate a response” (comment code 301) and/or “full coverage of the standard may not be possible with selected response” (comment code 308).

#### *Craft and Structure*

4. Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
5. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
6. Assess how point of view or purpose shapes the content and style of a text.

**Table 11. Summary of Reading Standards for Literature Coding (Part 2)**

Literature Standard	Eligible Item Types	Comments*	DOK Range**
RL.x.4	SR, ECR, TE, PT	305	1–3
RL.x.5	SR, ECR, TE, PT	308 (grades 3, 4, 8–12)	1–3 (grades 3, 4) 2–3 (grades 5, 6) 3–4 (grades 7–12)
RL.x.6	SR (grades 4–12), ECR, TE, PT	308 (grade 4)	2–3 (grade 3) 3 (grade 4) 2–4 (grades 5, 6) 3–4 (grades 7–12)

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

**Table 12. Summary of Reading Standards for Informational Text Coding (Part 2)**

Informational Text Standard	Eligible Item Types	Comments*	DOK Range**
RI.x.4	SR, ECR, TE, PT	305	1–3
RI.x.5	SR, ECR, TE, PT	308 (grades 5, 7–12)	1–2 (grade 3) 1–3 (grade 4) 2–4 (grades 5, 11–12) 2–3 (grades 6–10)
RI.x.6	SR (grades 4–12), ECR, TE, PT	308 (grades 4, 7–12)	2–3 (grades 3, 6–8) 3–4 (grade 4) 2–4 (grades 5, 9–12)

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

All standards are eligible for assessment via SR items except for RL.3.6 and RI.3.6, which require students to “distinguish their own point of view” from that of “the narrator or those of the characters” or “of the author of a text.” All standards are eligible for assessment via the other three proposed item types at all grade levels. For several grade-level standards, analysts noted that “full coverage of the standard may not be possible with selected response” (comment code 308).

Analysts noted that content in RL.x.4 and RI.x.4 “overlaps with standard(s) in another strand” (comment code 305). These standards address determining the meaning of words and phrases, content that is also addressed by Language standards L.x.4, L.x.5, and L.x.6.

*Integration of Knowledge and Ideas*

7. Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
8. Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole. (Not applicable to literature)
9. Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

**Table 13. Summary of Reading Standards for Literature Coding (Part 3)**

Standard	Eligible Item Types	Comments*	DOK Range**
RL.x.7	SR, ECR, TE, PT	308 (grades 3, 6–12) 312 (grades 4–12)	2–3 (grade 3) 2–4 (grades 4, 5) 3–4 (grades 6–12)
RL.x.9	SR, ECR, TE, PT	308 (grades 3–10)	3–4 (grades 3, 4, 6–12) 1–2 (grade 5)

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

**Table 14. Summary of Reading Standards for Informational Text Coding (Part 3)**

Standard	Eligible Item Types	Comments*	DOK Range**
RI.x.7	SR (grades 3–5, 7–12), ECR, TE, PT	308 (grades 3, 4, 7–12) 313 (grades 5, 6) 312 (grades 6–12)	2–3 (grades 3, 4) 1–3 (grade 5) 3–4 (grades 6–12)
RI.x.8	SR, ECR, TE, PT	308 (grades 5–12) 301 (grades 6–12)	2 (grade 3) 2–3 (grades 4, 6) 2–4 (grades 5, 7–12)
RI.x.9	SR (grades 3, 6–12), ECR, TE, PT	308 (grades 3, 6–12) 313 (grades 4, 5)	3 (grade 3) 3–4 (grades 4, 6–10) 2–4 (grade 5) 2–3 (grades 11–12)

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

For the literature standards, all four item types proposed for the reading assessment are eligible item types for both standards at all grades. For the informational text standards, all standards are eligible for assessment via SR items except for RI.6.7, RI.4.9, and RI.5.9, since assessing these standards would involve measuring the student’s ability to “integrate information” and “develop a coherent understanding of a topic or issue” or to write or speak about a topic “knowledgeably.” All informational text standards are eligible for assessment via the other three proposed item types at all grade levels.

Analysts noted that for many of the grade-level standards, “full coverage of the standard may not be possible with selected response” (comment code 308). In addition, for RL.x.7 at grades 4–12 and RI.x.7 at grades 6–12, they noted that “technological enhancement may be necessary for all item types for this standard” (comment code 312). Finally, for RI.5.7, RI.6.7, RI.4.9, and RI.5.9, analysts noted that “the parameters for assessment may be difficult to define for a component of this standard” (comment code 313).

*Range of Reading and Level of Text Complexity*

10. Read and comprehend complex literary and informational texts independently and proficiently.

Standard RL.x.10/RI.x.10 is not eligible for assessment via the proposed item types, as this standard does not describe assessable content per se but instead “informs the complexity of text appropriate for assessment” (comment code 309).

## **Reading Standards: Foundational Skills, Grades 3–5**

### *Phonics and Word Recognition*

1. Know and apply grade-level phonics and word analysis skills in decoding words.

### *Fluency*

2. Read with sufficient accuracy and fluency to support comprehension.

Almost all of the grade-level standards in this strand are not eligible for summative assessment via the item types proposed for the reading assessment, as the skills assessed by these standards are “best measured by in-person observation” (comment code 302). A summative assessment may be best used to assess higher-level integrated skills, and decoding and fluency, which are more basic and isolated skills, may be best measured in person as part of an interim or formative assessment. Standard RF.3.3 (DOK 1) is the only eligible standard, assessable via SR, TE, and PT, though analysts noted that “a portion of the standard is not measurable via on-demand assessment” (comment code 307).

## **Writing Standards, Grades 3–12**

### *Text Types and Purposes*

1. Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
2. Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
3. Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences.

**Table 15. Summary of Writing Standards Coding (Part 1)**

<b>Standard</b>	<b>Eligible Item Types</b>	<b>Comments*</b>	<b>DOK Range**</b>
W.x.1	TE, PT, WP	306	3–4
W.x.2	TE, PT, WP	306	3–4
W.x.3	TE, PT, WP	306	3–4

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

All of the standards are eligible for assessment via the open-ended item types proposed for the writing assessment. Analysts noted that the standards overlap with another standard in this strand (comment code 306) since the writing process involves integrating the skills described in the standards addressing text types and purposes with standard W.x.4, which addresses production of writing (see below).

### *Production and Distribution of Writing*

4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.

**Table 16. Summary of Writing Standards Coding (Part 2)**

Standard	Eligible Item Types	Comments*	DOK Range**
W.x.4	TE, PT, WP	306	3–4
W.x.5	SR, TE, PT, WP	303 (grades 3–8) 304 305 301 (grades 5–12)	1–4

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

All of the standards are eligible for assessment via the open-ended item types proposed for the writing assessment. While W.x.5 is also assessable via SR, analysts noted that for grades 5 through 12, “at least one verb in the standard requires the student to generate a response” (comment code 301). Analysts also noted that at least a portion of this standard “requires guidance and support from an adult” (comment code 303) in grades 3 through 8, and “requires interaction with others” (comment code 304) at all grades. In addition, the standard overlaps with standards in another strand (comment code 305), specifically Language standards 1–3.

6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Standard W.x.6 is not eligible for assessment via the proposed item types, as this standard does not describe assessable content per se but instead “is related to process rather than outcome” (comment code 310). In addition, the standard “requires guidance and support from an adult” (comment code 303) in grades 3 through 5.

*Research to Build and Present Knowledge*

7. Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.
8. Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.
9. Draw evidence from literary or informational texts to support analysis, reflection, and research.

**Table 17. Summary of Writing Standards Coding (Part 3)**

Standard	Eligible Item Types	Comments*	DOK Range**
W.x.7	TE, PT, WP (grades 6–12)	310 (grades 3–5) 307 (grades 6–12) 311 (grades 6–12) 313 (grades 6–12)	3–4 (grade 6) 2–4 (grades 7–12)
W.x.8	SR (grades 6–12), TE, PT	307 (grades 3–5) 301 (grades 6–12) 308 (grades 6–7) 313 (grades 7–12)	1–2 (grades 3–5) 1–4 (grades 6–12)
W.x.9 (begins in grade 4)	TE, PT, WP	305 (grades 4–12)	2–3 (grades 4–5) 2–4 (grades 6–12)

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

Standard W.x.7 is not eligible for on-demand summative assessment in grades 3 through 5, as the skills are “related to process rather than outcome” (comment code 310). Portions of this standard are assessable via all eligible open-ended item types for writing in grades 6 through 12, though analysts noted that full coverage of the standard “requires an extended amount of time” (comment code 311), and that portions of the standard may be difficult to assess via on-demand tasks (comment codes 307 and 313). Standard W.x.8 is assessable via SR from grades 6 through 12, and via TE and PT at all grades, though analysts noted that full coverage of the standard may not be possible with SR (comment codes 301 and 308) and that, as with W.x.7, portions of the standard may be difficult to assess via on-demand tasks (codes 307, 313). Standard W.x.9 is assessable via open-ended item types for writing and overlaps with standards in another strand (code 305), specifically Reading.

*Range of Writing*

10. Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Standard W.x.10 is not eligible for assessment via the proposed item types, as this standard is “related to process rather than outcome” (comment code 310). In this case, the skill described is clear; however, it is not a content skill that can be measured via an on-demand summative assessment with the item types proposed by the Consortium for its summative assessment.

**Speaking and Listening Standards, Grades 3–12**

*Comprehension and Collaboration*

1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.

This standard is not eligible for on-demand summative assessment, as performing the skills requires interaction with others (comment code 304) and requires an extended amount of time (comment code 311).

2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
3. Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric.

**Table 18. Summary of Speaking and Listening Standards Coding (Part 1)**

Standard	Eligible Item Types	Comments*	DOK Range**
SL.x.2	TE	314 (grades 5–12) 313 (grades 11–12)	1–2 (grade 3) 2–3 (grades 4, 5) 2–4 (grades 6–10) 3–4 (grades 11–12)
SL.x.3	TE	314 (grades 3–8)	1–2 (grades 3, 4) 2–3 (grades 5, 6) 2–4 (grades 7–12)

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

Both standards are eligible via TE items<sup>11</sup>. Analysts noted that, for many grade-level standards, “only listening would be measured if responses were written” (comment code 314), and that, for SL.9–10.2 and SL.11–12.2, “the parameters for assessment may be difficult to define for a component of this standard” (comment code 313).

*Presentation of Knowledge and Ideas*

4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.
5. Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
6. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate.

**Table 19. Summary of Speaking and Listening Standards Coding (Part 2)**

Standard	Eligible Item Types	Comments*	DOK Range**
SL.x.4	TE, OR		1–4 (grade 3) 1–3 (grades 4–12)
SL.x.5	TE, OR	307 (grade 3) 313 (grades 9–12)	2–3
SL.x.6	TE, OR	307 (grade 3) 305	1–2

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

All three standards are assessable via TE items, with oral response required. Analysts noted that for some of the grade-level standards, a portion of the standard “is not measurable via on-demand assessment” (comment code 307) or “the parameters for assessment may be difficult to define for a component of this standard” (comment code 313).

**Language Standards, Grades 3–12**

*Conventions of Standard English*

1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
2. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

*Knowledge of Language*

3. Apply knowledge of language to understand how language functions in different contexts, to make effective choices for meaning or style, and to comprehend more fully when reading or listening.

<sup>11</sup> As presented in the SBAC proposal, all Speaking and Listening standards are assessed via TE items.

**Table 20. Summary of Language Standards Coding (Part 1)**

Standard	Eligible Item Types	Comments*	DOK Range**
L.x.1	SR, TE, PT, WP	301 305 308	1–2 (grades 3–5, 7–12) 1 (grade 6)
L.x.2	SR, TE, PT, WP	301 305 308	1
L.x.3	SR, TE, PT, WP	301 305 308	2 (grades 3, 4) 2–4 (grade 5) 2–3 (grade 6) 1–3 (grades 7, 9–12) 3 (grade 8)

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

All three standards are assessable via all eligible item types for the Language strand, though analysts noted that “full coverage of the standard may not be possible with selected response” (comment code 308) and that “at least one verb in the standard requires the student to generate a response” (comment code 301). These standards overlap with standards in another strand (comment code 305), specifically Reading, Writing, and Speaking and Listening standards.

*Vocabulary Acquisition and Use*

4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases by using context clues, analyzing meaningful word parts, and consulting general and specialized reference materials, as appropriate.
5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
6. Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

**Table 21. Summary of Language Standards Coding (Part 2)**

Standard	Eligible Item Types	Comments*	DOK Range**
L.x.4	SR, TE, PT	305 307 (grades 6–12)	1–3 (grades 3–5) 1–2 (grades 6–12)
L.x.5	SR, TE, PT	305 307 (grades 6–12)	1–3 (grades 3–8) 2–3 (grades 9–12)
L.x.6	SR, TE, PT, WP	305 307 (grades 4–12) 313 (grades 6–12)	1–2

\*See Appendix D for an explanation of the comments.

\*\*For grades 3–12 unless otherwise noted.

All three standards are assessable via SR, TE, and PT item types, and L.x.6 is also assessable via WP. Analysts noted that, at some grade levels, portions of the standard are “not measurable via on-demand assessment” (comment code 307) and “the parameters for assessment may be difficult to define for a component of this standard” (comment code 313). These standards overlap with standards in another strand (comment code 305), specifically Reading, Writing, and Speaking and Listening standards.

## Mathematics Findings

This section presents a summary of the findings for the eligible content analysis in mathematics. General findings for the three eligibility criteria are presented first, followed by depth of knowledge results and specific findings related to item types and depth of knowledge.

### Eligibility

As described in detail in the Methodology section of this report, standards were considered eligible for the summative assessment if they were judged to be learnable during the school year, expected of all students, and measurable via on-demand assessment. For high school mathematics, the “expected of all students” criterion focused on whether the standard was labeled with a (+), indicating additional mathematics for advanced course preparation. As described elsewhere in this subsection, standards marked with a (+) were coded as not expected of all students, and therefore are not eligible for the summative assessment for accountability purposes.

Table 22 shows the number of standards in each grade and conceptual category that were judged to be eligible or not eligible, as determined by the three criteria for eligibility.

**Table 22. Number of Mathematics CCSS Eligible for Summative Assessment**

Grade or Conceptual Category	Total	Learnable		Expected		Measurable		Eligible	
		Y	N	Y	N	Y	N	Y	N
3	25	25	0	25	0	25	0	25	0
4	28	28	0	28	0	28	0	28	0
5	26	26	0	26	0	26	0	26	0
6	29	29	0	29	0	29	0	29	0
7	24	24	0	24	0	24	0	24	0
8	28	28	0	28	0	27	1	27	1
Number and Quantity	27	27	0	9	18	27	0	9	18
Algebra	27	27	0	23	4	27	0	23	4
Functions	28	28	0	22	6	28	0	22	6
Geometry	43	43	0	37	6	41	2	35	8
Statistics and Probability	31	31	0	22	9	31	0	22	9
<b>TOTAL</b>	<b>316</b>	<b>316</b>	<b>0</b>	<b>273</b>	<b>43</b>	<b>313</b>	<b>3</b>	<b>270</b>	<b>46</b>
<b>Percent of Total</b>		<b>100%</b>	<b>0%</b>	<b>86%</b>	<b>14%</b>	<b>99%</b>	<b>1%</b>	<b>85%</b>	<b>15%</b>

Of the 316 grade-level and conceptual category-level standards in grades 3–8 and high school, 270 were judged to be eligible for the summative assessment; 46 were not eligible. The eligibility was distributed across the grades as follows:

- In grades 3–7, all standards were eligible.
- In grade 8, 27 of 28 standards were eligible. One grade 8 standard in the Geometry domain was ineligible; this standard was judged to be not measurable via on-demand assessment.
- In high school, 111 of 156 standards were eligible and 45 were not eligible.
- Of the 45 ineligible high school standards, 43 were not expected of all students. The largest number of standards not expected of all students was in the Number and Quantity conceptual

category, but every conceptual category included some standards not expected of all students. The remaining two ineligible standards, both in Geometry, were judged to be not measurable via on-demand assessment and more appropriate for classroom assessment.

### **Learnable During the School Year**

All 316 mathematics standards in grades 3–8 and high school were judged to be learnable during the school year.

### **Expectations of All Students**

All standards in grades 3–8 were judged to be expected of all students. In high school, 43 of 156 standards were coded as not expected of all students, due to being designated with a (+). According to the CCSS (CCSSO and NGA, 2010b, p. 57), the mathematics CCSS for high school “specify the mathematics that all students should study in order to be college and career ready,” and certain standards designated with a (+) describe “additional mathematics that students should learn in order to take advanced courses such as calculus, advanced statistics, or discrete mathematics.” Thus, all standards were judged to be expected of all students, except for those standards designated with a (+). The Number and Quantity conceptual category had the greatest number of standards judged to be not expected of all students (18 of 27). Statistics and Probability had 9 of 31, Functions had 6 of 28, Geometry had 6 of 43, and Algebra had 4 of 27.

Additionally, in three Functions standards (F.IF.7, F.BF.1, and F.BF.4), only a portion of the standard is designated with a (+). These standards were judged to be expected of all students but were coded with comment code 202, “A portion of this standard is labeled with a (+), indicating that the content should be learned by students in order to take advanced courses.”

### **Measurable Via On-Demand Assessment**

All standards in grades 3–7 were judged to be measurable via on-demand summative assessment using at least some of the item types defined in the SBAC proposal. In grade 8, 27 of 28 standards were judged to be measurable via on-demand summative assessment. One grade 8 standard in the Geometry domain was judged to be not measurable via on-demand summative assessment. The standard, 8.G.1 (“Verify experimentally the properties of rotations, reflections, and translations . . .”), was judged to be more appropriate for classroom assessment.<sup>12</sup>

In high school, all standards in all conceptual categories except Geometry were judged to be measurable via on-demand summative assessment. In Geometry, two of 43 standards were judged to not be measurable via on-demand assessment. One standard, G.CO.4 (“Develop definitions of rotations, reflections, and translations . . .”), was judged to focus on process rather than outcome. The other standard, G.SRT.1 (“Verify experimentally the properties of dilations given by a center and a scale factor”), was judged to be more appropriate for classroom assessment.

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<sup>12</sup> As noted previously, outcomes of this analysis are intended as a starting point to inform discussion and should in no way be interpreted to constrain the Consortium’s discussion and decisions. For example, the analysts of this study judged standard 8.G.1 more appropriate for classroom assessment than for summative assessment. However, there are numerous considerations to be made when designing the summative assessment (e.g., content coverage). Therefore, with further discussion by Consortium groups (e.g., Test Design Work Group, content specifications committee), it may be determined that some standards that were judged by this study’s analysts as more appropriate for classroom assessment should be included on the Consortium’s summative assessment.

### Measurability by Item Type

All standards determined to be measurable via on-demand summative assessment were then coded for the types that could be most efficiently used to assess those standards. In mathematics, the types of items included in the analysis were selected-response items, extended constructed-response items, technology-enhanced items, and performance tasks. This rating does not indicate that one item type could necessarily assess the full depth and breadth of the standard, but instead indicates that at least a component of the standard is assessable using the item type. Table 23 shows, for the eligible standards, the item types by which the standards were judged to be measurable.

**Table 23. Item Types by Which Eligible Mathematics Standards Were Judged to Be Measurable**

Grade or Conceptual Category	Total	Selected Response		Extended Constructed Response		Technology Enhanced		Performance Task	
		Y	N	Y	N	Y	N	Y	N
3	25	24	1	25	0	25	0	25	0
4	28	28	0	28	0	28	0	28	0
5	26	26	0	26	0	26	0	26	0
6	29	29	0	29	0	29	0	29	0
7	24	23	1	24	0	24	0	24	0
8	27	27	0	27	0	27	0	27	0
Number and Quantity	9	8	1	9	0	9	0	9	0
Algebra	23	22	1	23	0	23	0	23	0
Functions	22	21	1	22	0	22	0	22	0
Geometry	35	23	12	35	0	35	0	35	0
Statistics and Probability	22	21	1	22	0	22	0	22	0
<b>TOTAL</b>	<b>270</b>	<b>252</b>	<b>18</b>	<b>270</b>	<b>0</b>	<b>270</b>	<b>0</b>	<b>270</b>	<b>0</b>
<b>Percent of Total</b>		<b>93%</b>	<b>7%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>0%</b>

Of the 270 eligible standards, 252 were judged to be assessable via all four item types. All 270 standards were judged to be assessable via extended constructed-response items, technology-enhanced items, and performance tasks. Eighteen standards were judged to be not measurable via selected-response items. Of the 18 standards, one was in grade 3, one was in grade 7, and the remaining 16 were in high school. Twelve of those high school standards were in the Geometry conceptual category.

## **Response Type**

No mathematics standard was judged to require an oral response for assessment.

## **Comments**

Two comments were used most frequently to expand on the measurability criterion: 301 and 308.

- Comment code 301: “At least one verb in the standard requires the student to generate a response.” This comment was assigned to 87 eligible standards (97 total standards).
- Comment code 308: “Full coverage of the standard may not be possible with selected response.” This comment was assigned to 93 eligible standards (103 total standards).

Both comments were associated with standards across all grades and conceptual categories. The two comments were often associated with the same standards.

Eight standards, all eligible, were judged to have at least a portion of the standard that would be best measured via in-person observation (comment code 302). These standards were from grades 3, 4, 5, and 7, and the high school conceptual category Geometry. The standards that received these comments had elements such as estimation, mental computation, and use of tools, which may be difficult to assess using an on-demand assessment.

Six standards, all eligible, were flagged as being possible for use “as a stand-alone for a performance task” (comment code 315). These standards were from grade 7 and the high school conceptual categories Statistics and Probability and Geometry. The four grade 7 standards were in the Statistics and Probability conceptual category, with three standards under the cluster “Investigate chance processes and develop, use, and evaluate probability models,” and one standard under the cluster “Use random sampling to draw inferences about a population.” The standards receiving this comment tend to be broader than other standards. While many standards (including these) could be used in combination with each other to create a meaningful performance task, these six standards also appear to have sufficient content individually to support a performance task that includes complex thinking in the context of an extended task. These standards would benefit from the extended amount of time offered to complete a performance task. For example, 7.SP.8c, “Design and use a simulation to generate frequencies for compound events,” requires time for students to complete a related task with fidelity to the intent of the standard. While other item types could also assess a portion of this substandard, none are likely to offer the opportunity to truly explore the full breadth of the intention of the standard.

Three standards, two of which were eligible, were noted as having at least a portion of the standard related to process rather than outcome (comment code 310). The two eligible standards, in grade 8 (8.EE.8) and the high school conceptual category Algebra (A.APR.6), both specify solving by inspection, which was determined to be a key focus of the standards.

## ***Depth of Knowledge***

As described in the Methodology section of this report, each standard, regardless of its eligibility rating, was analyzed to determine the range of depth of knowledge levels in the standard. Table 24 shows, for all standards, the number of standards to which each depth of knowledge level was assigned. The percentages of total standards at each DOK level sum to above 100 since a standard could be rated for multiple DOK levels.

**Table 24. Depth of Knowledge Levels of All Mathematics Standards**

Grade or Conceptual Category	Total	Depth of Knowledge Level			
		1	2	3	4
3	25	24	24	3	0
4	28	28	16	5	0
5	26	26	18	3	0
6	29	29	20	2	0
7	24	18	22	8	0
8	28	26	25	9	0
Number and Quantity	27	27	15	0	0
Algebra	27	26	21	7	0
Functions	28	27	24	4	0
Geometry	43	24	36	19	1
Statistics and Probability	31	27	29	7	0
<b>TOTAL</b>	<b>316</b>	<b>282</b>	<b>250</b>	<b>67</b>	<b>1</b>
<b>Percentage of Total Standards at DOK Level</b> (Standards may cover a range of DOK levels)		<b>89%</b>	<b>79%</b>	<b>21%</b>	<b>&lt; 1%</b>

Across all grades and conceptual categories, the majority of standards were coded to DOK Level 1 and/or Level 2. In grade 7, grade 8, and especially the high school conceptual category Geometry, a notable number of standards were also coded to Level 3. One standard in Geometry was coded to Level 4.

Since a standard could be coded to more than one DOK level, results for depth of knowledge can also be examined by looking at the range of depth of knowledge of the standards. Table 25 shows, for the eligible standards only, the number of standards in each grade and conceptual category with each range of depth of knowledge. A standard with a range of 1–1 was coded to Level 1 only. A standard with a range of 1–3 was coded to Level 1, Level 2, and Level 3.

**Table 25. Range of Depth of Knowledge of Eligible Mathematics Content Standards**

Grade or Conceptual Category	Total	Range of Depth of Knowledge						
		1–1	1–2	1–3	2–2	2–3	2–4	3–3
3	25	1	20	3	1	0	0	0
4	28	12	11	5	0	0	0	0
5	26	8	15	3	0	0	0	0
6	29	9	18	2	0	0	0	0
7	24	2	13	3	1	5	0	0
8	27	3	15	8	0	1	0	0
Number and Quantity	9	4	5	0	0	0	0	0
Algebra	23	4	12	6	0	1	0	0

Grade or Conceptual Category	Total	Range of Depth of Knowledge						
		1-1	1-2	1-3	2-2	2-3	2-4	3-3
Functions	22	4	16	2	0	0	0	0
Geometry	35	1	16	4	2	5	1	6
Statistics and Probability	22	2	16	1	1	2	0	0
<b>TOTAL</b>	<b>270</b>	<b>50</b>	<b>157</b>	<b>37</b>	<b>5</b>	<b>14</b>	<b>1</b>	<b>6</b>

In all grades except grade 4, among eligible standards, the greatest number of standards had a range of depth of knowledge of 1–2. In grade 4, the greatest number of standards (12) had a range of depth of knowledge of 1–1, while 11 standards had a range of depth of knowledge of 1–2. All grades and conceptual categories included some eligible standards with a range that included Level 3, except for Number and Quantity. Some Number and Quantity standards judged to be ineligible also had a range of depth of knowledge of 1–1 and 1–2. Geometry was the only conceptual category that had standards with a range of 3–3, and the only conceptual category with a standard coded to Level 4.

It should be noted that while the majority of the mathematics *content knowledge* as described by the Standards for Mathematical Content was rated at DOK Levels 1 and 2, it is not necessarily the case that assessment items would be developed at the same DOK levels. Developers of the summative assessment items/tasks may decide to require students to apply the Standards for Mathematical Practice in varied and complex ways, resulting in assessment items/tasks at DOK Levels 3 or 4.

#### ***Standards Not Measurable Via Selected-Response Items***

As noted earlier in this section, most standards in the mathematics CCSS (252 of the 270 eligible standards) were found to be eligible for assessment by all four item types. Eighteen eligible standards, all but two of which were in high school, were judged to not be measurable via selected-response items. Of those 18 standards, 17 had a range of depth of knowledge that included Level 2 and/or Level 3, while three standards had a range of depth of knowledge that included Level 1. Of those three, one had a depth of knowledge of Level 1 only. Two of the three standards were noted as having portions of the standard that would be best measured by in-person observation (comment code 302), and one was flagged as a possible standard for a stand-alone performance task (comment code 315).

The majority of standards not measurable via selected-response items (13 of the 18) were in the domain or conceptual category of Geometry. These standards included the skills of proofs, constructions, and giving an informal argument; analysts judged that selected-response items would not adequately measure these skills, as they require the student to generate a response.

Nearly one-third of the standards (93 eligible; 103 total) received the comment that full coverage of the standard may not be possible with selected-response items. These standards received comment code 308 to indicate that, while selected-response items could be used to assess portions of the standard, at least one component of the standard would require at least one other item type. The standards receiving this code occurred across all grades and conceptual categories, and with the following ranges of depth of knowledge: 1–1, 1–2, 1–3, and 2–3. These standards often also received the comment that at least one verb in the standard required the student to generate a response (comment code 301). Analysts' judgments were based on the specific wording of the standards, and if the language of a standard described a student response, rather than selecting an answer, this language was interpreted literally. For example, in the grade 7 standard 7.NS.2d (“ . . . Convert a rational number to a decimal using

long division; know that the decimal form of a rational number terminates in 0s or eventually repeats”), the specific mention of “using long division” was interpreted as requiring a response that could not be assessed via selected-response item. As another example, in grade 4, 4.NBT.5 requires that students “illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.” A selected-response item in which a student selects an illustration or explanation was interpreted as not addressing the specific skills of actually illustrating and explaining, as included in the standard.

### ***Eligible Standards Coded to Depth of Knowledge Level 1 Only***

A total of 50 eligible standards were judged to have a range of depth of knowledge of Level 1 only. Of those 50, all were coded as assessable via all four item types, except for one item that was not assessable via selected response. These Level 1 standards occurred in all grades and conceptual categories. In many cases, a selected-response item may be sufficient to assess the content of these Level 1 standards, or the standards may be clustered or integrated into open-ended item types. It is therefore not necessarily the case that assessment items would be developed at the same DOK Level 1. As suggested previously, developers of the summative assessment items/tasks may decide to require students to apply the Standards for Mathematical Practice in varied and complex ways, resulting in assessment items/tasks at DOK Levels 3 or 4.

Eight of the 50 standards received comment codes 301 and 308, indicating that a portion of the standard required students to generate a response and that full coverage of the standard may not be possible via selected-response items. Thus, it is important to note that the nature of the tasks of some standards, while cognitively at Level 1, may require item types other than selected response to assess the skill as written in the standards. For example, in the grade 8 standard 8.EE.1 (“Know and apply the properties of integer exponents to generate equivalent numerical expressions”), knowing and applying the properties of integer exponents is Level 1 content. A portion of this standard could be assessed via selected-response items, but such items would only be able to ask students to “recognize” equivalent expressions. Assessing the “generate” portion of the standard would require students to generate the equivalent expressions, thus necessitating assessment via an open-ended item type.

Eligibility and depth of knowledge ratings can also be examined at the individual standard level. Analysts’ ratings for each standard are included in Appendix E.

## CONSIDERATIONS FOR NEXT STEPS

Outcomes of this descriptive analysis are intended as a starting point to inform the Consortium efforts to design its summative assessment and develop its test and item specifications. The Consortium’s further examination and discussion of the study’s descriptive data and their implications for the design and development of its summative assessment is expected, and this section is intended to help members of the Consortium involved in item and test development (e.g., the Item Design, Test Development, Technology Approach, and Accessibility and Accommodations Work Groups and the content specifications committee) use findings from this analysis to inform their discussions and activities.

### Suggested Considerations

#### Comment Codes

As described in the Findings section of this report, many of the standards have comment codes (e.g., associated with analyses of measurability and DOK)<sup>13</sup>. These comment codes have potential implications for content clustering, item development, test design, test administration, and the use of technology, as shown in Table 26 below.<sup>14</sup>

**Table 26. Suggested Implications of Comment Codes**

Comment Code	Implications				
	Content Clustering	Item Development	Test Design	Test Administration	Use of Technology
201: Standard is labeled with a (+), indicating that the content should be learned by students in order to take advanced courses.		√	√		
202: A portion of this standard is labeled with a (+), indicating that the content should be learned by students in order to take advanced courses.		√	√		
301: At least one verb in the standard requires the student to generate a response.	√	√	√	√	√
302: At least a portion of this standard is best measured by in-person observation.		√	√	√	
303: Assessment of this standard (or a portion of this standard) may require guidance and support from an adult.		√		√	√
304: Assessment of this standard		√		√	√

<sup>13</sup> As noted in the Methodology section, comment codes were proposed by analysts as they completed their ratings; the wording of the codes was then standardized to ensure consistent use across analysts.

<sup>14</sup> These areas of focus (i.e., content clustering, item development, test design, test administration, use of technology) were selected based on the 2010–2011 activities reflected in the Consortium’s *Master Work Plan and High-Level Time Line and Work Strands* (SBAC, 2010a).

Comment Code	Implications				
	Content Clustering	Item Development	Test Design	Test Administration	Use of Technology
(or a portion of this standard) may require interaction with others.					
305: This standard (or a portion of this standard) overlaps with one or more standard(s) in another strand.	√	√	√		
306: This standard (or a portion of this standard) overlaps with one or more standard(s) in this strand.	√	√	√		
307: A portion of this standard is not measurable via on-demand assessment.		√	√		
308: Full coverage of the standard may not be possible with selected response.	√	√	√		√
309: Statements in this standard inform the complexity of text appropriate for assessment.			√		
310: At least a portion of this standard is related to process rather than outcome.	√	√	√	√	√
311: This standard (or a portion of this standard) requires an extended amount of time.		√	√	√	√
312: Technological enhancement may be necessary for all item types for this standard.	√	√	√		√
313: The parameters for assessment may be difficult to define for a component of this standard.	√	√	√		
314: Only listening would be measured if responses were written.	√	√	√	√	
315: This standard may be used as a stand-alone for a performance task.		√	√	√	√
401: Higher DOK applies only to a portion of the standard that is to be learned by students in order to take advanced courses.	√	√	√		

It is recommended that users of the results of this analysis review and discuss the specific standards with comment codes relevant to their task (see the Eligible Content Data Workbook in Appendix E). For example, those involved in defining the technology approach for the Consortium’s summative assessment should review standards with comment codes 301, 303, 304, 308, 310, 311, 312, and 315, and discussion of the implications for the design and specifications of the item authoring application and scoring engine should be coordinated with those involved in item design, test design, test administration, and accessibility and accommodations as appropriate. Cross-work group coordination is critical to help ensure a cohesive and coherent assessment.

It is also critical to underscore that the information presented in this report is a starting point for the Consortium’s efforts related to test and item development. The Consortium should use this study’s data and recommendations to inform its further explication of the content to be assessed; that is, in terms of what is to be measured, what is not to be measured, how to best measure the content, and how to ensure accessibility to all students of the content measured. Subsequent discussions should focus on issues such as whether and how assessable content can be reasonably clustered to reduce the number of assessed constructs— for example, which content could and should be clustered, prioritization of the standards/clusters to be assessed, and the cognitive demands and types of evidence required by the standards/clusters to be assessed. These discussions should occur within the context of understanding the purpose of the summative assessment and what the Consortium hopes to accomplish with this assessment in terms of student learning and achievement.

### ***Standards Not Measurable Via Selected-Response Items***

In addition to using the information in Table 26, those involved in item and test design and development should systematically examine and discuss those standards determined to be eligible for the summative assessment but not measurable via the selected-response item type (i.e., 92 standards in ELA; 18 standards in mathematics). Consortium work groups and committees (e.g., Item Development, Test Design, Technology Approach, Test Administration, Reporting, and Accessibility and Accommodations Work Groups and the content specifications committee) should further examine these standards and determine, for example, whether and how these standards should be clustered or integrated into open-ended item types. In the case of the mathematics standards not measurable with selected-response items, work groups and committees may also wish to integrate these standards with the Standards for Mathematical Practice to develop assessment items/tasks that measure such clusters of standards in varied and complex ways.

### ***Standards Judged as More Appropriate for Classroom Assessment***

As noted previously, outcomes of this analysis are intended as a starting point to inform discussion and should in no way be interpreted to constrain the Consortium’s discussion and decisions. With that said, some standards (e.g., mathematics standard 8.G.1) were judged to be more appropriate for classroom assessment than for summative assessment. However, there are numerous considerations to be made when designing the summative assessment (e.g., content coverage). Therefore, further discussion should occur among Consortium groups (e.g., Test Design Work Group, content specifications committee), to verify exclusion or to determine the need for inclusion on the summative assessment of standards judged by this study’s analysts as more appropriate for classroom assessment.

### ***Vertical Alignment of ELA Standards***

As noted in the Introduction to this report, the standards for ELA and mathematics have different organizational structures. The ELA standards are organized based on cross-grade College and Career Readiness (CCR) Anchor Standards, whereas the mathematics standards are organized based on domains that vary across grade levels/spans according to grade-appropriate content. This subsection provides additional information on the organization of the ELA standards that may be useful in consideration of the results of this study for clustering content and determining learning progressions across grade levels.

Table 27 provides an example of the relationship between the CCR Anchor Standards, which define “general, cross-disciplinary literacy expectations that must be met for students to be prepared to enter college and workforce training programs ready to succeed,” and the grade-level standards, which define “end-of-year expectations and a cumulative progression designed to enable students to meeting college and career readiness expectations no later than the end of high school” (CCSSO and NGA, 2010a, p. 4), for each strand. The codes for the standards were determined as follows: “Individual CCR anchor standards can be identified by their strand, CCR status, and number (R.CCR.6, for example). Individual grade-specific standards can be identified by their strand, grade, and number (or number and letter<sup>15</sup>, where applicable), so that RI.4.3, for example, stands for Reading, Informational Text, grade 4, standard 3 and W.5.1a stands for Writing, grade 5, standard 1a” (p. 8).

**Table 27. Sample Set of College and Career Readiness Anchor Standards across Grade Levels**

<b>K–12 Anchor Standard</b>	<b>Grade 5 Standard</b>		<b>Grade Span 11–12 Standard</b>	
<b><i>College and Career Readiness Anchor Standards for Reading</i></b>	<b><i>Reading Standards for Literature K–5</i></b>	<b><i>Reading Standards for Informational Text K–5</i></b>	<b><i>Reading Standards for Literature 6–12</i></b>	<b><i>Reading Standards for Informational Text 6–12</i></b>
<b>R.CCR.2</b> Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.	<b>RL.5.2</b> Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.	<b>RI.5.2</b> Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.	<b>RL.11–12.2</b> Determine two or more themes or central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to produce a complex account; provide an objective summary of the text.	<b>RI.11–12.2</b> Determine two or more central ideas of a text and analyze their development over the course of the text, including how they interact and build on one another to provide a complex analysis; provide an objective summary of the text.
<b><i>College and Career Readiness Anchor Standards for Writing</i></b>	<b><i>Writing Standards K–5</i></b>		<b><i>Writing Standards 6–12</i></b>	
<b>W.CCR.1</b> Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	<b>W.5.1</b> Write opinion pieces on topics or texts, supporting a point of view with reasons and information.		<b>W.11–12.1</b> Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.	

<sup>15</sup> For the purposes of this study, lettered content was not coded, though the content was considered as relevant to inform understanding of the numbered standard. Lettered details that are included for some of the grade-specific standards are not shown in Table 27.

K–12 Anchor Standard	Grade 5 Standard	Grade Span 11–12 Standard
<b>College and Career Readiness Anchor Standards for Listening and Speaking</b>	<b>Speaking and Listening Standards K–5</b>	<b>Speaking and Listening Standards 6–12</b>
<b>SL.CCR.3</b> Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric.	<b>SL.5.3</b> Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.	<b>SL.11–12.3</b> Evaluate a speaker’s point of view, reasoning, and use of evidence and rhetoric, assessing the stance, premises, links among ideas, word choice, points of emphasis, and tone used.
<b>College and Career Readiness Standards for Language</b>	<b>Language Standards K–5</b>	<b>Language Standards 6–12</b>
<b>L.CCR.5</b> Demonstrate understanding of word relationships and nuances in word meanings.	<b>L.5.5</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.	<b>L.11–12.5</b> Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

**Range of Depth of Knowledge**

In some cases for ELA, for example, the DOK ranges for the same anchor standard may vary across grade levels. In such cases, special consideration may need to be taken in interpreting the intent of the standards in order to represent a progression of skills across grade levels (DOK levels for each grade-level standard were determined by analysts based on the particular use of verbs and other relevant descriptors in the standard). Such consideration has implications for defining learning progressions across grade levels, which will affect assessment design and item development.

### **Additional Examples of Use of Data**

The following examples for ELA and mathematics are intended to help illustrate how to navigate and use the information from this analysis (e.g., consideration of the content standards, comment codes, DOK) in creating a task.<sup>16,17</sup>

#### **Using Data from Eligible Content Data Workbook to Inform Performance Task Design for ELA: Example (Grade 5)**

*Conceptual Task:* Critically analyze informational text: compare and contrast ideas or concepts in two texts and present the analysis in writing in well-organized paragraphs.

*Step 1:* Determine set of relevant eligible standards that would be assessed by this task (consider notes on measurability; ensure that standard can be assessed with a performance task [PT] item type).

<b>Standard</b>	<b>Note</b>	<b>PT?</b>
RI.5.1	308	Y
RI.5.2	308	Y
RI.5.3		Y
RI.5.8	308	Y
W.5.2	306	Y
W.5.4	306	Y
W.5.9	305	Y

308: Full coverage of the standard may not be possible with selected response.

306: Standard overlaps with standard(s) in this strand.

305: Standard overlaps with standard(s) in another strand.

*Step 2:* Consider range of DOK.

<b>Standard</b>	<b>Range of DOK</b>
RI.5.1	1–3
RI.5.2	2–3
RI.5.3	1–3
RI.5.8	2–4
W.5.2	2–4
W.5.4	3–4
W.5.9	2–3

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<sup>16</sup> The intention of the example tasks—in these cases, performance tasks—is not to present an item prototype or to model how best to assess the particular standards referenced in the examples. Rather, the intention is to illustrate how to consider the various categories of data (e.g., comment codes, DOK) as Consortium groups (e.g., content specifications committee; Item Development and Test Design Work Groups) move forward with their design and development activities. The data presented in this report are intended for further discussion by Consortium groups.

<sup>17</sup> These examples are also intended to underscore that assessing an integration of knowledge and skills across multiple standards should arise from the standards and/or definition of the targeted construct/conceptual task. The cognitive demands and types of evidence required by the desired construct also should be defined.

Step 3: Consider evidence required for student demonstration of understanding/mastery.

Standard	Targeted Level of Cognitive Demand	Evidence Required
RI.5.1		
RI.5.2		
RI.5.3		
RI.5.8		
W.5.2		
W.5.4		
W.5.9		

Step 4: Determine how each standard (or part of the standard) will be assessed by the task and at what DOK level. [To be completed as part of development of item specifications and tasks.]

Standard	Part of Standard Assessed	How Task Assesses This Part (Include appropriate accessibility and accommodations strategies)	DOK Level Required by Task
RI.5.1			
RI.5.2			
RI.5.3			
RI.5.8			
W.5.2			
W.5.4			
W.5.9			

**Using Data from Eligible Content Data Workbook to Inform Performance Task Design for Mathematics: Example (Grade 7)**

*Conceptual Task:* Students will investigate chance processes and demonstrate the ability to develop, use, and evaluate probability models.

Step 1: Determine set of relevant eligible standards that would be assessed by this task (consider notes on measurability; ensure that standard can be assessed with a performance task [PT] item type).

Standard	Note	PT?
7.SP.6	308; 315	Y
7.SP.7	301; 308; 315	Y
7.SP.8	301; 308; 315	Y

301: At least one verb in the standard requires the student to generate a response.

308: Full coverage of the standard may not be possible with selected response.

315: This standard may be used as a stand-alone for a performance task.

Step 2: Consider range of DOK.

Standard	Range of DOK
7.SP.6	2–3
7.SP.7	2–3
7.SP.8	1–3

Step 3: Consider evidence required for student demonstration of understanding/mastery.

Standard	Targeted Level of Cognitive Demand	Evidence Required
7.SP.6		
7.SP.7		
7.SP.8		

Step 4: Determine how each standard (or part of the standard) will be assessed by the task and at what DOK level. [To be completed as part of development of item specifications and tasks.]

Standard	Part of Standard Assessed	How Task Assesses This Part (Include appropriate accessibility and accommodations strategies)	DOK Level Required by Task
7.SP.6			
7.SP.7			
7.SP.8			

Appendix G presents additional considerations for use of these data as the Consortium moves forward with its test and item design and development. The suggestions presented in Appendix G are based on selected comments from members of the Consortium’s Technical Advisory Committee. These suggestions are intended to generate and/or guide further discussion of this study’s data among Consortium work groups and committees (e.g., Test Design, Item Development, Technology Approach, and Accessibility and Accommodations Work Groups, content specifications committee).

## REFERENCES

- Briggs, D. (2010, October). *Can We Use Large-Scale Assessments for both Summative and Formative Purposes?* Presentation at the annual Reidy Interactive Lecture Series, Cambridge: MA.
- Darling-Hammond, L., Pecheone, R., Jaquith, A., Schultz, S., Walker, L., & Wei, R.C. (2010). *Developing an internationally comparable balanced assessment system that supports high-quality learning.* Paper presented at the National Conference on Next Generation K-12 Assessment Systems, March 2010, Washington, D.C. Retrieved from <http://www.k12center.org/rsc/pdf/Darling-HammondPechoneSystemModel.pdf>
- Council of Chief State School Officers (CCSSO) & National Governors Association (NGA). (2010a). *Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects.* Washington, DC: Author.
- Council of Chief State School Officers (CCSSO) & National Governors Association (NGA). (2010b). *Common Core State Standards for Mathematics.* Washington, DC: Author.
- Horton, M., O'Neal, S., & Winter, P. (n.d.). Writing DOK levels. Unpublished manuscript.
- Quellmalz, E. S. & Moody, M. (2004). *Models for multi-level state science assessment systems.* Report commissioned by the National Research Council Committee on Test Design for K-12 Science Achievement. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.126.984&rep=rep1&type=pdf>
- Mislevy, R. J., Almond, R. G., & Lukas, J. F. (2003). *A brief introduction to evidence-centered design.* Retrieved February 2011, from <http://www.education.umd.edu/EDMS/mislevy/papers/BriefIntroECD.pdf>
- Mislevy, R. J. & Haertel, G. (2006). Implications for evidence-centered design for educational assessment. *Educational Measurement: Issues and Practice, 4*, 6-20.
- SMARTER Balanced Assessment Consortium. (2010). Master work plan and high-level time line and work strands. Retrieved from <http://smarter.k12partners.org/>
- SMARTER Balanced Assessment Consortium. (2010b). *Race to the Top Assessment Program application for new grants: Comprehensive assessment systems.* CFDA Number: 84.395B. Submitted to USED by Washington State on behalf of the SMARTER Balanced Assessment Consortium. Author.
- Valencia, S. W., & Wixson, K. K. (2000). Policy-oriented research on literacy standards and assessment. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research: Volume III* (pp. 909-935). Mahwah, NJ: Lawrence Erlbaum.
- Webb, N. (2005). Web Alignment Tool (WAT) Training Manual, Draft Version 1.1. Retrieved from <http://wat.wceruw.org/index.aspx>

## APPENDIX A: GUIDING PRINCIPLES AND CONSIDERATIONS

### SBAC Common Core State Standards Analysis Defining Eligible Content for the Summative Assessment

#### Guiding Principles and Considerations (rev. 12/09/10)

Below are guiding principles and considerations informing the analysis and determination of the Common Core State Standards (CCSS) content eligible for the Consortium’s end-of-year summative assessment. The Consortium’s Executive Committee and members of the Consortium’s project management reviewed these guiding principles and considerations and provided input.

Resources consulted:

- CCSS standards, appendices, and explanatory documents
- WestEd’s SBAC paper, *Research-Supported Guidance for the Development of a Comprehensive Assessment Framework Based on the Common Core State Standards*, Sept. 30, 2010

#### A. What CCSS content can/should be assessed?

1. What is reasonable to assess on a summative assessment (i.e., students will have had the opportunity to learn the knowledge, skills, and abilities reflected in the standards)?
  - The CCSS were designed to address content for each grade level that is reasonable to learn in a school year, so the full set of standards (as described/specified in the CCSS documents) will be considered and analyzed for eligibility for the summative assessment.
  - ELA standards (Reading, Writing, Speaking & Listening, and Language strands) will be considered eligible for the Consortium’s end-of-year summative assessment, but standards for Literacy in History/Social Studies, Science, and Technical Subjects will not be considered. (Note: Test designers may choose to use history/social studies, science, and technical subjects as context for assessing literacy skills; however, the individual standards for literacy in history/social studies, science, and technical subjects will not be included in this analysis—i.e., for eligible content for summative assessment<sup>18</sup>.)
  - The following will be considered for eligibility on the summative assessment:
    - ELA: Grades 9–10 and 11–12
    - Mathematics: All six conceptual categories (Note: Modeling is integrated into five of the conceptual categories)
  - Note: The high school assessment is not based on a single year of instruction; rather, it is cumulative across multiple years.
  - The specific content to be assessed must be determined by the test design and test and item specifications. Since the SBAC assessment intends to allow an item to assess multiple standards, for this analysis (i.e., of eligible content) analysts will tend toward being more inclusive than exclusive in determining which standards are eligible for the Consortium’s summative assessment.

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<sup>18</sup> The standards for Literacy in History/Social Studies, Science, and Technical Subjects overlap with those for ELA Reading and Writing in grades 6–12; the intent of these standards appears to be to draw awareness to and provide guidance for interdisciplinary teaching of literacy skills (see p. 4 of the Introduction to the CCSS for English Language Arts and Literacy in History/Social Studies, Science, and Technical Subjects).

- The analysis of eligible content for the summative assessment will be limited to the CCSS and will not include/consider knowledge, skills, and abilities beyond those of the CCSS.
2. What is the broadest level of granularity for ELA and mathematics that would be appropriate for assessment? For item specifications?
- ELA: The main standard statements (numbered standards) have an appropriate level of content detail for assessment. The College and Career Readiness (CCR) Anchor Standards are too broad; the examples and many of the lettered “sub-standard” statements appear overly detailed for determining eligibility for summative assessment, but could be useful to consider in writing item specifications. As appropriate, the CCR Anchor Standard subheadings and statements will be considered in interpreting the standard and determining eligibility of the grade-specific standards.
  - Mathematics: The main standard statements (numbered standards) have an appropriate level of content detail for assessment. The standard cluster statement is generally too broad (and in some cases it is narrower than some of the numbered standards); the examples and many of the lettered “sub-standard” statements appear overly detailed for determining eligibility for summative assessment, but could be useful to consider in writing item specifications.  
As appropriate, the cluster statements will be considered in interpreting the standards and determining eligibility of the “numbered standards.”
  - The analysis of eligible content for summative assessment focuses on a grain size that is appropriate for informing item and test specifications and development. The level of granularity at which the analysis is focused is intended to allow for flexibility in how performance on the test will be reported. The number of items needed and the narrowness/broadness of content coverage within an item are beyond the scope of this analysis and better suited for discussions of item and test specifications.
3. How should we consider content emphasis? Is there any work/resources related to content progressions (or clusters) that reflect content priorities/emphases?
- As appropriate, ELA CCR Anchor Standards that provide a set of content clusters and the introductions for each grade (i.e., the narrative describing the overall focus of the grade level) in the mathematics standards will be considered.
  - Some standards may need to be assessed within the context of assessing other standards (e.g., ELA Language standards may need to be assessed via a reading or writing task), given variation in grain size within the standards documents themselves and the relative importance of certain standards.  
For example, Grade 9–10 Language standard 1: “Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.”
4. Is there anything/are there any considerations that would make content NOT eligible for summative assessment purposes?
- Standards identified by the CCSS as not required for all students (e.g., the “(+)” standards in mathematics)
  - Standards that are best measured by a portfolio of work or by tasks that must be completed over an extended period of time, that is, beyond the length of time allotted for performance tasks (e.g., ELA Reading standard 10 for all grades)

## **B. Structure of the analysis across content areas/grade levels**

1. Might there be a different product for grades 3–8 versus for high school? What similarities/differences might there be across grades within a content area (e.g., scope, number, structure)?
  - Generally, the protocol and rating tool/database will be the same for ELA and mathematics, across grades.
2. How should we consider appropriate item types (e.g., selected response, constructed response, performance tasks)?
  - Items types are defined in the SBAC proposal—analysts will use these definitions to determine which item types are appropriate for assessing eligible content standards.
  - As mentioned previously (see #1), analysts will be more inclusive in order to provide the test designers with flexibility in their ultimate determination of which item type(s) to use for assessing eligible content.

## **C. Process for determining eligibility for assessment**

1. Recommended approaches/considerations for ensuring accurate/appropriate interpretation of intent of standards/content meaning, understanding of introductory statements vis-à-vis individual related standards, etc.?
  - We will begin by relying on our analysts' expertise and crafting the criteria for analysis carefully.
  - We will rely on external review and comment by other experts (e.g., national experts in assessment, curriculum, instruction, standards, and the content areas).
  - We will review any relevant existing analyses.
- 2a. What are recommended criteria for determining which standards are eligible for assessment?
  - The following general, widely accepted and validated criteria for assessability (for a summative tool) are proposed. These criteria also were considered vis-à-vis information presented in the SBAC proposal:
    - Measurable via on-demand tasks, oral or written response
    - Measurable via selected response, constructed response, and/or performance tasks (as defined in SBAC proposal)
    - Learnable within the school year (as based on CCSS documents)
    - Expected content for all students (based on CCSS documents)
- 2b. What role does consideration of content on the vertical pathway to college and career preparation play in establishing criteria?
  - As appropriate, information in the CCSS about CCR Anchor Standards for ELA will be considered in interpreting standards and determining eligibility of the grade-specific standards.
  - Evaluating whether a given standard is on or appropriate for the pathway to college and career preparation is beyond the scope of this analysis (i.e., of eligible content).

2c. How should we account for possible achievement differentiators (e.g., considering growth) as we establish these criteria?

- Ranges of cognitive complexity (DOK) of each standard determined to be eligible for the summative assessment will be indicated by the analysts.
- Determination of actual/possible achievement differentiators is beyond the scope of this analysis (i.e., of eligible content).

2d. How should we consider range of cognitive complexity as we establish these criteria?

- Our draft criteria include rating each standard for the full range of relevant DOK levels.
- The results of the DOK analysis of the standards can inform selection of standards to test a range and balance of cognitive complexity.

## APPENDIX B. DESCRIPTIONS OF ITEM TYPES

### ***Selected response (multiple-choice)***

“Whereas selected-response items have routinely been a part of assessments of student learning, their emphasis has too often been on low-level skills reflecting knowledge of discrete pieces of information that are not critical for subsequent student learning. The emphasis here will be on the development of items that reflect important knowledge and skills consistent with the expectations of the CCSS. Items can be developed to address knowledge and skills from more than one standard. The appropriate and judicious use of selected-response items provides for a cost-effective means to address content in terms of test development, administration, and scoring.” (SBAC, 2010b, p. 52)

### ***Extended constructed response***

“Our assessment design calls for the use of extended constructed-response items. These items will be used to assess knowledge and skills not easily assessed with selected-response or technology-enhanced items. Constructed-response items allow students to demonstrate their use of complex thinking skills such as formulating comparisons or contrasts; proposing cause and effects; identifying patterns or conflicting points of view; categorizing, summarizing, or interpreting information; and developing generalizations, explanations, justifications, or evidence-based conclusions (Darling-Hammond & Pecheone, 2010). These complex thinking skills are consistent with the expectations for college- and career-readiness and will be included in both the English language arts and mathematics assessments.” (SBAC, 2010b, p. 53)

### ***Technology enhanced (multiple-choice or constructed response) and Technology enhanced constructed response (tied to writing performance event)<sup>19</sup>***

“The Consortium is committed to making effective use of technology by including items that capitalize on the capabilities of the assessment platform. The effective use of technology can expand not only the nature of the content that can be presented but also the knowledge, skills, and processes that can be assessed (Quellmalz & Moody, 2004). Technology-enhanced items can take advantage of drag-and-drop, hot spot, and simulation technologies along with the use of online tools to measure content that was previously not assessed or was assessed through constructed-response item formats requiring more elaborate scoring procedures. While most of the work with the technology-enhanced items has been done in the area of science, we envision the development of technology-enhanced items in both English language arts and mathematics. For example, a video presentation of a speech could be combined with a reading passage to provide students the opportunity to integrate reading and listening skills per the CCSS and evaluate content across diverse media.” (SBAC, 2010b, pp. 52–53)

### ***Performance task***

“The summative evaluation for each student will also include performance events that will provide a measure of the student’s ability to integrate knowledge and skills across multiple standards—a key component of college- and career-readiness. Performance events will be used to better measure capacities such as depth of understanding, research skills, and complex analysis, which cannot be adequately assessed with selected- or constructed-response items. At grades 3–8, students will engage

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<sup>19</sup> The analysis for this study did not distinguish among these technology-enhanced item types; determining the appropriate technology-enhanced item type to best assess a standard or set of standards should accompany further work on clustering standards and developing test and item specifications and assessment task templates.

in two rigorous performance events for ELA and mathematics. At the high school level, students will engage in up to six performance events by grade 11 for both ELA and mathematics. These events will be computer-delivered and typically will require one to two class periods to complete.” (SBAC, 2010b, p. 42)

“These events will evaluate the CCSS in ways that require more student-initiated planning, management of information and ideas, interaction with other materials and/or people, and production of more extended responses (e.g., oral presentations, exhibitions, product development, in addition to more extended written responses) that reveal additional abilities of students (Darling-Hammond & Pecheone, 2010) not captured by the other item types included in the summative assessment.” (SBAC, 2010b, p. 53)

### ***Writing prompts***

For the purpose of this analysis, the following decision rule will be applied to define the writing prompt item type:

“The item type ‘writing prompt’ is interpreted to refer to an on-demand task requiring the student to write for the purpose of assessing the students skills or knowledge in writing (that is, in the Writing and Language standards), and not for the purpose of assessing the student’s skills or knowledge in reading (that is, the Reading standards).”

## APPENDIX C. WEBB DEPTH OF KNOWLEDGE LEVELS

The following descriptions of Webb’s depth of knowledge (DOK) levels are excerpted from the *Web Alignment Tool (WAT) Training Manual, Draft Version 1.1* (Webb, 2005, pp. 45–46 and 70–75). DOK levels for ELA and mathematics are described separately.

### ELA DOK Levels

In language arts, four DOK levels were used to judge both reading and writing objectives and assessment tasks. The reading levels are based on Valencia and Wixson (2000, pp. 909–935). The writing levels were developed by Marshá Horton, Sharon O’Neal, and Phoebe Winter.

**Reading Level 1.** Level 1 requires students to receive or recite facts or to use simple skills or abilities. Oral reading that does not include analysis of the text, as well as basic comprehension of a text, is included. Items require only a shallow understanding of the text presented and often consist of verbatim recall from text, slight paraphrasing of specific details from the text, or simple understanding of a single word or phrase. Some examples that represent, but do not constitute all of, Level 1 performance are:

- Support ideas by reference to verbatim or only slightly paraphrased details from the text.
- Use a dictionary to find the meanings of words.
- Recognize figurative language in a reading passage.

**Reading Level 2.** Level 2 includes the engagement of some mental processing beyond recalling or reproducing a response; it requires both comprehension and subsequent processing of text or portions of text. Inter-sentence analysis of inference is required. Some important concepts are covered, but not in a complex way. Standards and items at this level may include words such as summarize, interpret, infer, classify, organize, collect, display, compare, and determine whether fact or opinion. Literal main ideas are stressed. A Level 2 assessment item may require students to apply skills and concepts that are covered in Level 1. However, items require closer understanding of text, possibly through the item’s paraphrasing of both the question and the answer. Some examples that represent, but do not constitute all of, Level 2 performance are:

- Use context cues to identify the meaning of unfamiliar words, phrases, and expressions that could otherwise have multiple meanings.
- Predict a logical outcome based on information in a reading selection.
- Identify and summarize the major events in a narrative.

**Reading Level 3.** Deep knowledge becomes a greater focus at Level 3. Students are encouraged to go beyond the text; however, they are still required to show understanding of the ideas in the text. Students may be encouraged to explain, generalize, or connect ideas. Standards and items at Level 3 involve reasoning and planning. Students must be able to support their thinking. Items may involve abstract theme identification, inference across an entire passage, or students’ application of prior knowledge. Items may also involve more superficial connections between texts. Some examples that represent, but do not constitute all of, Level 3 performance are:

- Explain or recognize how the author’s purpose affects the interpretation of a reading selection.
- Summarize information from multiple sources to address a specific topic.
- Analyze and describe the characteristics of various types of literature.

**Reading Level 4.** Higher-order thinking is central and knowledge is deep at Level 4. The standard or assessment item at this level will probably be an extended activity, with extended time provided for completing it. The extended time period is not a distinguishing factor if the required work is only repetitive and does not require the application of significant conceptual understanding and higher-order thinking. Students take information from at least one passage of a text and are asked to apply this information to a new task. They may also be asked to develop hypotheses and perform complex analyses of the connections among texts. Some examples that represent, but do not constitute all of, Level 4 performance are:

- Analyze and synthesize information from multiple sources.
- Examine and explain alternative perspectives across a variety of sources.
- Describe and illustrate how common themes are found across texts from different cultures.

**Writing Level 1.** Level 1 requires the student to write or recite simple facts. The focus of this writing or recitation is not on complex synthesis or analysis, but on basic ideas. The students are asked to list ideas or words, as in a brainstorming activity, prior to written composition; are engaged in a simple spelling or vocabulary assessment; or are asked to write simple sentences. Students are expected to write, speak, and edit using the conventions of Standard English. This includes using appropriate grammar, punctuation, capitalization, and spelling. Students demonstrate a basic understanding and appropriate use of such reference materials as a dictionary, thesaurus, or Web site. Some examples that represent, but do not constitute all of, Level 1 performance are:

- Use punctuation marks correctly.
- Identify Standard English grammatical structures, including the correct use of verb tenses.

**Writing Level 2.** Level 2 requires some mental processing. At this level, students are engaged in first-draft writing or brief extemporaneous speaking for a limited number of purposes and audiences. Students are expected to begin connecting ideas, using a simple organizational structure. For example, students may be engaged in note-taking, outlining, or simple summaries. Text may be limited to one paragraph. Some examples that represent, but do not constitute all of, Level 2 performance are:

- Construct or edit compound or complex sentences, with attention to correct use of phrases and clauses.
- Use simple organizational strategies to structure written work.
- Write summaries that contain the main idea of the reading selection and pertinent details.

**Writing Level 3.** Level 3 requires some higher-level mental processing. Students are engaged in developing compositions that include multiple paragraphs. These compositions may include complex sentence structure and may demonstrate some synthesis and analysis. Students show awareness of their audience and purpose through focus, organization, and the use of appropriate compositional elements. The use of appropriate compositional elements includes such things as addressing chronological order in a narrative, or including supporting facts and details in an informational report. At this stage, students are engaged in editing and revising to improve the quality of the composition. Some examples that represent, but do not constitute all of, Level 3 performance are:

- Support ideas with details and examples.
- Use voice appropriate to the purpose and audience.
- Edit writing to produce a logical progression of ideas.

**Writing Level 4.** Higher-level thinking is central to Level 4. The standard at this level is a multi-paragraph composition that demonstrates the ability to synthesize and analyze complex ideas or themes. There is

evidence of a deep awareness of purpose and audience. For example, informational papers include hypotheses and supporting evidence. Students are expected to create compositions that demonstrate a distinct voice and that stimulate the reader or listener to consider new perspectives on the addressed ideas and themes. An example that represents, but does not constitute all of, Level 4 performance is:

- Write an analysis of two selections, identifying the common theme and generating a purpose that is appropriate for both.

### **Mathematics DOK Levels**

**Level 1 (Recall)** includes the recall of information such as a fact, definition, term, or a simple procedure, as well as performing a simple algorithm or applying a formula. That is, in mathematics, a one-step, well defined, and straight algorithmic procedure should be included at this lowest level. Other key words that signify Level 1 include “identify,” “recall,” “recognize,” “use,” and “measure.” Verbs such as “describe” and “explain” could be classified at different levels, depending on what is to be described and explained.

**Level 2 (Skill/Concept)** includes the engagement of some mental processing beyond an habitual response. A Level 2 assessment item requires students to make some decisions as to how to approach the problem or activity, whereas Level 1 requires students to demonstrate a rote response, perform a well-known algorithm, follow a set procedure (like a recipe), or perform a clearly defined series of steps. Keywords that generally distinguish a Level 2 item include “classify,” “organize,” “estimate,” “make observations,” “collect and display data,” and “compare data.” These actions imply more than one step. For example, to compare data requires first identifying characteristics of objects or phenomena and then grouping or ordering the objects. Some action verbs, such as “explain,” “describe,” or “interpret,” could be classified at different levels depending on the object of the action. For example, interpreting information from a simple graph, or reading information from the graph, also are at Level 2. Interpreting information from a complex graph that requires some decisions on what features of the graph need to be considered and how information from the graph can be aggregated is at Level 3. Level 2 activities are not limited only to number skills, but may involve visualization skills and probability skills. Other Level 2 activities include noticing or describing non-trivial patterns, explaining the purpose and use of experimental procedures; carrying out experimental procedures; making observations and collecting data; classifying, organizing, and comparing data; and organizing and displaying data in tables, graphs, and charts.

**Level 3 (Strategic Thinking)** requires reasoning, planning, using evidence, and a higher level of thinking than the previous two levels. In most instances, requiring students to explain their thinking is at Level 3. Activities that require students to make conjectures are also at this level. The cognitive demands at Level 3 are complex and abstract. The complexity does not result from the fact that there are multiple answers, a possibility for both Levels 1 and 2, but because the task requires more demanding reasoning. An activity, however, that has more than one possible answer and requires students to justify the response they give would most likely be at Level 3.

Other Level 3 activities include drawing conclusions from observations; citing evidence and developing a logical argument for concepts; explaining phenomena in terms of concepts; and deciding which concepts to apply in order to solve a complex problem.

**Level 4 (Extended Thinking)** requires complex reasoning, planning, developing, and thinking, most likely over an extended period of time. The extended time period is not a distinguishing factor if the required work is only repetitive and does not require applying significant conceptual understanding and higher-order thinking. For example, if a student has to take the water temperature from a river each day for a

month and then construct a graph, this would be classified as a Level 2. However, if the student is to conduct a river study that requires taking into consideration a number of variables, this would be a Level 4. At Level 4, the cognitive demands of the task should be high and the work should be very complex. Students should be required to make several connections—relate ideas *within* the content area or *among* content areas—and have to select one approach among many alternatives on how the situation should be solved, in order to be at this highest level. Level 4 activities include designing *and* conducting experiments and projects; developing and proving conjectures, making connections between a finding and related concepts and phenomena; combining and synthesizing ideas into new concepts; and critiquing experimental designs.

## APPENDIX D. LIST OF ANALYSTS' COMMENTS

<b>200 Series</b>	<b>Expected</b>
201	Standard is labeled with a (+), indicating that the content should be learned by students in order to take advanced courses.
202	A portion of this standard is labeled with a (+), indicating that the content should be learned by students in order to take advanced courses.
<b>300 Series</b>	<b>Measurable</b>
301	At least one verb in the standard requires the student to generate a response. <sup>20</sup>
302	At least a portion of this standard is best measured by in-person observation. <sup>21</sup>
303	Assessment of this standard (or a portion of this standard) may require guidance and support from an adult.
304	Assessment of this standard (or a portion of this standard) may require interaction with others.
305	This standard (or a portion of this standard) overlaps with one or more standards in another strand.
306	This standard (or a portion of this standard) overlaps with one or more other standards in this strand.
307	A portion of this standard is not measurable via on-demand assessment.
308	Full coverage of the standard may not be possible with selected response.
309	Statements in this standard inform the complexity of text and selection of content area texts appropriate for the assessment.
310	At least a portion of this standard is related to process rather than outcome. <sup>22</sup>
311	This standard (or a portion of this standard) requires an extended amount of time.
312	Technological enhancement may be necessary for all item types for this standard. <sup>23</sup>
313	The parameters for assessment may be difficult to define for a component of this standard.
314	Only listening would be measured if responses were written.
315	This standard may be used as a stand-alone for a performance task.

<sup>20</sup> Skills that require the student to generate a response are most effectively assessed via constructed-response items; however, a standard may describe multiple skills and thus be rated for multiple item types, not all of which apply to all of the content.

<sup>21</sup> The portion of the standard describing skills or knowledge best measured by in-person observations would not be considered eligible for the summative assessment.

<sup>22</sup> The portion of the standard describing process skills over extended time would not be considered eligible for the summative assessment.

<sup>23</sup> Technology-enhanced items can be selected response or constructed response; for some standards, analysts rated other applicable item types in addition to technology-enhanced items, and added this note as a consideration that, while the content could be assessed via various item types, effectively assessing the content may mean that technological enhancement will be required.

<b>400 Series</b>	<b>DOK</b>
401	Higher DOK applies only to a portion of the standard that is to be learned by students in order to take advanced courses.

**APPENDIX E. ELIGIBLE CONTENT DATA WORKBOOK**

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
RL.3.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.3.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.3.3	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.3.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.3.5	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.3.6	Y		Y		Y		N	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.3.7	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.3.8	NA		NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
RL.3.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.3.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
RI.3.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.3.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.3.3	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.3.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.3.5	Y		Y		Y		Y	Y	Y	Y	N	N	Y	Y	Y	N	N		
RI.3.6	Y		Y		Y		N	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.3.7	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.3.8	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	N	N		
RI.3.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	N		
RI.3.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
RF.3.3	Y		Y		Y	307	Y	N	Y	Y	N	N	Y	Y	N	N	N		
RF.3.4	Y		Y		N	302	N	N	N	N	N	N	N	Y	Y	N	N		
W.3.1	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.3.2	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.3.3	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.3.4	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
W.3.5	Y		Y		Y	303 304 305	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y		
W.3.6	Y		Y		N	303 304 310	N	N	N	N	N	N	N	Y	Y	N	N		
W.3.7	Y		Y		N	310	N	N	N	N	N	N	N	Y	Y	Y	Y		
W.3.8	Y		Y		Y	307	N	N	Y	Y	N	N	Y	Y	Y	N	N		
W.3.9	NA		NA		NA		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
W.3.10	Y		Y		N	310	N	N	N	N	N	N	N	Y	Y	Y	Y		
SL.3.1	Y		Y		N	304	N	N	N	N	N	N	N	Y	Y	Y	Y		
SL.3.2	Y		Y		Y		N	N	Y	N	N	N	Y	Y	Y	N	N		
SL.3.3	Y		Y		Y	314	N	N	Y	N	N	N	Y	Y	Y	N	N		
SL.3.4	Y		Y		Y		N	N	Y	N	N	Y	Y	Y	Y	Y	Y		
SL.3.5	Y		Y		Y	307	N	N	Y	N	N	Y	Y	N	Y	Y	N		
SL.3.6	Y		Y		Y	307 305	N	N	Y	N	N	Y	Y	Y	Y	N	N		
L.3.1	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
L.3.2	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	Y	N	N	N		
L.3.3	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	N	Y	N	N		
L.3.4	Y		Y		Y	305	Y	N	Y	Y	N	N	Y	Y	Y	Y	N		
L.3.5	Y		Y		Y	305	Y	N	Y	Y	N	N	Y	Y	Y	Y	N		
L.3.6	Y		Y		Y	305	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
RL.4.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.4.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.4.3	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
RL.4.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.4.5	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.4.6	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	N		
RL.4.7	Y		Y		Y	312	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RL.4.8	N/A		N/A		N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
RL.4.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.4.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
RI.4.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.4.2	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.4.3	Y		Y		Y		Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.4.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.4.5	Y		Y		Y		Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.4.6	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.4.7	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.4.8	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.4.9	Y		Y		Y	313	N	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.4.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
RF.4.3	Y		Y		N	302	N	N	N	N	N	N	N	Y	N	N	N		
RF.4.4	Y		Y		N	302	N	N	N	N	N	N	N	Y	Y	N	N		
W.4.1	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.4.2	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.4.3	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.4.4	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.4.5	Y		Y		Y	303 304 305	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y		
W.4.6	Y		Y		N	303 304 310	N	N	N	N	N	N	N	Y	Y	N	N		
W.4.7	Y		Y		N	310	N	N	N	N	N	N	N	N	N	Y	Y		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
W.4.8	Y		Y		Y	307	N	N	Y	Y	N	N	Y	Y	Y	N	N		
W.4.9	Y		Y		Y	305	N	N	Y	Y	Y	N	Y	N	Y	Y	N		
W.4.10	Y		Y		N	310	N	N	N	N	N	N	N	Y	Y	Y	Y		
SL.4.1	Y		Y		N	304	N	N	N	N	N	N	N	Y	Y	Y	N		
SL.4.2	Y		Y		Y		N	N	Y	N	N	N	Y	N	Y	Y	N		
SL.4.3	Y		Y		Y	314	N	N	Y	N	N	N	Y	Y	Y	N	N		
SL.4.4	Y		Y		Y		N	N	Y	N	N	Y	Y	Y	Y	Y	N		
SL.4.5	Y		Y		Y		N	N	Y	N	N	Y	Y	N	Y	Y	N		
SL.4.6	Y		Y		Y	305	N	N	Y	N	N	Y	Y	Y	Y	N	N		
L.4.1	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
L.4.2	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	Y	N	N	N		
L.4.3	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	N	Y	N	N		
L.4.4	Y		Y		Y	305	Y	N	Y	Y	N	N	Y	Y	Y	Y	N		
L.4.5	Y		Y		Y	305	Y	N	Y	Y	N	N	Y	Y	Y	Y	N		
L.4.6	Y		Y		Y	305 307	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
RL.5.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.5.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.5.3	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.5.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.5.5	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.5.6	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RL.5.7	Y		Y		Y	312	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RL.5.8	N/A		N/A		N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
RL.5.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	N	N		
RL.5.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	Y	Y		
RI.5.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.5.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.5.3	Y		Y		Y		Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.5.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.5.5	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.5.6	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.5.7	Y		Y		Y	313	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.5.8	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.5.9	Y		Y		Y	313	N	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.5.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
RF.5.3	Y		Y		N	302	N	N	N	N	N	N	N	Y	N	N	N		
RF.5.4	Y		Y		N	302	N	N	N	N	N	N	N	Y	Y	N	N		
W.5.1	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.5.2	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.5.3	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.5.4	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.5.5	Y		Y		Y	301 303 304 305	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y		
W.5.6	Y		Y		N	303 304 310	N	N	N	N	N	N	N	Y	Y	N	N		
W.5.7	Y		Y		N	310	N	N	N	N	N	N	N	N	N	Y	Y		
W.5.8	Y		Y		Y	307	N	N	Y	Y	N	N	Y	Y	Y	N	N		
W.5.9	Y		Y		Y	305	N	N	Y	Y	Y	N	Y	N	Y	Y	N		
W.5.10	Y		Y		N	310	N	N	N	N	N	N	N	N	Y	Y	Y		
SL.5.1	Y		Y		N	304 311	N	N	N	N	N	N	N	Y	Y	Y	Y		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
SL.5.2	Y		Y		Y	314	N	N	Y	N	N	N	Y	N	Y	Y	N		
SL.5.3	Y		Y		Y	314	N	N	Y	N	N	N	Y	N	Y	Y	N		
SL.5.4	Y		Y		Y		N	N	Y	N	N	Y	Y	Y	Y	Y	N		
SL.5.5	Y		Y		Y		N	N	Y	N	N	Y	Y	N	Y	Y	N		
SL.5.6	Y		Y		Y	305	N	N	Y	N	N	Y	Y	Y	Y	N	N		
L.5.1						301													
	Y		Y		Y	305	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
L.5.2						301													
	Y		Y		Y	305	Y	N	Y	Y	Y	N	Y	Y	N	N	N		
L.5.3						301													
	Y		Y		Y	305	Y	N	Y	Y	Y	N	Y	N	Y	Y	Y		
L.5.4	Y		Y		Y	305	Y	N	Y	Y	N	N	Y	Y	Y	Y	N		
L.5.5	Y		Y		Y	305	Y	N	Y	Y	N	N	Y	Y	Y	Y	N		
L.5.6						305													
	Y		Y		Y	307	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
RL.6.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.6.2						301													
	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.6.3	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.6.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.6.5	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.6.6	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RL.6.7						308													
	Y		Y		Y	312	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.6.8	N/A		N/A		N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
RL.6.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.6.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
RI.6.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.6.2						301													
	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
RI.6.3	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.6.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.6.5	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.6.6	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.6.7	Y		Y		Y	312 313	N	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.6.8	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.6.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.6.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
W.6.1	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.6.2	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.6.3	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.6.4	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.6.5	Y		Y		Y	301 303 304 305	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y		
W.6.6	Y		Y		N	304 310	N	N	N	N	N	N	N	Y	Y	N	N		
W.6.7	Y		Y		Y	307 311 313	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.6.8	Y		Y		Y	301 308	Y	N	Y	Y	N	N	Y	Y	Y	Y	Y		
W.6.9	Y		Y		Y	305	N	N	Y	Y	Y	N	Y	N	Y	Y	Y		
W.6.10	Y		Y		N	310	N	N	N	N	N	N	N	Y	Y	Y	Y		
SL.6.1	Y		Y		N	304 311	N	N	N	N	N	N	N	Y	Y	Y	N		
SL.6.2	Y		Y		Y	314	N	N	Y	N	N	N	Y	N	Y	Y	Y		
SL.6.3	Y		Y		Y	314	N	N	Y	N	N	N	Y	N	Y	Y	N		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
SL.6.4	Y		Y		Y		N	N	Y	N	N	Y	Y	Y	Y	Y	N		
SL.6.5	Y		Y		Y		N	N	Y	N	N	Y	Y	N	Y	Y	N		
SL.6.6	Y		Y		Y	305	N	N	Y	N	N	Y	Y	Y	Y	N	N		
L.6.1	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	Y	N	N	N		
L.6.2	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	Y	N	N	N		
L.6.3	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	N	Y	Y	N		
L.6.4	Y		Y		Y	305 307	Y	N	Y	Y	N	N	Y	Y	Y	N	N		
L.6.5	Y		Y		Y	305 307	Y	N	Y	Y	N	N	Y	Y	Y	Y	N		
L.6.6	Y		Y		Y	305 307 313	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
RL.7.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.7.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.7.3	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.7.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.7.5	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.7.6	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.7.7	Y		Y		Y	308 312	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.7.8	N/A		N/A		N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
RL.7.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.7.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
RI.7.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
RI.7.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.7.3	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.7.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.7.5	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.7.6	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.7.7	Y		Y		Y	308 312	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.7.8	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.7.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.7.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
W.7.1	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.7.2	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.7.3	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.7.4	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.7.5	Y		Y		Y	301 303 304 305	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y		
W.7.6	Y		Y		N	304 310	N	N	N	N	N	N	N	Y	Y	N	N		
W.7.7	Y		Y		Y	307 311 313	N	N	Y	Y	Y	N	Y	N	Y	Y	Y		
W.7.8	Y		Y		Y	301 308 313	Y	N	Y	Y	N	N	Y	Y	Y	Y	Y		
W.7.9	Y		Y		Y	305	N	N	Y	Y	Y	N	Y	N	Y	Y	Y		
W.7.10	Y		Y		N	310	N	N	N	N	N	N	N	Y	Y	Y	Y		
SL.7.1	Y		Y		N	304 311	N	N	N	N	N	N	N	Y	Y	Y	N		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
SL.7.2	Y		Y		Y	314	N	N	Y	N	N	N	Y	N	Y	Y	Y		
SL.7.3	Y		Y		Y	314	N	N	Y	N	N	N	Y	N	Y	Y	Y		
SL.7.4	Y		Y		Y		N	N	Y	N	N	Y	Y	Y	Y	Y	N		
SL.7.5	Y		Y		Y		N	N	Y	N	N	Y	Y	N	Y	Y	N		
SL.7.6	Y		Y		Y	305	N	N	Y	N	N	Y	Y	Y	Y	N	N		
L.7.1						301 305 308	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
L.7.2	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	Y	N	N	N		
L.7.3	Y		Y		Y	301 305 308	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N		
L.7.4	Y		Y		Y	305 307	Y	N	Y	Y	N	N	Y	Y	Y	N	N		
L.7.5	Y		Y		Y	305 307	Y	N	Y	Y	N	N	Y	Y	Y	Y	N		
L.7.6	Y		Y		Y	305 307 313	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
RL.8.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.8.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.8.3	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.8.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.8.5	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.8.6	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.8.7	Y		Y		Y	308 312	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.8.8	N/A		N/A		N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
RL.8.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.8.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
RI.8.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.8.2	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.8.3	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.8.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.8.5	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.8.6	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.8.7	Y		Y		Y	312	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.8.8	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.8.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.8.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
W.8.1	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.8.2	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.8.3	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.8.4	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.8.5	Y		Y		Y	301 303 304 305	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y		
W.8.6	Y		Y		N	304 310	N	N	N	N	N	N	N	Y	Y	N	N		
W.8.7	Y		Y		Y	307 311 313	N	N	Y	Y	Y	N	Y	N	Y	Y	Y		
W.8.8	Y		Y		Y	301 313	Y	N	Y	Y	N	N	Y	Y	Y	Y	Y		
W.8.9	Y		Y		Y	305	N	N	Y	Y	Y	N	Y	N	Y	Y	Y		
W.8.10	Y		Y		N	310	N	N	N	N	N	N	N	Y	Y	Y	Y		
SL.8.1	Y		Y		N	304 311	N	N	N	N	N	N	N	Y	Y	Y	N		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
SL.8.2	Y		Y		Y	314	N	N	Y	N	N	N	Y	N	Y	Y	Y		
SL.8.3	Y		Y		Y	314	N	N	Y	N	N	N	Y	N	Y	Y	Y		
SL.8.4	Y		Y		Y		N	N	Y	N	N	Y	Y	Y	Y	Y	N		
SL.8.5	Y		Y		Y		N	N	Y	N	N	Y	Y	N	Y	Y	N		
SL.8.6	Y		Y		Y	305	N	N	Y	N	N	Y	Y	Y	Y	N	N		
L.8.1						301 305 308													
	Y		Y		Y		Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
L.8.2						301 305 308													
	Y		Y		Y		Y	N	Y	Y	Y	N	Y	Y	N	N	N		
L.8.3						301 305 308													
	Y		Y		Y		Y	N	Y	Y	Y	N	Y	N	Y	Y	N		
L.8.4						305 307													
	Y		Y		Y		Y	N	Y	Y	N	N	Y	Y	Y	N	N		
L.8.5						305 307													
	Y		Y		Y		Y	N	Y	Y	N	N	Y	Y	Y	Y	N		
L.8.6						305 307 313													
	Y		Y		Y		Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
RL.9-10.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.9-10.2						301 308													
	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.9-10.3	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RL.9-10.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.9-10.5	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.9-10.6	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.9-10.7						308 312													
	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.9-10.8	N/A		N/A		N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
RL.9-10.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.9-10.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
RI.9-10.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.9-10.2	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.9-10.3	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.9-10.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.9-10.5	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.9-10.6	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.9-10.7	Y		Y		Y	312	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.9-10.8	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.9-10.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.9-10.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
W.9-10.1	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.9-10.2	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.9-10.3	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.9-10.4	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.9-10.5	Y		Y		Y	301 304 305	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y		
W.9-10.6	Y		Y		N	304 310	N	N	N	N	N	N	N	Y	Y	N	N		
W.9-10.7	Y		Y		Y	307 311 313	N	N	Y	Y	Y	N	Y	N	Y	Y	Y		
W.9-10.8	Y		Y		Y	301 313	Y	N	Y	Y	N	N	Y	Y	Y	Y	Y		
W.9-10.9	Y		Y		Y	305	N	N	Y	Y	Y	N	Y	N	Y	Y	Y		
W.9-10.10	Y		Y		N	310	N	N	N	N	N	N	N	Y	Y	Y	Y		
SL.9-10.1	Y		Y		N	304 311	N	N	N	N	N	N	N	Y	Y	Y	N		
SL.9-10.2	Y		Y		Y	314	N	N	Y	N	N	N	Y	N	Y	Y	Y		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
SL.9-10.3	Y		Y		Y		N	N	Y	N	N	N	Y	N	Y	Y	Y		
SL.9-10.4	Y		Y		Y		N	N	Y	N	N	Y	Y	Y	Y	Y	N		
SL.9-10.5	Y		Y		Y	313	N	N	Y	N	N	Y	Y	N	Y	Y	N		
SL.9-10.6	Y		Y		Y	305	N	N	Y	N	N	Y	Y	Y	Y	N	N		
L.9-10.1						301 305													
	Y		Y		Y	308	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
L.9-10.2						301 305													
	Y		Y		Y	308	Y	N	Y	Y	Y	N	Y	Y	N	N	N		
L.9-10.3						301 305													
	Y		Y		Y	308	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N		
L.9-10.4						305 307													
	Y		Y		Y	307	Y	N	Y	Y	N	N	Y	Y	Y	N	N		
L.9-10.5						305 307													
	Y		Y		Y	307	Y	N	Y	Y	N	N	Y	N	Y	Y	N		
L.9-10.6						305 307													
	Y		Y		Y	313	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
RL.11-12.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.11-12.2						301 308													
	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RL.11-12.3	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RL.11-12.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RL.11-12.5	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.11-12.6	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.11-12.7						308 312													
	Y		Y		Y	312	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.11-12.8	N/A		N/A		N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
RL.11-12.9	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RL.11-12.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
RI.11-12.1	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
RI.11-12.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.11-12.3	Y		Y		Y		Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.11-12.4	Y		Y		Y	305	Y	Y	Y	Y	N	N	Y	Y	Y	Y	N		
RI.11-12.5	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.11-12.6	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.11-12.7	Y		Y		Y	308 312	Y	Y	Y	Y	N	N	Y	N	N	Y	Y		
RI.11-12.8	Y		Y		Y	301 308	Y	Y	Y	Y	N	N	Y	N	Y	Y	Y		
RI.11-12.9	Y		Y		Y	308	Y	Y	Y	Y	N	N	Y	N	Y	Y	N		
RI.11-12.10	Y		Y		N	309	N	N	N	N	N	N	N	Y	Y	N	N		
W.11-12.1	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.11-12.2	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.11-12.3	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.11-12.4	Y		Y		Y	306	N	N	Y	Y	Y	N	Y	N	N	Y	Y		
W.11-12.5	Y		Y		Y	301 304 305	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y		
W.11-12.6	Y		Y		N	304 310	N	N	N	N	N	N	N	Y	Y	N	N		
W.11-12.7	Y		Y		Y	307 311 313	N	N	Y	Y	Y	N	Y	N	Y	Y	Y		
W.11-12.8	Y		Y		Y	301 313	Y	N	Y	Y	N	N	Y	Y	Y	Y	Y		
W.11-12.9	Y		Y		Y	305	N	N	Y	Y	Y	N	Y	N	Y	Y	Y		
W.11-12.10	Y		Y		N	310	N	N	N	N	N	N	N	Y	Y	Y	Y		
SL.11-12.1	Y		Y		N	304 311	N	N	N	N	N	N	N	Y	Y	Y	N		
SL.11-12.2	Y		Y		Y	313 314	N	N	Y	N	N	N	Y	N	N	Y	Y		

APPENDIX E - SBAC Eligible Content Data Workbook: ELA

English Language Arts																			
CCS Code	Learnable		Expected		Measurable		Item Type						Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Writing Prompt (ELA ONLY)	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
SL.11-12.3	Y		Y		Y		N	N	Y	N	N	N	Y	N	Y	Y	Y	Y	
SL.11-12.4	Y		Y		Y		N	N	Y	N	N	Y	Y	Y	Y	Y	N		
SL.11-12.5	Y		Y		Y	313	N	N	Y	N	N	Y	Y	N	Y	Y	N		
SL.11-12.6	Y		Y		Y	305	N	N	Y	N	N	Y	Y	Y	Y	N	N		
L.11-12.1						301													
	Y		Y		Y	305	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
L.11-12.2						301													
	Y		Y		Y	305	Y	N	Y	Y	Y	N	Y	Y	N	N	N		
L.11-12.3						301													
	Y		Y		Y	305	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N		
L.11-12.4						305													
	Y		Y		Y	307	Y	N	Y	Y	N	N	Y	Y	Y	N	N		
L.11-12.5						305													
	Y		Y		Y	307	Y	N	Y	Y	N	N	Y	N	Y	Y	N		
L.11-12.6						305													
	Y		Y		Y	307	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		
						313	Y	N	Y	Y	Y	N	Y	Y	Y	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																		
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	CODE
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
3.OA.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.OA.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.OA.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.OA.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.OA.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.OA.6	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.OA.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.OA.8	Y		Y		Y	302	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
3.OA.9	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N		
3.NBT.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
3.NBT.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.NBT.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.NF.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.NF.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.NF.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
3.MD.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.MD.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.MD.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.MD.4	Y		Y		Y		N	Y	Y	Y	N	Y	N	Y	N	N		
3.MD.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.MD.6	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.MD.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.MD.8	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																		
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	CODE
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
3.G.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
3.G.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.OA.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.OA.2	Y		Y		Y	308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.OA.3	Y		Y		Y	301 302 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
4.OA.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
4.OA.5	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.NBT.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
4.NBT.2	Y		Y		Y	301 302 308	Y	Y	Y	Y	N	Y	Y	N	N	N		
4.NBT.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
4.NBT.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
4.NBT.5	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.NBT.6	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.NF.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
4.NF.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N		
4.NF.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N		
4.NF.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.NF.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
4.NF.6	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
4.NF.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N		
4.MD.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																		
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
4.MD.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.MD.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.MD.4	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.MD.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
4.MD.6	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	N	N	N		
4.MD.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.G.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	N	N	N		
4.G.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
4.G.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	N	N	N		
5.OA.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
5.OA.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.OA.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.NBT.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
5.NBT.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.NBT.3	Y		Y		Y	301 308 302	Y	Y	Y	Y	N	Y	Y	N	N	N		
5.NBT.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
5.NBT.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
5.NBT.6	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.NBT.7	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
5.NF.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																		
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
5.NF.2	Y		Y		Y	302	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
5.NF.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.NF.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.NF.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N		
5.NF.6	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.NF.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.MD.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.MD.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.MD.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
5.MD.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.MD.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.G.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
5.G.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.G.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
5.G.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.RP.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.RP.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.RP.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.NS.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.NS.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
6.NS.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
6.NS.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
6.NS.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.NS.6	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	N	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																		
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	CODE
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
6.NS.7	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.NS.8	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.EE.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	N	N	N		
6.EE.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.EE.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.EE.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
6.EE.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
6.EE.6	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.EE.7	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.EE.8	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.EE.9	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
6.G.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.G.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.G.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.G.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.SP.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
6.SP.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.SP.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
6.SP.4	Y		Y		Y	308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
6.SP.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N		
7.RP.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																		
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	CODE
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
7.RP.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.RP.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.NS.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.NS.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.NS.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.EE.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
7.EE.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.EE.3	Y		Y		Y	301 302	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
7.EE.4	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
7.G.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.G.2	Y		Y		Y		N	Y	Y	Y	N	Y	Y	Y	N	N		
7.G.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.G.4	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.G.5	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.G.6	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
7.SP.1	Y		Y		Y		Y	Y	Y	Y	N	Y	N	Y	N	N		
7.SP.2	Y		Y		Y	301 308 315	Y	Y	Y	Y	N	Y	N	Y	Y	N		
7.SP.3	Y		Y		Y		Y	Y	Y	Y	N	Y	N	Y	Y	N		
7.SP.4	Y		Y		Y		Y	Y	Y	Y	N	Y	N	Y	Y	N		
7.SP.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																		
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	CODE
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
7.SP.6	Y		Y		Y	308 315	Y	Y	Y	Y	N	Y	N	Y	Y	N		
7.SP.7	Y		Y		Y	301 308 315	Y	Y	Y	Y	N	Y	N	Y	Y	N		
7.SP.8	Y		Y		Y	301 308 315	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
8.NS.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
8.NS.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.EE.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	N	N	N		
8.EE.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
8.EE.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.EE.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.EE.5	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
8.EE.6	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N		
8.EE.7	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.EE.8	Y		Y		Y	301 308 310	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
8.F.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.F.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.F.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.F.4	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
8.F.5	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																		
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
8.G.1	Y		Y		N	302	N	N	N	N	N	N	N	Y	N	N		
8.G.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.G.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.G.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.G.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N		
8.G.6	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	N	Y	Y	N		
8.G.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.G.8	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.G.9	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.SP.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
8.SP.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.SP.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
8.SP.4	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
N.RN.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
N.RN.2	Y		Y		Y		N	Y	Y	Y	N	Y	Y	N	N	N		
N.RN.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
N.Q.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
N.Q.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
N.Q.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
N.CN.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
N.CN.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
N.CN.3	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	N	N	N		
N.CN.4	Y		N	201	Y	301 308	Y	Y	Y	Y	N	N	Y	Y	N	N		
N.CN.5	Y		N	201	Y	301 308	Y	Y	Y	Y	N	N	Y	Y	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																	
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge				
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE
N.CN.6	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	N	N	N	
N.CN.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N	
N.CN.8	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
N.CN.9	Y		N	201	Y	301 308	Y	Y	Y	Y	N	N	Y	Y	N	N	
N.VM.1	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	N	N	N	
N.VM.2	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	N	N	N	
N.VM.3	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
N.VM.4	Y		N	201	Y	301 308	Y	Y	Y	Y	N	N	Y	Y	N	N	
N.VM.5	Y		N	201	Y	301 308	Y	Y	Y	Y	N	N	Y	Y	N	N	
N.VM.6	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
N.VM.7	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	N	N	N	
N.VM.8	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	N	N	N	
N.VM.9	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	N	N	N	
N.VM.10	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	N	N	N	
N.VM.11	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
N.VM.12	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
A.SSE.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
A.SSE.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
A.SSE.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N	
A.SSE.4	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N	
A.APR.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N	
A.APR.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
A.APR.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N	

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																		
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge					
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
A.APR.4	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
A.APR.5	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N		
A.APR.6	Y		Y		Y	301 308 310	Y	Y	Y	Y	N	Y	Y	Y	N	N		
A.APR.7	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	N	N	N		
A.CED.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
A.CED.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
A.CED.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
A.CED.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
A.REI.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
A.REI.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
A.REI.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
A.REI.4	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
A.REI.5	Y		Y		Y		N	Y	Y	Y	N	Y	N	Y	Y	N		
A.REI.6	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
A.REI.7	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
A.REI.8	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	N	N	N		
A.REI.9	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N		
A.REI.10	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
A.REI.11	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N		
A.REI.12	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		

APPENDIX E - SBAC Eligible Content Data Workbook: Mathematics

Mathematics																	
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge				
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE
F.IF.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N	
F.IF.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.IF.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N	
F.IF.4	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.IF.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.IF.6	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.IF.7	Y		Y	202	Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.IF.8	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.IF.9	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.BF.1	Y		Y	202	Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.BF.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.BF.3	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.BF.4	Y		Y	202	Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.BF.5	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
F.LE.1	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N	
F.LE.2	Y		Y		Y		N	Y	Y	Y	N	Y	Y	Y	N	N	
F.LE.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.LE.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N	
F.LE.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.TF.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N	
F.TF.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
F.TF.3	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	

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Mathematics																		
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	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
F.TF.4	Y		N	201	Y		Y	Y	Y	Y	N	N	N	Y	N	N		
F.TF.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
F.TF.6	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N		
F.TF.7	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	Y	N		
F.TF.8	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N		
F.TF.9	Y		N	201	Y	301 308	Y	Y	Y	Y	N	N	Y	Y	Y	N		
G.CO.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
G.CO.2	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
G.CO.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
G.CO.4	Y		Y		N	310	N	N	N	N	N	N	N	Y	N	N		
G.CO.5	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
G.CO.6	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
G.CO.7	Y		Y		Y		N	Y	Y	Y	N	Y	N	Y	Y	N		
G.CO.8	Y		Y		Y		Y	Y	Y	Y	N	Y	N	Y	Y	N		
G.CO.9	Y		Y		Y		N	Y	Y	Y	N	Y	N	N	Y	N		
G.CO.10	Y		Y		Y		N	Y	Y	Y	N	Y	N	N	Y	N		
G.CO.11	Y		Y		Y		N	Y	Y	Y	N	Y	N	N	Y	N		
G.CO.12	Y		Y		Y	302	N	Y	Y	Y	N	Y	N	Y	N	N		
G.CO.13	Y		Y		Y	302	N	Y	Y	Y	N	Y	N	Y	N	N		
G.SRT.1	Y		Y		N	302	N	N	N	N	N	N	N	Y	N	N		
G.SRT.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
G.SRT.3	Y		Y		Y		N	Y	Y	Y	N	Y	N	Y	Y	N		
G.SRT.4	Y		Y		Y		N	Y	Y	Y	N	Y	N	N	Y	N		

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Mathematics																	
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge				
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	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE
G.SRT.5	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N	
G.SRT.6	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
G.SRT.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
G.SRT.8	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
G.SRT.9	Y		N	201	Y		N	Y	Y	Y	N	N	N	Y	Y	N	
G.SRT.10	Y		N	201	Y	301 308	Y	Y	Y	Y	N	N	Y	Y	Y	N	
G.SRT.11	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
G.C.1	Y		Y		Y		N	Y	Y	Y	N	Y	N	N	Y	N	
G.C.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
G.C.3	Y		Y		Y		N	Y	Y	Y	N	Y	N	Y	Y	N	
G.C.4	Y		N	201	Y		N	Y	Y	Y	N	N	N	Y	N	N	
G.C.5	Y		Y		Y	308	Y	Y	Y	Y	N	Y	Y	Y	Y	N	
G.GPE.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N	
G.GPE.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
G.GPE.3	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
G.GPE.4	Y		Y		Y		N	Y	Y	Y	N	Y	N	N	Y	N	
G.GPE.5	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	Y	N	
G.GPE.6	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
G.GPE.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
G.GMD.1	Y		Y		Y		N	Y	Y	Y	N	Y	N	Y	Y	N	
G.GMD.2	Y		N	201	Y		N	Y	Y	Y	N	N	N	Y	Y	N	
G.GMD.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
G.GMD.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
G.MG.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	
G.MG.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N	

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Mathematics																		
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	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	CODE
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE	
G.MG.3	Y		Y		Y	315	Y	Y	Y	Y	N	Y	N	Y	Y	Y		
S.ID.1	Y		Y		Y	308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.ID.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.ID.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.ID.4	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.ID.5	Y		Y		Y	308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.ID.6	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.ID.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.ID.8	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.ID.9	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.IC.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
S.IC.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.IC.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.IC.4	Y		Y		Y		Y	Y	Y	Y	N	Y	N	Y	N	N		
S.IC.5	Y		Y		Y		Y	Y	Y	Y	N	Y	N	Y	Y	N		
S.IC.6	Y		Y		Y	315	N	Y	Y	Y	N	Y	N	Y	Y	N		
S.CP.1	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.CP.2	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	N	N	N		
S.CP.3	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.CP.4	Y		Y		Y	301 308	Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.CP.5	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	Y	N		
S.CP.6	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.CP.7	Y		Y		Y		Y	Y	Y	Y	N	Y	Y	Y	N	N		
S.CP.8	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N		

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Mathematics																	
CCS Code	Learnable		Expected		Measurable		Item Type					Eligible	Depth of Knowledge				
	Y or N	CODE	Y or N	CODE	Y or N	CODE	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N	Y or N
	Learnable during school year	Learnable Comment CODE	Expected of all Students	Expected Comment CODE	Measurable via on-demand	Measurable Comment CODE	Selected Response	Extended Constructed Response	Technology Enhanced	Performance Task	Oral Response Required	Eligible	DOK 1	DOK 2	DOK 3	DOK 4	DOK Comment CODE
S.CP.9	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
S.MD.1	Y		N	201	Y	301 308	Y	Y	Y	Y	N	N	Y	Y	N	N	
S.MD.2	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
S.MD.3	Y		N	201	Y	301 308	Y	Y	Y	Y	N	N	Y	Y	Y	N	
S.MD.4	Y		N	201	Y	301 308	Y	Y	Y	Y	N	N	Y	Y	Y	N	
S.MD.5	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	Y	N	
S.MD.6	Y		N	201	Y		Y	Y	Y	Y	N	N	Y	Y	N	N	
S.MD.7	Y		N	201	Y		Y	Y	Y	Y	N	N	N	Y	Y	N	

## APPENDIX F. PRELIMINARY REPORT REVIEW—FEEDBACK AND RESPONSES

### SMARTER Balanced Assessment Consortium Common Core State Standards Analysis: Defining Eligible Content for the Summative Assessment

All Consortium member states and work groups were provided the opportunity to review and comment on a draft version of this report (Feb. 4, 2011 version). The purpose of the review was to solicit comment related to the clarity of the report from States. Three work groups were identified as the primary audience for this report: Test Design, Item Development, and Technology Approach. From these three work groups, feedback was solicited regarding the clarity of the report, as well as the usefulness and meaningfulness of the information presented in the report vis-à-vis the work groups' summative assessment-related tasks.

Below are the comments received from reviewers. First are comments from reviewers describing information that they found clear/useful. Table F-1 lists comments that (a) are addressed in this final report and (b) are beyond the scope of this project and require follow-up by work groups, the Executive Committee, and/or the Consortium's Technical Advisory Committee (TAC).<sup>\*</sup> The comment source is provided, along with the response/action to each comment, and when comments require responses by work groups, the Executive Committee, or the TAC, a recommended follow-up by one or more of these groups is specified.

<sup>\*</sup> Some comments have been addressed in the report, as noted in Table F-1. Comments that require responses beyond the scope of this project/report are included, and recommendations for follow-up with Consortium work groups/committees, the Executive Committee, and/or the TAC are noted, in Table F-1. Cross-work group/committee communication and coordination are encouraged as noted.

#### Comments: Clear/Useful:

1. The limitations pointed out at the bottom of page 1 are helpful.
2. I think Table 27 is a great way to highlight implications for the various work groups. The examples on pages 35 and 36 are quite useful.
3. Especially useful were the statements of what the purposes of the document were NOT intended to be.
4. what a great report – this is a home run in a draft form
5. Pg. 35 – I like the ideas presented here
6. I looked at the draft through the lens of ELA. The purpose of the study was explicitly clear. The details and methodology were explained in straightforward, precise terms that are easily understood. Anyone with knowledge of the contents of the common core should be able to understand the methodology and interpret it to stakeholders. I was impressed by both the level of specificity and the attention paid to addressing the key questions. Key findings were described and key terms were paraphrased and defined as needed. Overall, I found that the document shed light on the work of the SBAC as the consortium determines eligible content for assessments.
7. Purpose: Clear – very useful for defining eligible content for summative assessment. Our impression is that the main purpose behind this project was to look at each of the Common Core State Standards and to analyze if they should be included in a Summative Assessment for the assigned grade level, and how the standard would be best assessed based on item type. This would be very useful knowledge for development of a Test Specifications document, and it does

give some hints as to what item type would be most appropriate for assessing each of the standards. The body of the document provides specific analysis as to which of the general ELA standards would be assessed and how. The appendix provides the tables showing that same information for the specific grade level standards.

8. Overall findings are clear and are useful to give a general sense of the big picture, but the specific implications/uses were even more helpful.
9. Overall this document clarifies how the review of the standards was completed and the process for how decision were reached about which standards would be assessed and how.
10. Intent and Content of Report
  - a. The report fulfills its intent of addressing the range of eligible content for a summative assessment system. The next steps for workgroups will require some heavy lifting as far as detailed designs by standards, but this sets a basis for that work and offers some warranted suggestions (pgs. 35 and 36) for accomplishing this.
  - b. For the most part, I believe the content is accurate. I think the use of Technology Enhanced items and Performance Tasks were slightly “undersold”, but not significantly.
11. The purpose is clearly described with appropriate references to the original application and deliverables statements
12. In general, the presentation of information was clear, although it did take some concentrated reading.
  - a. From mathematics perspective: the document is organized and explained well, so we could use it if working to design test or item specifications.
  - b. From the ELA perspective: the document is well-organized and easy to follow. There are several comment codes that are referred to in various tables in the document, but a quick check of the body of the document and the appendices clarified what these codes were reflecting. One of those comments was “the parameters for assessment may be difficult to define for a component of this standard,” which could use some clarification.
13. The section detailing the reviewer’s definitions of various coding, such as that used to distinguish verbs in the various standards, is very helpful, and should inform future committee work as well as test blueprint and item design in RFP.
14. Overall, I am very pleased to see the focus on multiple types of items.
15. The purpose, key questions, and history sections help clarify the purpose of the study.
16. We appreciate the clarification (under Decision Rules) of the general verbs used in the CC, as well as the examples for mathematics and ELA. The decision to use authored text is contrary to our current assessment criteria for reading, but we are glad that was made clear in this document at this stage of development. It represents a **very thorough** analysis of every standard in terms of its eligibility on a number of dimensions. With regard to the clarity of the report, I find the content very well-organized, lucid and accessible. Overall, I am highly impressed with the thoroughness of these findings and believe that they will provide a solid framework from which assessment items will be developed.
17. The document provides strong guidance for development of formative tools and assessment, particularly with regard to standards that cannot be assessed at full coverage. The Charts with codes clearly connect to the learning targets within specific standards. We believe the considerations and implications are clearly articulated. We really believe it is an impressive draft and find it quite useful to our work.
18. Purpose of the study was clear. The context and information needed to move into the more complex job of defining the eligible content was provided.
19. Math findings are particularly clear
20. The terminology was clear and the report was easily read.

21. Very well-done. It was helpful to have the process outlined in a step-by-step manner.
22. Nice to hear the training was only completed when the analysts had mastered the entire process.
23. Once the process and criteria were defined, the findings were clear.
24. The findings and the way they are reported will support the people working with them. It was helpful that the process for how to assess multiple standards by the use of a performance task was explained.
25. It is good to emphasize that this is not an analysis of the quality of the standards as that could take the group in an entirely different direction.

**Table F-1. Responses to Feedback and Recommended Follow-Up**

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
1.	pp 3-4 – Table 2 – please explain letters in parenthesis in the Grade Standard descriptions for Writing and Language	Tech. WG	This has been addressed in the final report			
2.	<p>pg 6 – Population – if summative assessment is intended for all students, including students from special populations:</p> <p>a. Will items be maintained in a separate item selection pool?</p> <p>b. Will unique items be written for the special population or will general assessment items be modified for presentation (including fewer options)?</p> <p>c. Will lower DOK levels be extended to provide differentiation of cognitive skills measured</p>	Tech. WG	<p>a. Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups: test design; item development; technology approach; accessibility and accommodations.</p> <p>b. Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups: test design; item development; accessibility and accommodations.</p> <p>c. Response to this question is beyond the scope of this project/report. Suggest follow up by</p>	X		
				X		
				X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	for cognitively-impaired students?		consortium's work groups: test design; item development; accessibility and accommodations.			
3.	Pg 6 – Item Types – will extended constructed response items be scored against a rubric, multiple rubrics, weighted rubrics, standard or custom (item-specific) rubrics?	Tech. WG	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups: test design; item development.	X		
4.	Pg 6 – Test Format – computer adaptive assessment – what criteria (attributes) will be the basis for item selection?	Tech. WG	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups: test design; item development; technology approach.	X		
5.	Pg 8 – Measurable via On-Demand tasks – could a delivery module that includes a test administrator using a scoring rubric be incorporated to include tasks that require in-person observation or interaction?	Tech. WG	Response to this question is beyond the scope of this project/report. Suggest additional discussion regarding summative assessment item types and follow up by consortium's work groups: test design; item development; administration. (Related to 10b below)	X		
6.	Pg 8 – Item Type – ...to be completed over a number of days... - what are acceptable parameters that the technology work group needs to consider regarding student re-entry into an extended response or performance task item?	Tech. WG	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups: item development; accessibility and accommodations; administration. (Related to 10e below)	X		
7.	Pg 9 – will the system need to capture oral responses by the student? If yes, how will responses be scored? If no,	Tech. WG	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	will these items be administered and scored with a rubric by the test administrator?		work groups: test design; item development; accessibility and accommodations; technology approach, administration.			
8.	Pg 11 – please clarify the distinction among gridded response, short-answer, open-ended, open-response, and constructed response items	Tech. WG	Response to this question is beyond the scope of this project/report. Follow up is needed by consortium's work groups (e.g., test design; item development; performance tasks; accessibility and accommodations; technology approach; administration). (Related to 25, 39, 72, 88, 89, 128, and 134)	X		
9.	p.21 - 6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others. a. Standard W.x.6 is not eligible for assessment via the proposed item types as this standard does not describe assessable content per se but instead "is related to process rather than outcome" (code 310). b. While this probably does not lend itself to an on-demand summative assessment, it should still be considered for formative assessment or as a part of a performance assessment, and not	Tech. WG	The focus of this study is on eligible content for the consortium's summative assessment. Content considerations for formative assessment should be undertaken by the Formative Processes and Tools/Professional Development Work group.	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	simply dismissed as not accessible.					
10.	<p>Comment codes:</p> <p>a. 301 – does this imply that the item type must be extended response?</p> <p>b. 303-304 see question 5 (i.e., Measurable via On-Demand tasks – could a delivery module that includes a test administrator using a scoring rubric be incorporated to include tasks that require in-person observation or interaction?)</p> <p>c. Does the system need to ensure that all standards are assessed? What are the minimum and maximum parameters for establishing that a standard has been assessed?</p> <p>d. 310 – please confirm – standards with code 310 are not assessable on the summative assessment</p> <p>e. 311 – are these assessable, but need consideration for student re-entry (see # 6-- Item Type – ...to be completed over a number of days... - what are acceptable parameters that the technology work group needs to consider regarding student</p>	Tech. WG	<p>a. This has been addressed in the final report</p> <p>b. Response to this question is beyond the scope of this project/report. Suggest additional discussion regarding summative assessment item types and follow up by consortium's work groups: test design; item development; administration. (Related to #5 above)</p> <p>c. Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups: test design; item development; reporting.</p> <p>d. This has been addressed in the final report</p> <p>e. Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups: item development; accessibility and accommodations; administration. (Related to #6 above)</p>	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	<p>re-entry into an extended response or performance task item?) into the assessment, or are standards coded 311 not assessable on the summative assessment?</p> <p>f. 312 – please clarify this comment code – it states that technology enhancement may be required for all item types, yet Technology Enhanced is an item type. Please make the distinction and provide examples of both a technology enhanced item type, and another item type that is technologically enhanced</p> <p>g. 315 – please provide additional information or an example of how this would be included in a summative assessment (page 43)</p>		<p>f. This has been addressed in the final report</p> <p>g. This has been addressed in the final report.</p> <p>Follow up by the Performance Tasks work group also is suggested.</p>			
11.	<p>It may be premature at this point, but the descriptions of item types in Appendix B didn't answer a few questions I had when reading some of the summary tables and the tables in Appendix E (particularly with respect to the capabilities of technology-enhanced items).</p> <p>a. For example, in Table 7, all 285 ELA standards were measurable via T-E items,</p>	State 1	<p>Response to this question is beyond the scope of this project/report. The authors of this report anticipate that there will be further refinement/definition of each item type (e.g., work of various work groups such as item development).</p> <p>a. We encourage discussion of points such as the one you raise. The coding of</p>	X		
				X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	<p>but performance tasks were more limited. I was wondering if SL 3.2 and SL 3.3 wouldn't also be measurable in the context of performance tasks.</p> <p>b. Perhaps in a later version of the document, the analysts could comment (or code) the specific means by which the standard could be measured. (Although this may be the responsibility of test design work groups.)</p>		<p>the standards is intended to inform discussion. Suggest follow up by consortium's work groups (e.g., test design, item development, performance tasks, technology approach, administration)</p> <p>b. Because we expect that the description/definition of each item type will undergo refinement (e.g., as work groups undertake their various projects/activities), we refrained from evaluating at this time which item type would best measure a given standard. Follow up by item development and test design work groups is recommended.</p>	X		
12.	I was curious about other protocols that might get at the degree to which a standard is measurable using each item type. Did the analysts feel the Yes/No approach limiting? To some extent, the comment codes get around this.	State 1	Because we expect that the description/definition of each item type will undergo refinement (e.g., as work groups undertake their various projects/activities), we refrained evaluating the degree of appropriateness of each item type for measuring a given standard. Suggest follow up by consortium's work groups (e.g., item development, performance tasks, technology approach, administration, accessibility and accommodations)	X		
13.	With regard to the findings, I have one question: Will other experts be invited to	Formative Processes and Tools/Professional Dev WG	The findings will be/have been reviewed by the consortium state members,	X	X	X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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	perform a similar study and offer their findings? I see that a review will occur but it is not clear what exactly that will entail.		including the consortium work groups, Executive Committee members, and members of the consortium's Technical Advisory Committee. It is recommended that interpretation of the findings in terms of implementation (e.g., test design, item specifications, content clustering) is reviewed by experts (e.g., external experts, the TAC, PARCC representatives) as relevant work groups/committees use this study's findings to inform their design/development/implementation activities			
14.	On page 11 under the heading <i>ELA Only, #1</i> . I find this statement to be confusing. <i>"The term "text" is interpreted to refer to an intact piece of authored writing...."</i> Is this reference the use of the term text in the CCSS? If so, it seems much more limited than that intended by the CCSS. Clarification is needed here.	Formative Processes and Tools/Professional Dev WG	This has been addressed in the final report			
15.	On page 38 under <i>What CCSS content can/should be assessed?</i> Bullet 2 indicates that the literacy standards will not be considered eligible. More clarification is needed on this decision if possible. We are receiving a great many mixed messages with regard to this issue.	Formative Processes and Tools/Professional Dev WG	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
16.	On page 2 paragraph 2, "each strand is headed by a strand- a specific set of College and Career Readiness (CCR) Anchor Standards that is identical across all grade levels"- I don't understand what is meant by each strand is headed by a strand.	Formative Processes and Tools/Professional Dev WG	This correction has been made in the report (...a strand-specific set...)			
17.	What grade level are we assessing for ELA? It would seem we would have to do grade 10 or grade 12 because the way the standards are organized by grade bands. That is if we did just grade 11, the expectation doesn't seem clear in the core that all the stuff in the grade 11-12 band needs to be mastered by grade 11. However I can not tell from the report how this is being handled.	Formative Processes and Tools/Professional Dev WG	Response to this issue is beyond the scope of this project/report. Suggest follow up by consortium's work group: test design.	X		
18.	It is not clear what decision has been made about the content of the high school mathematics assessment. I understand that one of the main purposes of the report is to identify which standards are able to be assessed and in which formats. However, there appears to be an implication that all of the high school mathematics standards that have been deemed as "assessable" must be learned by the end of the 11 <sup>th</sup> grade. In the Common Core State Standards document, all of the "non-	Formative Processes and Tools/Professional Dev WG	The purpose of this study/report is to evaluate the eligibility of the content of the CCSS for the consortium's summative assessment. The project's analysts were tasked with analyzing all standards in grades 3-8 and high school for ELA and mathematics (grades 9-10 and 11-12 in ELA and all conceptual categories in mathematics at the high school level). Findings from this study are intended to inform discussions by various consortium groups in terms of specifically which content	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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	<p>plussed" high school standards define the minimum college- and career-ready finish line for all students. However, no where in the Common Core State Standards document is it mandated that these learning expectations be completed by the 11<sup>th</sup> grade. If SBAC is planning to develop an 11<sup>th</sup> grade assessment for high school mathematics, the SBAC states need to come to agreement on which of the high school standards we expect all students to get through by at least the end of 11<sup>th</sup> grade. This is a critical issue that the SBAC states need to dialogue about and come to a decision to inform the test development. The CCSS high school mathematics standards specify the minimum EXIT expectations for all students (i.e., expectations for all students to achieve by the end of their high school careers). However, the report implies that students will be assessed on achieving the finish line by the end of the 11<sup>th</sup> grade, whereas the standards clearly define a minimum finish line for all students by the time they exit high school. Clarity needs to be provided on this issue and the SBAC states need to define what can</p>		<p>is tested and how the content should be tested (e.g., test design, item development work groups). It is expected that work group such as the Test Design work group will address the issues raised.</p>			

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	truly be expected to be mastered by the end of 11 <sup>th</sup> grade.					
19.	We believe there may be typos on chart on page 2 under "Reading Standards: Foundational Skills K-5". Should 1-4 not be Grades K-1, instead of K-2? Should 3-4 not be 2-5, instead of 3-%?	Formative Processes and Tools/Professional Dev WG	This correction has been made in the report.			
20.	Depth of Knowledge definition. Given the type of analysis that was done, it would be helpful to know what verbs were mapped to which DOK for this study.	Performance Tasks WG	Appendix C provides a description of the operational definitions of the DOK levels used in this analysis. Analysts have applied this protocol in other similar studies, and as a result of training for this study, analysts were calibrated.			
21.	The eligible standards in Mathematics and ELA that are designated to be 100% measurable via "technology-enhanced" item types. It would be helpful to know what the working definition of "technology-enhanced" item types is for this study, since they seem to be able to accomplish things that even performance tasks can't do.	Performance Tasks WG	Appendix B presents the item type descriptions used as working definitions for this study's analyses. The authors of this report anticipate that there will be further refinement/definition of each item type (e.g., work of various work groups such as item development and technology approach).	X		
22.	Tables 10 through 22: These tables use abbreviations for item types that are not defined locally. While one can figure out what these mean, for clarity it would be better to define these in the text. While I understand the use of the codes, they	Performance Tasks WG	This has been addressed in the final report			

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	<p>should be identified before the table, not after each table in which the code appears, or else, the actual wording of the code should appear to reduce confusion.</p> <p>These tables also present data in a way that is not parallel to the way the data for the Math Standards is presented. Why isn't the same detail available for both Math and ELA? (for example, for the ELA standards (tables 10-22) the comments by code are given for each standard and grade range, whereas for Mathematics (tables 23-26) do not show this level of detail. Some of the detail is written in a narrative form for Mathematics, but not at the same level as the information that is provided for ELA. (for example, "Eight of the 50 standards received Comment Codes 301 and 308, ..."))</p>					
23.	<p>Comment #1 – <i>Re-evaluate two ineligible standards for consideration as eligible content. Detailed rationale provided below for this re-evaluation.</i></p> <p>The standards listed below were "judged to be more appropriate for classroom assessment" (SBAC, in draft,</p>	Performance Tasks WG	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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	<p>p. 28).  G.SRT.1. Verify experimentally the properties of dilations given by a center and a scale factor:  a. A dilation takes a line not passing through the center of the dilation to a parallel line, and leaves a line passing through the center unchanged.  b. The dilation of a line segment is longer or shorter in the ratio given by the scale factor.</p> <p>8.G.1. Verify experimentally the properties of rotations, reflections, and translations:  a. Lines are taken to lines, and line segments to line segments of the same length.  b. Angles are taken to angles of the same measure.  c, Parallel lines are taken to parallel lines.</p> <p>The two standards above highlight the properties of geometric transformations as applied to one-dimensional objects. If we deem them ineligible, we will limit our coverage of geometric transformations to two-dimensional figures. Looking at standard 8.G.1.(b), the following examples demonstrate that it is assessable given our item types. While these are not polished, final products,</p>					

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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	<p>they should illustrate the point:</p> <ul style="list-style-type: none"> <li>✓ What happens to the measure of a 45 degree angle when it is rotated 120 degrees? Provide a series of steps a person could follow to show what happens. (open-ended)</li> <li>✓ What is the measure of a 45 degree angle after it has undergone a 120 degree rotation? (selected response or grid)</li> <li>✓ Using technology, provide three different examples to show that a rotation does not affect an angle's measure. (technology-enhanced)</li> <li>✓ Create a company logo (hand-drawn or using technology) where the entire drawing is based on a single angle and the following statement "When an angle is rotated, reflected, or translated the resulting angle is the same measure." Develop a presentation that includes a demonstration of how your drawing was developed from a single angle of measure</li> </ul>					

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	_____ and the series of transformations used to create your final product. (Performance task)					
24.	I do not generally disagree with the ratings for DOK with respect to the mathematics standards. Since the purpose of the DOK analysis was not clearly defined, however, I want to be certain that these ranges of cognitive complexity do not prevent the eventual test items from extending to higher levels of complexity than those assigned to the individual standards. Perhaps an elaboration on the purpose and eventual use of these particular ratings would help alleviate any concerns that the mathematics standards are heavily loaded on the 1 & 2 levels.	Performance Tasks WG	The intention of the DOK analysis will be made clearer in the report.  We suggest follow up by consortium's work groups/committees to address the concern regarding higher levels of DOK being assessed (e.g., test design, item development, performance tasks, content specifications)	X		
25.	It would be very helpful to clearly define and highlight the differences between the item types that fall under the "Extended constructed-response" umbrella – "gridded-response, short-answer, open-ended, open-response, or constructed-response" (SBAC, in draft, p. 11)	Performance Tasks WG	We suggest follow up by consortium's work groups (e.g., test design, item development, performance tasks, accessibility and accommodations; technology approach, administration) (Related to 8, 39, 72, 88, 89, 128, and 134)	X		
26.	Correction: Writing Standard #9 begins at grade 4, NOT grade 3. (p. 2)	Performance Tasks WG	This correction has been made			
27.	Question/Clarification: Is there an item type labeled "constructed response"	Performance Tasks WG	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	<p>apart from extended constructed response or technology-enhanced constructed response? That is, are there shorter or less complex constructed response items planned that are not TEs?</p> <p>Note commentary under Test Format: "The selected response and CONSTRUCTED RESPONSE sections of the summative assessment will be administered as a computer-delivered adaptive assessment." Does that statement refer to extended constructed response? Technology-enhanced constructed response? Both? (p. 6)</p>					
28.	Are the on-demand writing prompts part of the adaptive engine? (p. 6)	Performance Tasks WG	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups: test design; item development; accessibility and accommodations; administration; technology approach.	X		
29.	<p>The construction of the ELA Conceptual Task (p.35) trivializes the writing component of the proposed reading/writing task. Writing about content does not in itself guarantee the measurement of writing.</p> <p>Asking students to "present an analysis in well-organized paragraphs," does not</p>	Performance Tasks WG	The examples are intended to illustrate how to navigate and use the information from the analysis in creating a task—consideration of the content standards, comment codes, DOK, etc. vis-à-vis a specified conceptual task. The examples appear to serve their purpose, and we encourage the work groups	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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	<p>mean coverage of W.5.2.or W.5.4. The task implies writing will be measured by “having well-organized paragraphs.” That was not the intent of W.5.4. Asking students to write an analysis does not signal the richness of a-e of W.5.2.</p> <p>W.5.2 and W.5.4 present essential elements in a piece of writing. If the intent is to measure both reading and writing standards, then the entirety of W.5.2 and W.5.2 would need to be signaled in the task (e.g., “write an essay explaining your analysis for your teacher” and adding W.5.5, e.g., “be sure to plan, revise, and edit your essay”).</p> <p>Rather than looking at eligible standards individually, might some standards be better measured if clustered together? W.5.2, W.5.4, and W.5.5 would make an ideal cluster if we are interested in measuring writing meaningfully. The advantage of performance tasks for writing would be the opportunity to provide time for quality revision and editing—which is rarely, if at all possible, on short (e.g., 30-</p>		<p>to use the general process illustrated, as appropriate, for designing assessment tasks (e.g., item development, performance tasks, formative processes and tools/professional development). (Related to 65 and 70)</p>			

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				Work Group(s)	Executive Committee	TAC
	<p>minute) on-demand writing prompts.</p> <p>Similar comments could be made about the reading component of the task. I realize this is only a conceptual task to illustrate how to use eligible content data in task development; however, if we have one opportunity to illustrate a performance task in this document, wouldn't a carefully crafted example that illustrates the potential of a performance task to measure complex thinking across standards be a good idea? How about a sample task that is not the typical write-about-what-you-have-read task?</p>					
30.	<p>Consideration: Please consider changing the wording of comment #309 to read: Statements in this standard inform the complexity of text and selection of content area texts appropriate for this assessment. That wording would be a better fit for ELA Reading standard for all grades (p. 48).</p>	Performance Tasks WG	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
31.	Depth of Knowledge classification: While "use" is a verb that indicates Writing Level 1 in the DOK, some use of punctuation requires more mental processing when sentence structures are more complex (p. 46). Is the Depth of Knowledge classification dependent only on the verb used?	Performance Tasks WG	No, DOK classification is not only dependent on the verb used. This has been addressed in the final report			
32.	Comment #7— Considerations: Does measuring only a portion of a standard sometimes put at risk the fidelity of that standard? Are some standards better assessed in clusters? What role does the item type play in determining whether clusters are appropriate?	Performance Tasks WG	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: test design; item development; content specifications. Also suggest discussion with consortium's TAC.	X		X
33.	Clarification needed: Does "eligible" mean that it will be included or considered for inclusion? For Grades 3-8 Mathematics, all but one standard is eligible. This is an enormous amount of content to include on a summative test	Item Dev WG/state 1	This has been addressed in the final report			
34.	p. 5, first sentence in section "Purpose of the Summative Assessment" Can "full range" be clarified. Does this mean each and every standard will be assessed? Does this mean that all components of a standard need to be assessed? For example, standards that have a measurable code of 302 "At	Item Dev WG/state 1	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	least a portion of this standard is best measured by in-person observation," must those be assessed too?					
35.	<p>p. 6, Item Types, Extended Constructed Response (and subsequent references to "extended constructed response")</p> <p>Terminology Clarification: Suggestion - "Constructed Response" is the more general term. In CT "extended constructed response" is a type of constructed response that requires the student to write a first draft in ELA or solve a multi-step math problem that has more than one possible answer or more than one solution method. "Constructed response" is the general term that includes these plus short answer, grid-in and short answer with an explanation. "Constructed response" is used in the Test Format section below.</p>	Item Dev WG/state 1	This has been addressed in the final report			
36.	<p>p. 7, Learnable within a school year</p> <p>Clarification needed: The content may be learnable within the school year but is it learnable before the 12 week testing window? For mathematics, this means that the entire grade-level content is eligible to be assessed 3 months before the end of the year.</p>	Item Dev WG/state 1	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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37.	p. 8, second sentence under #3 Clarification needed: Does this mean that a standard that has a measurable code of 302 is not measurable via on-demand tasks? None of these in math were rated as not measurable. In these cases, only part of the standard can be assessed. This goes back to my question about "measuring the full range of the CCSS."	Item Dev WG/state 1	This has been addressed in the final report			
38.	p. 11 at top: "analysts developed to decision rules" Typo?	Item Dev WG/state 1	This correction has been made			
39.	p. 11, "Mathematics Only", #1 What is the difference between these three types of constructed responses?	Item Dev WG/state 1	Response to this question is beyond the scope of this project/report. Follow up is needed by consortium's work groups (e.g., test design; item development; performance tasks; accessibility and accommodations; technology approach; administration). (Related to 8, 25, 72, 88, 89, 128, and 134)	X		
40.	p. 39, #4, bullet 3 In appendix E page 6, this standard is indicated as eligible.	Item Dev WG/state 1	This correction has been made			
41.	The purpose of the document was clear and stated at the beginning as expected; however, a few formatting changes would enhance the readers' understanding of the entire document: A statement identifying the intended audience	State 2	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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	Inclusion of a table of contents A clear delineation of sections through more variation in headings of sections and subsections (e.g., font size and style, indentation/centering.					
42.	The Table 2 example of the Grade 5 learning progression in reading establishes the relationship between anchor standards and K-12 standards; perhaps a similar table could be used for mathematics, where the relationship of the CCSS and the CCR anchor standards is not as explicit.	State 2	This has been addressed in the final report			
43.	Throughout the document, codes were used that were either not explained or explained after they had been used in a table/chart: <ul style="list-style-type: none"> <li>• The protocol for coding the ELA standards p. 3 and pp. 17-24 have no explanation. It is a complicating step for the reader to stop and figure this out.</li> <li>• The item types listed on p. 6 and 8-9 should have the abbreviations that are used later in the tables for ELA and mathematics.</li> <li>• The item types on p. 6 should include "oral response," which is listed as an item type in the ELA tables.</li> <li>• "Oral response" should</li> </ul>	State 2	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	<p>be added to Item Types Appendix B.</p> <ul style="list-style-type: none"> <li>On p. 17, paragraph 3, the appendix letter should be included after item types (Appendix B), comment codes (Appendix D), and DoK range (Appendix C). (Note: a table of contents might render this unnecessary.)</li> </ul>					
44.	<p>In Item Types Appendix B, two content questions arose:</p> <ul style="list-style-type: none"> <li>ELA – How does the ECR differ from the WP? ECR appears as an item type for reading standards only and the WP for writing and language standards. Could a clarification be added to the quoted descriptions in Appendix B?</li> <li>Mathematics – items that are labeled TE will need to be assessed with intuitive technology equipped with a particular interface that includes mathematical symbols, as well as the capability for students to create models and graphs. That is not clear in the quoted description.</li> </ul>	State 2	We suggest follow up by consortium's work groups (e.g., test design, item development, performance tasks, accessibility and accommodations; technology approach, administration)	X		
45.	The methodology used was clear, and we recognize that this portion of the work is	State 2	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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	<p>complete. The Coding Protocol process prompted some concern; i.e., that the two analysts per content area did not code the CCSS <i>independently</i> before reaching consensus, rather than coding by a single analyst, with the other reviewing the coding and then reaching consensus.</p> <p>While we question the number of raters used, we appreciate their expertise and wide experience which includes having been classroom teachers.</p>					
46.	<p>One small suggestion: On first reading of the "assessable" criteria, the description might lead to misconception that content has been deemed not eligible because of limitations in our technology (remember that old assessment saw about "Measuring what we value, not valuing what we can measure). Please add clarity to the criteria to make it clear that this is not why some content has been judged as not eligible.</p>	State 2	This has been addressed in the final report			
47.	<p>ELA Findings:  a. Tables 10–22 are organized by "strands within strands," yet the strands do not appear prior to these tables. It would be helpful to have a chart of these</p>	State 2	a. This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	<p>strands within strands similar to the mathematics organization chart in Table 5.</p> <p>b. Perhaps this question is premature, but given that standards at both grades 9-10 and 11-12 have been identified as eligible content for the summative assessment, how does this fit with the idea of a <i>single</i> summative assessment at the HS level in ELA?</p> <p>c. Literacy in History/Social Studies, Science and Other Technical Subjects standards are not mentioned until Appendix A, p. 38. These standards are included as part of the ELA standards, but there is no explanation for the omission. These standards have been widely deemed a major step in increasing literacy in all content areas, but there will be no "teeth" in them if they are not included in the summative assessment. We do not even see them in the document as eligible content to be assessed by performance assessments.</p>		<p>b. Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups: test design; item development; administration</p> <p>c. This has been addressed in the final report</p>	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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48.	<p>Mathematics Findings:</p> <p>a. Heavy emphasis on DoK levels 1 + 2 for all grades and domains.</p> <p>b. Grades 3 – 6 are very light on DoK 3.</p> <p>c. DoK Levels 2-3, 2-4, and 3-3 appear to be heavily weighted toward the domain of geometry.</p> <p>d. There is no explanation of why Mathematical Practices standards were omitted from eligible content, nor is there any mention of an Oral Response item type that could be used to assess a Mathematical Practice standard such as, "Constructing a viable argument defending your solution to a problem."</p> <p>e. No mention of the relationship between the CCR standards for mathematics and the K-12 mathematics standards, as seen in ELA.</p> <p>f. Our math specialists were <u>particularly</u> concerned about the limited emphasis on mathematics practice and modeling, two areas that should advance our instruction in mathematics. Our concern is that schools may only emphasize in</p>	State 2	<p>a-c. Implications for test design and development are beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: test design; item development; content specifications</p> <p>d. This has been addressed in the final report</p> <p>e. This has been addressed in the final report</p> <p>f. This issue is beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: formative processes and tools/professional development; content specifications</p>	X		
				X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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	instruction what we emphasize in assessment, which would be very unfortunate in the case of modeling and math practices.					
49.	p. 6, Item Types, "Performance Tasks"  ...two at EACH OF grades...	Test Design WG/state 2	This correction has been made			
50.	p. 10, Coding Protocol Did the second analyst first code the standards independently? That seems a bit unclear.	Test Design WG/state 2	This has been addressed in the final report			
51.	p. 10, Coding Protocol First mention of a content lead. Perhaps a bit more explanation of their role? Was their training more in-depth or just have different experiences? What differentiates a content lead from a rater. Same with project leads below.	Test Design WG/state 2	This has been addressed in the final report			
52.	p. 14, ELA Findings, Eligibility (following table 6) Breaking down eligibility in this way is a bit confusing. Eligibility = learnable + expected + measurable. The table works well but the description in the text in the paragraph after the table and bulleted list is a bit cumbersome. And then the next section goes on to only discuss eligible standards rather than measurable/eligible. Seems better to just go with discussion of eligible.	Test Design WG/state 2	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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53.	p. 15, in text following Table 7 Is this reference to next section correct? Seems that the discussion of item types by CCR anchor standard comes a section (or 2?) away, after DOK.	Test Design WG/state 2	This has been addressed in the final report			
54.	In the Appendix (Guidelines) page 38, Question 1, the answer regarding Mathematics at the High School level suggests that all six content standards would need to be assessed over a multiple-year period. There is no suggestion as to what the assessment design would then look like- would it be helpful to add some comments to distinguish between an End-of-Course measure and End of Mathematics Pathway summative?	Reporting	The assessment design and refined distinctions between End-of-Course measures and End of Mathematics Pathway summative assessments are beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: test design; item development; content specifications	X		
55.	page 9, DOK is not specified as an eligibility criterion for selection of standards for inclusion in the assessment. My review of the accompanying excel workbook listing the criteria of each CCS suggests there are an abundance of DOK 1 and DOK2 standards, but very few DOK3 and DOK4. If we truly believe that the assessment design must provide evidence of student learning and mastery in the higher DOK levels, should we list as a criterion that there should be a certain	Reporting	An outcome of this study is to provide a description of the CCSS. Responses to the specific issues/questions raised are beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: test design; item development; content specifications, as well as with the consortium's TAC.	X		X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	<p>percentage of DOK 1-2-3-4-rated Standards at each level of the Math assessment and ELA assessment? The discussion on page 17 begins to get at the distribution of DOK items, but needs to be translated into a guideline for numbers or percentage of items at each DOK level and at each grade. Both ELA and Math have the majority of items rated as DOK1, DOK2 and DOK3. The discussion on page 32 helps crystallize both the concern and the challenge to select appropriate item types to address the DOK issue.</p> <p>I would like to make a similar comment about a proposed percentage of the various item types seen as desirable for the summative test design, especially as the assessment design changes from elementary grades to high school grades</p>					
56.	<p>More explanation of the balanced assessment system, including interim/benchmark assessment, formative assessment, and summative assessment is required. On first reading of the document in hand, I cannot see how the summative assessment, which students may take twice during the testing window, which occurs within the last 12</p>	Reporting	<p>Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: test design; reporting; formative processes and tools/professional development; accessibility and accommodations; content specifications</p>	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	weeks of the instructional year (p. 6) can “produce instructionally useful information available throughout the instructional year to help guide and support differentiated instruction.” (p. 5)					
57.	Why, in Appendix A, are only grades 9-10 and 11-12 considered for eligibility on the summative assessment? (see p. 38) [Note: I moved to Appendix A because the methodology section of the document stated that the guiding principles and considerations are presented in the appendix.]	Reporting	Grades 9-10 and 11-12 are the high school ELA grades. For mathematics, all six conceptual categories are evaluated at the high school level. These were determined by (1) the SBAC proposal and (2) discussion with the consortium’s Executive Committee.			
58.	Page 6, Testing Window. “The summative assessment administered within 12 weeks of the end of the instructional year.” Is it necessary to clarify the 12 week time frame? Is the window open for 12 weeks? Is testing to take place sometime within the 12 weeks?	Reporting	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium’s work group: administration	X		
59.	Page 43, Performance Task. Please clarify if there are to be two performance tasks for ELA and two performance tasks for math per grade for a total of four performance tasks per grade. Or, will there be as stated in the document, “...two rigorous performance events for ELA and mathematics.”	Reporting	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium’s work groups: test design; item development; performance tasks	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
60.	<p>The phrase “eligible content” carries with it a lot of misconceptions. Clearly defining what is meant by “eligible” within the purpose section would be helpful. The term in the past has meant for teachers the content that is they will be held accountable for. The math analysis really shows that all the standards are assessable, but the distinction could be in determining what types of items could be used, or if there would be part of the standard that wouldn't be assessed (e.g. comment 308).</p> <p>Distancing “eligibility” from the idea of “what standards are assessed” would be helpful (since all standards should be assessed somehow). Perhaps emphasizing the analysis determines how the standard could be assessed and at a specified depth of knowledge would be better.</p>	Reporting	This has been addressed in the final report			
61.	<p>The use of an “on-demand” task (section 3, p.8) is not clear in context of the item descriptions given earlier on page 6. Which of the items types listed on page 6 would be considered “on-demand”? It is confusing since the use of “on-demand writing prompts” is the only reference to the term, and it seems like an ELA-specific</p>	Reporting	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	term in this context. Either drop the term "on-demand" (and then specify the items types you are referring to in section 3 (p.8)), or clearly define which items in the "item type" on page 6 would be considered "on-demand".					
62.	Better defining the depth of knowledge descriptors would be helpful (p.9). I know it is referenced, but it seems like I shouldn't need to look up the article to figure out what you are referring to in this context. Also, nearly all the math standards were not given a level 4 DOK rating. What would qualify an item as extended thinking then? Perhaps an example, or exemplar of an item would help illustrate these differences.	Reporting	Appendix C provides a description of the operational definitions of the DOK levels used in this analysis. The citation, Webb (2005), is provided to reference the source document from which the description of the DOK levels was excerpted. Examples of items measuring content at DOK 4 is beyond the scope of this project/report. Work by consortium work groups/committees (e.g., item development, performance tasks, content specifications) should yield examples of items that measure content at DOK 4.	X		
63.	Eligibility is better defined on page 14, and would be helpful to include earlier. It seems that the term is referring to the eligibility to the online summative test only. It would be good to clarify this early in the document.	Reporting	This has been addressed in the final report			
64.	It is not clear how DOK levels (table 25, p.30) were determined for standards that demonstrated multiple components (table 26, p.30).	Reporting	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	Items that are 1-1, 2-2, and 3-3 are clear, but how would a 1-2 get coded as a single number? Or a 1-3? Table 26 makes sense to me, but how you get table 25 from the data in table 26 is not clear and seems subjective. How was this process operationalized by the raters?					
65.	Not sure what the purpose of the Examples of use of Data section would be (p.35) for the reader. Is this an appendix type of item? It seems like it is future oriented, which makes it not clear how it relates to what has been done. Why is the table in step 3 blank? Could there be an example of what this may look like?	Reporting	The examples are intended to illustrate how to navigate and use the information from the analysis in creating a task—consideration of the content standards, comment codes, DOK, etc. vis-à-vis a specified conceptual task. The examples appear to serve their purpose, and we encourage the work groups to use the general process illustrated, as appropriate, for designing assessment tasks (e.g., item development, performance tasks, formative processes and tools/professional development). (Related to 29 and 70)	X		
66.	The term “eligibility” needs to be operationalized better in the introduction. Anticipate possible mis-use of such a document to be used by people to figure out what is the minimum they need to teach to get by. Emphasizing that all standards should be assessed in the classroom could help as well as	Reporting	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	emphasizing that process of determining item types and depth of knowledge are also part of the eligibly process.					
67.	Clarify what is meant by "on-demand" task on page 8, and be sure it is consistent with the item type table on page 6.	Reporting	This has been addressed in the final report			
68.	Definitions and examples of DOK descriptors on page 9 would be helpful. Especially what would it take to be a 4 since only one made this rating.	Reporting	Appendix C provides a description of the operational definitions of the DOK levels used in this analysis.			
69.	Clarify how a standard is given a single DOK rating for table 25 (p.30) is determined when they have multiple DOK rating (e.g 1-2, 1-3) found in table 26. That is, it would help to understand how an item would go from table 26 to 25. Without this explanation this process seems very subjective.	Reporting	This has been addressed in the final report			
70.	Include more explanations to the "use of Data section" (p.35). Examples for the table in step 3 may help.	Reporting	The examples are intended to illustrate how to navigate and use the information from the analysis in creating a task—consideration of the content standards, comment codes, DOK, etc. vis-à-vis a specified conceptual task. The examples appear to serve their purpose, and we encourage the work groups to use the general process illustrated, as appropriate, for designing assessment			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
			tasks (e.g., item development, performance tasks, formative processes and tools/professional development). (Related to 29 and 65)			
71.	<p>a. If the goal for interim assessments is to identify the level at which a student is performing successfully, even if that is above or below grade level, then shouldn't we be developing items to reflect standards in K-2 and 11-12? That is not in the plans, mainly because there is not enough funding in the grant. It seems we might want to recommend this development occur, and seek funds elsewhere for that work. (Linda Darling Hammond says there are foundations waiting to help fund various things).</p> <p>b. Related to that, the intent is to only include items that are "available to all students." That is why they are not included STEM items in 11-12. I think it should still be developed at that level if we say this is supposed to give information about college and career readiness. Otherwise the ceiling will be too low.</p>	Reporting	<p>a. Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: test design; item development; formative processes and tools/professional development; accessibility and accommodations; content specifications. Discussion with the consortium's Executive Committee and TAC also is recommended. (Related to 74 and 82)</p> <p>b. Response to this issue is beyond the scope of this project/report. The project's analysts were tasked with analyzing the grades specified in the report for ELA and mathematics. Additionally, the scope of this project/report was limited to the summative assessment—therefore, consideration of content eligibility was consistent with the intent of the summative assessment</p>	X	X	X
				X	X	X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
			<p>which is intended for all students, since the summative assessment is for accountability.</p> <p>Suggest follow up by consortium's work groups/committees: test design; item development; formative processes and tools/professional development; accessibility and accommodations; content specifications.</p> <p>Discussion with the consortium's Executive Committee and TAC also is recommended. (Related to 74 and 82)</p>			
72.	<p>If this work is meant to identify the types of items that would best demonstrate attainment of each standards, I want to be sure that there has been enough thought given to the "best item types." It could be that we default to multiple choice too frequently and that could limit how we think of development of assessment types later.</p>	Reporting	<p>Determination of the "best item type" for each standard is beyond the scope of this study. More/refined definition of the item types is needed.</p> <p>Follow up is needed by consortium's work groups (e.g., test design; item development; performance tasks; accessibility and accommodations; technology approach; administration).</p> <p>(Related to 8, 25, 39, 88, 89, 128, and 134)</p>	X		
73.	<p>I think that "speaking and listening" is going to lend itself best to the classroom performance tasks that are to be part of the assessment, although listening could also be done via computer with headphones. The PARCC consortium is</p>	Reporting	<p>This issue requires follow up by the consortium's work groups/committees: test design; item development; performance tasks; technology approach; accessibility and accommodations; formative processes and tools/professional</p>	X	X	X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	recommending that speaking and listening only be assessed by interim assessments and not included in summative testing, but I can't imagine that USED will allow a major section to be excluded. We have to figure out how to do something for that area in the summative assessment.		development; content specifications. Discussion with the consortium's Executive Committee and TAC also is recommended.			
74.	if there is the intention to go off grade level with the adaptive test, then shouldn't standards that are NOT for all students still be included?	Reporting	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: test design; item development; formative processes and tools/professional development; accessibility and accommodations; content specifications. Discussion with the consortium's Executive Committee and TAC also is recommended. (Related to 71 a and b and 82)	X	X	X
75.	Page 5 mentions differentiated instruction; when I look at the SBAC glossary, this is not defined. It might not be a big issue, but recently I have run into challenges with how this term is used in the field and am wondering if SBAC has come to consensus on a definition for this term.	Reporting	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: formative processes and tools/professional development; accessibility and accommodations; content specifications. Discussion with the consortium's Executive Committee and TAC also is recommended.	X	X	X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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76.	Page 6 discusses that portions of the summative assessment will be administered as a computer-delivered adaptive assessment; how will this work for kids that can't access computer-delivered materials? I am sure accommodations have been considered....should this be addressed here?	Reporting	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups: test design; item development; technology approach; accessibility and accommodations. Discussion with the consortium's Executive Committee and TAC also is recommended.	X	X	X
77.	Beginning on page 17 there are comments codes used in the provided tables (301, 308, 305 and so forth) however the specific meaning of these codes are not provided until after the table has shared the information. It might be more helpful to provide a key or identify the meaning of these codes prior to presenting them in the tables.	Reporting	This has been addressed in the final report			
78.	Page 15 typo, should read- 245 via performance tasks	Reporting	This correction has been made			
79.	Mathematics Findings: not broken down by domain like the ELA findings- should be consistent	Reporting	This has been addressed in the final report			
80.	The Standards for Mathematical Practice are not addressed in any of the materials. I know that they are very difficult to assess, but they are also central to what is considered to be mathematical proficiency. I think this is a serious omission.	Reporting	This will be addressed as appropriate in the final report and/or in the final version of this response document.			

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				Work Group(s)	Executive Committee	TAC
81.	<p>The memo has a flaw when describing project background (red in quote below). The eligible content is not wholly defined in Algebra and Geometry. This statement limits the intent of the standards even though throughout the document there is consistent reference to the six conceptual categories which includes topics beyond algebra and geometry. Referring only to the traditional algebra-geometry sequence stifles efforts in moving toward integrating standards.</p> <p>The eligible content will be defined for ELA and mathematics in grades 3–8 and high school (HS). Regarding HS: for ELA this means grades 9-10 and 11-12; for mathematics, this means Algebra and Geometry -- all six conceptual categories (Note: Modeling is integrated into five of the conceptual categories.”</p>	Reporting	The reference to Algebra and Geometry in the memo that provides context and instructions for the review of the draft report is an artifact of a previous, more limited, reference to mathematics content. The references in the report to the six conceptual categories is correct.			
82.	there needs to be some kind of a plan for K-2 and STEM item development.	Reporting	Response to this question is beyond the scope of this project/report. The project's analysts were tasked with analyzing the grades specified in the report for ELA and mathematics. Suggest follow up by consortium's work groups/committees: test	X	X	X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
			design; item development; formative processes and tools/professional development; accessibility and accommodations; content specifications. Discussion with the consortium's Executive Committee and TAC also is recommended.(Related to 71 a and b and 74)			
83.	For the ELA and Math Findings sections, even if there were NO eligible content for these sections, tables should be included with "N/A" present. It would make it more inclusive.	Item Dev/State 2	This request has been noted; however, the decision was made to streamline the report as much as possible and to not add this table to the report.			
84.	For the Summary of Coding tables (e.g., Table 10), I would like to see one single overall table (in addition to the tables within the discussion). It would make it easier to get a global picture.	Item Dev/State 2	This request has been noted; however, the decision was made to not add this table—there are content and strand differences that would make such a table difficult to interpret and possibly misrepresent information.			
85.	Re: What additional guidance for organizing and using the data and findings should be included in this report's discussion of considerations and implications?  I would appreciate seeing an outline of a global spreadsheet which will allow us to start making decisions about which items and in what quantities will be needed.	Item Dev/State 2	Response to this question is beyond the scope of this project/report. Follow up is needed by consortium's work groups: test design; item development; performance tasks; accessibility and accommodations; technology approach	X		
86.	Re: What questions do I have or decisions do I need	Item Dev/State 2				

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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	<p>to make that could be informed by the outcomes of this study?</p> <p>a. Proportions of item types supported by this analysis</p> <p>b. Are certain item types better ranged for specific DoKs within standards.</p>		<p>a. Response to this question is beyond the scope of this project/report. Follow up is needed by consortium's work groups: test design; item development; performance tasks; accessibility and accommodations; technology approach</p> <p>b. Response to this question is beyond the scope of this project/report. Follow up is needed by consortium's work groups: test design; item development; performance tasks; accessibility and accommodations; technology approach</p>	X		
87.	I know the application only defined extended constructed response. We have discussed recently about also having a short constructed response category. How would that fit into this document? – related to pg. 6, Item Types	Item Dev/State 2	Response to this question is beyond the scope of this project/report. Follow up is needed by consortium's work groups: test design; item development; performance tasks; accessibility and accommodations; technology approach	X		
88.	Related to pg. 8, Item Type – knowing that the analysis was looking at DoK and Item Types across the range of standards, can any insight be provided into what items could tap which levels of DoK for standards?	Item Dev/State 2	More/refined definition of the item types is needed. Follow up is needed by consortium's work groups (e.g., test design; item development; performance tasks; accessibility and accommodations; technology approach;	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
			administration). (Related to 8, 25, 39, 72, 89, 128, and 134)			
89.	Related to pg. 11, Mathematics only point 1 – this interpretation of extended constructed response items is pretty broad. This may answer the question about short constructed response items	Item Dev/State 2	More/refined definition of the item types is needed. Follow up is needed by consortium's work groups (e.g., test design; item development; performance tasks; accessibility and accommodations; technology approach; administration). (Related to 8, 25, 39, 72, 88, 128, and 134)	X		
90.	Pg. 14, bottom of page – was there any pattern (across grade bands) to the standards that were not measurable? I assume yes. If yes, it would be good to note what the pattern was.	Item Dev/State 2	This has been addressed in the final report			
91.	Pg. 19, top paragraph, "since assessing these standards would involve knowing the student's point of view." Technology enhanced items could possibly address this. E.g., items of equal difficulty that address selected points of view. In other words, the student could select a point of view from some options, and then a question tailored to that point of view could be presented.	Item Dev/State 2	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
92.	Pg. 20, Reading Standards: Foundational Skills, grades 3-5 – could you add a table even if N/A fills the grid. Otherwise, this part is hard to register as significant, when it may be more significant than the others.	Item Dev/State 2	This request has been noted; however, the decision was made to streamline the report as much as possible and to not add this table to the report. Additionally, very few standards are not eligible.			
93.	Pg. 22, Range of Writing, could you add a table even if N/A fills the grid. Otherwise, this part is hard to register as significant, when it may be more significant than the others.	Item Dev/State 2	This request has been noted; however, the decision was made to streamline the report as much as possible and to not add this table to the report. Additionally, very few standards are not eligible.			
94.	Pg. 22, Range of Writing – couldn't this be addressed via Performance Task items?	Item Dev/State 2	Discussion of this report's findings is encouraged by work groups (e.g., item development; performance tasks, test design; technology approach; accessibility and accommodations; administration)	X		
95.	Pg. 23, Summary of Speaking and Listening – why can this not be addressed with PT items?	Item Dev/State 2	Discussion of this report's findings is encouraged by work groups (e.g., item development; performance tasks, test design; technology approach; accessibility and accommodations; administration)	X		
96.	Pg. 27, last two paragraphs – why could this not be addressed via Technology Enhanced items?	Item Dev/State 2	Discussion of this report's findings is encouraged by work groups (e.g., item development; performance tasks, test design; technology approach; accessibility and accommodations; administration)	X		

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				Work Group(s)	Executive Committee	TAC
97.	Pg. 29, middle two paragraphs – what about Technology Enhanced Items	Item Dev/State 2	Discussion of this report's findings is encouraged by work groups (e.g., item development; performance tasks, test design; technology approach; accessibility and accommodations; administration)	X		
98.	Pg. 30 – Table 25 – the lack of DoK 4s is very concerning. Because it is so concerning, should we verify this finding with the writers of CCSS. In other words, was this intended, or did someone (i.e., WestEd analysts or the CCSS writers) miss the mark?	Item Dev/State 2	Analysts were experienced with the DOK protocol, and they were trained and calibrated. DOK ratings should be used to inform discussion by work groups/committees as they determine how to best measure the standards with assessment items (e.g., test design, item development, performance tasks, accessibility and accommodations, content specifications)	X		
99.	Pg. 38 – item 1 – the phrasing of this is unclear	Item Dev/State 2	This has been addressed in the final report			
100.	Pg. 38 – note to SBAC EC, need to address how Modeling will be integrated through assessment	Item Dev/State 2	Suggest follow up by consortium's work groups/committees: test design; item development; performance tasks; formative processes and tools/professional development; accessibility and accommodations; technology approach; content specifications. Discussion with the Executive Committee also is recommended.	X	X	
101.	Pg. 39 – item 4, first bullet, should we address this at the high school level as an adaptive test?	Item Dev/State 2	Suggest follow up by consortium's work groups/committees: test design; item development;	X	X	X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
			performance tasks; formative processes and tools/professional development; accessibility and accommodations; technology approach; content specifications. Discussion with the Executive Committee and TAC also is recommended.			
102.	Pg. 39 – item 4, 2nd bullet, add “beyond the length of time allotted for performance tasks”	Item Dev/State 2	This has been addressed in the final report			
103.	Pg. 40 – item C1 2 <sup>nd</sup> bullet – should we specify who the “other experts” were	Item Dev/State 2	This has been addressed in the final report			
104.	Pg. 41 – DoK, this report should justify somewhere why Webb’s DoK was used instead of others	Item Dev/State 2	This has been addressed in the final report			
105.	Pg. 44 – put Math first in this section to follow pattern of the rest of the document	Item Dev/State 2	This has been addressed in the final report			
106.	Pg. 49 – was there an ELA spreadsheet for standards?	Item Dev/State 2	Yes			
107.	Terminology is clear. It might be helpful, however, to list Item Type acronyms (e.g., extended constructed response (ECR) in the <i>original</i> list of items (pp. 8-9) - and in <i>all</i> table headings). The acronyms are used to indicate eligible item types within the tables, but they are never connected to the item type names.	Item Dev/State 3	This has been addressed in the final report			
108.	It might help to have the subdivisions of each section in CAPS (keep them on the left margin). Occasionally things seem to run together	Item Dev/State 3	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	(e.g., p. 9, with an underline, a numbered subdivision, and then a main heading).					
109.	<i>Specific</i> examples are helpful, for example on pp. 3-4 for Language Arts. Could something similar be done for Math? Later, could that same example (s) be used to show listed eligible item types, comments, and DOK range to tie things together – and then show how those findings could be used (see #5 below)?	Item Dev/State 3	This has been addressed in the final report. Additionally, follow up discussions are expected to occur among members of the consortium's work group, such as those involved in content specifications and item development.			
110.	Mathematics: There is a significant number (43) of advanced math standards -- denoted with + -- that are not expected of all students. These standards are not included in the summative assessment. Why are these standards included? Is there another advanced assessment being planned.	Item Dev/State 3	Exclusion of these standards for this analysis for the summative assessment were determined upfront (see Appendix A, Guiding Principles and Considerations). Exclusion from this analysis does not preclude these standards from being addressed by the consortium's other assessments (e.g., formative)			
111.	Table 27 on page 33 of the document lacks clarity. The table shows several columns where notations are made, and the headings of those columns are not explicitly defined. We can infer that "Content Clustering" might mean items would be used to measure more than one standard, but we are not sure if that is the accurate interpretation. A short explanation of that table would help add some clarity.	Item Dev/State 3	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
112.	We did a spot check of a few of Appendix E mathematics entries and agree with the comments. WestEd's classification tends to place more standards as Recall than [our State] Department Education would. For example, in a number of situation [the Department] might call a standard Skill/Concept whereas WestEd denoted it as Recall. This is a matter of consensus, and I don't fundamentally disagree with them. [The Department] would find this classification useful if there was SBAC agreement regarding usage of the Depth of Knowledge terms.	Item Dev/State 3	Analysts were experienced with the DOK protocol, and they were trained and calibrated. DOK ratings should be used to inform discussion by work groups/committees as they determine how to best measure the standards with assessment items (e.g., test design, item development, performance tasks, accessibility and accommodations; content specifications)	X		
113.	We would like to have Appendix E – type document with the standards and eligible content in column 1 (in addition to the codes currently listed). It is awkward to do the cross checking.	Item Dev/State 3	The data work book can be merged with a source table containing the text of each standard. The data workbook also can be sorted to organize the information according to eligibility.			
114.	p. 15 - In the first line under the chart, change the <i>second</i> 285 to 245	Item Dev/State 3	This correction has been made			
115.	p. 24 – The chart at the bottom does <i>not</i> list all eligible item types for the 3 standards, but the comment below the chart says it does.	Item Dev/State 3	This correction has been made			
116.	p. 29 – The last 2 sentences in the last paragraph under <i>Comments</i> don't relate to comments.	Item Dev/State 3	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
117.	The volume of eligible content for each grade level is too much for any one test. The weighting of standards/eligible content in the assessment will be important work. With the amount of eligible content, a system of rotation may be necessary to carefully assess all standards over a period of a few years.	Item Dev/State 3	Suggest follow up by consortium's work groups/committees: test design; item development; performance tasks; formative processes and tools/professional development; accessibility and accommodations; technology approach; content specifications. Discussion with the Executive Committee and TAC also is recommended.	X	X	X
118.	From standards and curriculum staff: We were hoping that with this new assessment could get away from the term "eligible content." We understood all of the standards were to be thought of as "fair game for the common assessment." And while we certainly hope the assessment will NOT attempt to measure them all, is there another phrase that can be used? We always felt denoting "eligible content" screamed "teach only these standards."	Item Dev/State 3	For the purpose of this study/report, the term "eligible content" will be used. Its definition is explained within the context of this project/report, and the intended use of the study's findings also is explained. Suggest follow up by consortium's work groups/committees: test design; formative processes and tools/professional development; accessibility and accommodations; administration; content specifications. Discussion with the Executive Committee and TAC also is recommended.	X	X	X
119.	With the features mentioned, this assessment will require considerable investment in hardware for schools.	Item Dev/State 3	Suggest follow up by consortium's work groups/committees: test design; administration; technology approach. Discussion with the Executive Committee and TAC also is recommended.	X	X	X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
120.	<p>Some questions arise in relation to [State] policies (these may not be appropriate for the requested review) but are represented of local concerns:</p> <ul style="list-style-type: none"> <li>• For the purposes of Essential Skills and graduation requirements, will students be held accountable for grade 9-10 standards, or 11-12?</li> <li>• There is a statement that the testing window would be within 12 weeks of the end of the instructional year. What are the implications there for the testing window as we currently have it in Oregon (October – May)? The high school assessment in ELA specifically refers to the fact that the learning is based on a cumulative process across grades. Does that imply that a different window is provided for high school as opposed to the other grades, which is measuring end of year learning?</li> <li>• There is a reference to the potential requirement for six performance tasks at the high school level, each taking up to one or two periods. Assuming these would be in</li> </ul>	Item Dev/State 3	<p>Suggest follow up by consortium's work groups/committees: test design; item development; performance tasks; formative processes and tools/professional development; accessibility and accommodations; technology approach; content specifications. Discussion with the Executive Committee and TAC also is recommended.</p>	X	X	X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	<p>addition to other elements of testing (selected response, extended constructed response, writing prompt, technology enhanced), exactly how much testing would be required? How will stakeholders respond to what appears to be more time spent on testing?</p> <ul style="list-style-type: none"> <li>• There is an emphasis in ELA on technology enhanced items; in fact, some of the standards require technology enhanced items in order to measure the standard. What are the implications for requiring schools to have available and adequate technology to complete this form of testing?</li> </ul>					
121.	<p>The table on p. 16 is a concern in that a large percentage of the assessment will need to be measured via extended response, performance task, writing and oral response. How will these be scored? What are the ramifications for testing; i.e. how long per student?</p>	Test Design/State 1				

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
122.	<p>Concerns about p. 25 about portions and parameters for assessment - "difficult to define for a component" - will the assessment only be assessing portions of a standard?</p> <p>Related to the above, the comments/coding in Appendix D, p. 48 are disconcerting as to the consistency and strength of the standards; i.e. progression of learning.</p>	Test Design/State 1				
123.	The question that keeps coming from teachers in the state is; "Who is responsible for teaching the history/science literacy standards? Will they be assessed on the reading test or the other content areas?"	Test Design/State 1	Suggest follow up by consortium's work groups/committees: formative processes and tools/professional development; content specifications. Discussion with the Executive Committee and TAC also is recommended.	X	X	X
124.	Page 15 – typo – under chart it should be “245 via performance tasks” not 285.	Test Design/State 1	This correction has been made			
125.	Page 1, Key Question 1 and last paragraph: Shouldn't interim assessments be included here? My understanding is that all interim and summative items will be field tested form one pool. Hence, the assessable content for the summative should be the same as the assessable content for the interim unless there is a plan to include additional item types for the interim assessments.	Test Design/State 3	The scope of this project/report is limited to the summative assessment only. Suggest follow up by consortium's work groups/committees: test design; item development; performance tasks; formative processes and tools/professional development; accessibility and accommodations; technology approach; content specifications.	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
126.	Page 6, paragraph: It might be helpful to explicitly state here that the assessment will not be accessible for students with severe cognitive disabilities. AAs that are aligned to CCSS will need to be developed.	Test Design/State 3	This has been addressed in the final report			
127.	Page 6, Testing Window: How long will it take the average student to complete an assessment for one content area considering that some items are "to be completed over a number of days" (p. 8)? How many computers will be needed by schools (e.g., 1 computer for every 5 students)?	Test Design/State 3	Suggest follow up by consortium's work groups/committees: test design; item development; performance tasks; formative processes and tools/professional development; accessibility and accommodations; administration; technology approach; content specifications. Discussion with the consortium's Executive Committee also is recommended.	X	X	
128.	Page 6, Item Types: It would be helpful to include a definition for each of the listed item types. Appendix B appears to justify the inclusion of the various types of items, but does not include a description of each item type.	Test Design/State 3	The descriptions provided in Appendix B are the item type definitions available by the analysts for this study/report. More/refined definition of the item types is needed. Follow up is needed by consortium's work groups (e.g., test design; item development; performance tasks; accessibility and accommodations; technology approach; administration). (Related to 8, 25, 39, 88, 89, and 134)	X		
129.	Page 6, Test Format: I do not understand how it is possible to include all the item types listed, if the	Test Design/State 3	Suggest follow up by consortium's work groups/committees: test design; item development;	X	X	X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	assessment is to be adaptive. Will performance tasks, extended CR items, and writing be scored by the computer? Are only the MC and technology enhanced items administered adaptively? (Also see p. 8 "to be completed over a number of days")		performance tasks; formative processes and tools/professional development; accessibility and accommodations; administration; technology approach; content specifications. Discussion with the consortium's Executive Committee and TAC also is recommended.			
130.	Page 7, Learnable within the School Year, last bullet: If N, then it should be indicated by what grade level the content should be learned and assessed.	Test Design/State 3	Response to this question is beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: formative processes and tools/professional development; content specifications	X		
131.	Page 8, number 3: "On-Demand-Task" should be defined.	Test Design/State 3	This has been addressed in the final report			
132.	Page 9, Speaking and Listening: Please provide a rationale for excluding MC items and performance tasks.	Test Design/State 3	This has been addressed in the final report			
133.	Page 9, DOK: "...analysts indicated all applicable DOK levels to indicate the full range of DOK." -- Isn't it customary to indicate the highest level only? It should be understood that standards can be assessed at levels at and below the indicated level (e.g., if DOK = 2, one could assess at DOK 1 and DOK 2; if DOK = 3, one could assess at DOK 1, DOK2, and DOK 3). I think it would be beneficial to	Test Design/State 3	It is not always the case that a higher level DOK rating (e.g., 3) automatically subsumes all lower DOK levels (both 1 and 2). Therefore, each applicable DOK level was noted for a given standard. Determination of the "target DOK" and the DOK level at which the standard is expected to be generally taught is beyond the scope of this project/report. Suggest follow up by	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	include the target DOK level for the standard, meaning the DOK level at which the standard is expected to be generally taught.		consortium's work groups/committees: test design; item development; performance tasks; accessibility and accommodations; formative processes and tools/professional development; content specifications.			
134.	Page 11, Mathematics Only, 1: It is necessary to have operational definitions for all the item types mentioned in this document. When one reviews the literature, it becomes immediately evident that there isn't a common definition of open-response, extended constructed response, short answer or constructed response, etc. How does one type differ from the other?	Test Design/State 3	More/refined definition of the item types is needed. Follow up is needed by consortium's work groups (e.g., test design; item development; performance tasks; accessibility and accommodations; technology approach; administration). (Related to 8, 25, 39, 88, 89, and 128)	X		
135.	Page 14 and Page 26: It would be useful to include rationales/justifications/explanations for those standards that were judged to be non-measurable.	Test Design/State 3	This has been addressed in the final report			
136.	Page 15 and 28: Please explain what "efficiently" means in the sentence: "... which could be most efficiently used to assess ..."	Test Design/State 3	This has been addressed in the final report			
137.	Page 15, Table 7: Include ELA in the title -- "...Eligible ELA Standards"	Test Design/State 3	This has been addressed in the final report			
138.	Page 15, Response Type: It would be useful to provide the rationales for the judgments.	Test Design/State 3	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
139.	Page 16, Table 8: It would be more useful to construct a table listing the "expected to be taught" DOK level for the standards with the corresponding percentages.	Test Design/State 3	Determination of "expected to be taught" DOK is beyond the scope of this project/report. Suggest follow up by consortium's work groups/committees: test design; item development; performance tasks; accessibility and accommodations; formative processes and tools/professional development; content specifications.	X		
140.	<p>a. Page 17, Paragraphs 2: The description here about how DOK levels were assigned is different from the process described on page 9 ("Because some standards describe skills at multiple levels of complexity (e.g., when there are multiple skills in a standard that could be applied at different levels of complexity), analysts indicated <b>all applicable DOK levels</b> to indicate the full range of DOK").</p> <p>b. General comment: It does not appear to be realistic to include a large number of DOK 4 items on a summative assessment. Actually, we should probably discuss whether DOK 4 items are eligible to be assessed on the on-demand summative assessment.</p>	Test Design/State 3	<p>a. This has been addressed in the final report</p> <p>b. Suggest follow up by consortium's work groups/committees: test design; item development; performance tasks; accessibility and accommodations; formative processes and tools/professional development; content specifications.</p>		X	

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
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141.	Page 17, Table 10: Codes used for eligible items have not been introduced (SR = Selected Response, etc.).	Test Design/State 3	This has been addressed in the final report			
142.	Page 31, paragraph 3: The concept of "...not measureable..." versus "...difficult to test..." should not be treated as synonymous. If something is "difficult," it is still doable.	Test Design/State 3	This has been addressed in the final report			
143.	I don't find the tables describing whether each standard is measureable by various item types useful. It would be more useful to demonstrate that using the various item types for each standard would provide valuable information over and above the information that can be provided by multiple choice items. For example, the question shouldn't be whether a standard is measureable by constructed response items. The question should be whether the inclusion of constructed response items for the standard would result in obtaining information over and above the information that is provided by the multiple choice items. One must keep in mind that multiple-choice items can be designed to measure understanding and reasoning skills.	Test Design/State 3	The information about various item types is intended to inform discussion by various consortium work groups/committees. Determination of which item(s) would yield the most meaningful information vis-à-vis the purpose of the assessment is beyond the scope of this project/report. We encourage the work groups; committees (e.g., test design; item development, performance tasks, formative processes and tools/professional development; administration; reporting; content specifications) to use the data (examples of how to navigate the data tables are provided in final section of the report) to address issues such as the one raised.	X		
144.	Page 34, last paragraph: Committees of state curriculum and assessment specialists should be	Test Design/State 3	Further clarification of the intention of this subsection has been included in the final report.	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	convened to confirm the conclusions drawn by WestEd.		This report provides a description of the standards—the intention of the information provided in the report is to inform discussion; it is not to set firm parameters on how the standards are to be measured. Therefore, it is not recommended that the conclusions presented in the report be confirmed/refuted; rather, the recommendation is to use the descriptions in the report (e.g., DOK levels, item types, measurability) to systematically think through what and how content should be assessed within the specific context/purpose of the summative assessment.			
145.	Page 38, second to the last bullet: "Since the SBAC assessment intends to allow an item to assess multiple standards ..." "Item" needs to be defined in this context. I'm assuming that the reference here is to writing prompt, performance task, or extended response item, but not MC items.	Test Design/State 3	The use of "item" for the purposes of the study's guiding principles is used in its broadest terms. The work groups, particularly the item development work group, will need to discuss and define what is intended by "item" in this context.			
146.	Why print mathematics in lower case when Algebra and Geometry are in upper case; the same goes for High School.	State 4	This is a style issue			
147.	The second paragraph repeats eligible content for Summative Assessment (this should be explained in the first paragraph).	State 4	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
148.	It is clear that the purpose of the study was to analyze standards, determine DOK ranges within the standards, types of items that would be suitable for assessment of specific standards, criteria to determine eligibility and eligibility of items for assessment. However, was the intent of the report to inform us of the process? or to initiate discussion?	State 5	The intent of the report is to initiate/inform discussion. Clarification has been provided in the final report			
149.	Why are oral response items (page 15) classified as measurable with on-demand but OR not listed as an item type? OR discussed in several places. Needs clarity.	State 5	This has been addressed in the final report			
150.	Criteria were clear. Protocol—How many people were actually involved? Were those listed table leaders, reviewers, or all inclusive? Implications?	State 5	This has been addressed in the final report			
151.	The charts are clear, but even with the Appendix D, references to the codes took some time. What are the intended uses of the DOK ranges—how will alignment be determined?	State 5	This has been addressed in the final report			
152.	Pg 11- first line: delete "to"	State 5	This correction has been made			
153.	Pg 26—first line of 2 <sup>nd</sup> paragraph: spacing/capitalization	State 5	This has been addressed in the final report			
154.	It would have been nice to know the specific "eligible content" standards that will be included, and the specific	State 6	Response to this issue is beyond the scope of this project/report. Suggest follow up by	X		

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	content that will be excluded from the development process.		consortium's work groups/committees: test design; item development; performance tasks; administration; accessibility and accommodations; technology approach; formative processes and tools/professional development; content specifications			
155.	given that multiple item types are being developed, it seems difficult to me that there are some standards that cannot be assessed using one of the proposed item types, although I suppose there are some that would require too much time to do, or too much time to score, thereby making an item cost-restrictive.	State 6	Readers of this report should refer to the criteria used for determining how item type was assigned to each standards (in the report's Methodology section). Additionally, there should be follow up by consortium's work groups: test design; item development; performance tasks; administration; accessibility and accommodations; technology approach; formative processes and tools/professional development	X		
156.	for states that want to augment the tests with their own standards (I think up to 15% is allowed?), what is the mechanism for that to be done, and who would be responsible for submitting such items?	State 6	Response to this issue is beyond the scope of this project/report. Suggest follow up by consortium's work groups: test design; item development; performance tasks; administration; accessibility and accommodations; technology approach; formative processes and tools/professional development. Discussion	X	X	X

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
			with the consortium's Executive Committee and TAC is recommended			
157.	On page 16, it might be good to include a description of the DOK levels below Table 9-like on page 35 for the comment codes.	State 7	This has been addressed in the final report			
158.	On p 7, need to define what you mean by "learnable" within a school year....sufficient time for the average student to reasonably learn this content within a school year or course?" Make sure to add "course" in all such places as we consider courses and not school year as the unit of analysis in HS.	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
159.	Similarly, p 8, you might want to provide more information about what "expected" means .... Is this content essential? Core? Critical? Valued?	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
160.	Recommended global change: I would watch references to "coded" or "codings" throughout report.... I would use "rated" or "ratings" instead so it is clear this was a judgment call. Eg, p 7, coded is used twice in section Study Criteria, also p 10 (codings and Coding Protocol).	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
161.	Pg 8-9. Readers may not be clear on difference among item types....need to refer them here to Appendix B. A couple of your decision rules provide some clarification, but readers will expect a link	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	to this information when the item types are first presented.					
162.	Rationale for "standardized" comments is needed to ensure transparency....we don't want the reader to think, for example, that we were trying to steer findings or otherwise influence raters...need to explain both in this section and on p. 33 (Implications)	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
163.	May want to make it clear from the outset that all eligibility criteria are weighted equally. Similarly, you do get close to saying that this is a conjunctive model (not compensatory), but you will want to reinforce this as, like AYP, it has implications for findings (i.e, it is all or nothing; one "no" and you are out)	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
164.	Per comment above, need to reinforce that this is a conjunctive, not compensatory, model (maybe on p. 14, with Overall Findings). Then you need to stick to this rule in your findings...on p 14 bottom you introduce the notion of measurable/eligible....don't they have to meet all 3 criteria to be considered eligible?	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
165.	P. 15 under Item Type, second line: add effectively..."which could be most <i>effectively and</i> efficiently used	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
166.	Top of pg 17, need table reference. Ie, "Overall, as shown in Table 10(?), the results for eligible item types...."	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
167.	2 <sup>nd</sup> paragraph on p 17 goes beyond findings, belongs in implications	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
168.	See note above about rationale for standardized comments, need to reinforce here	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
169.	P35: need some sort of introduction under Examples of Use of Data. Also recommend changing to Examples of Effective and/or Appropriate Uses of Data. The value of this section is unclear to me as is. Are these scenarios?	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
170.	One last step that might be really helpful is if to look more closely at the characteristics of the ineligible content in each subject area to see if you can draw any generalizations. SBAC leaders and developers will need to pay attention to such generalizations as they will need to find strategies for measuring that content with their other assessments.	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
171.	References to the focus on the summative assessment are consistent throughout report with the exception of first paragraph on p. 1 ("various assessments")....recommend changing that text to	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	"summative assessments at each grade" or something like that so focus remains clear.					
172.	P.1 Parenthetical statement under Purpose of Eligible Content Project needs to be removed or clarified, does not fit.	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
173.	In some cases I found the wording in your email slightly clearer than in the report itself—eg, grades/courses for math were clearer in email than on p.1 under Purpose of Eligible Content Project.	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
174.	Headings sometimes too specific, not inclusive of all content that follows. For example, on p. 1, a better heading would be "Focus for this Study" rather than Key Questions. On p 5, a better heading might be "Purpose of SBAC Assessment System." Sure seem to be a lot of headings in this report, with just a few sentences under each.	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
175.	Key question 1 on p.1: need to specify what you mean by "eligible" .... Clearer version might be "Using specific criteria for 'eligibility', which CCSS can be appropriately measured by the SBAC summative assessment at each grade?" Then refer reader to Methodology (p 7, 9) or Appendix A (p 40) where you define your criteria. Eligibility is a judgment call that can vary,	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			

	Reviewer Comment	Comment Source	Action/Response from Report's Authors	Recommended Follow-Up		
				Work Group(s)	Executive Committee	TAC
	depending on the criteria used.					
176.	Table 2 on p 2 does not add value, Table 1 is sufficient. That level of information may have been useful in an internal protocol for analysts but not needed in this report. Similarly, I would remove the domain codes in Tables 3, 4, & 5...these fit in an internal protocol, not final report.	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			
177.	Value of naming and providing long description of analysts in body of report is questionable. You can include resumes as appendix if SBAC requested information about qualifications of analysts.	PMP member involved in SBAC proposal and research activities	Guidance provided to the authors of the report by those commissioning the report was to include a description of the analysts because of concern raised about their backgrounds/qualifications			
178.	Global concern: be consistent throughout report. Use "ineligible" or "not eligible" consistently. I prefer ineligible. (e.g., top of p. 17)	PMP member involved in SBAC proposal and research activities	This has been addressed in the final report			

## APPENDIX G. CONSIDERATIONS FOR NEXT STEPS—SUGGESTIONS BASED ON COMMENTS FROM THE CONSORTIUM’S TECHNICAL ADVISORY COMMITTEE

The following suggestions are based on selected comments from members of the Consortium’s Technical Advisory Committee. These suggestions are intended to generate and/or guide further discussion of this study’s data among Consortium work groups and committees (e.g., Test Design, Item Development, and Accessibility and Accommodations Work Groups, content specifications committee).

Note: Other comments from Technical Advisory Committee members that are not presented here were addressed, as possible and appropriate, in the text of the report.

### **A Validity Framework for Test Design and Item Development that Ensures Appropriate Access to All Students**

As the Consortium moves forward with its summative test and item design and development, it is critical that it consider the following:

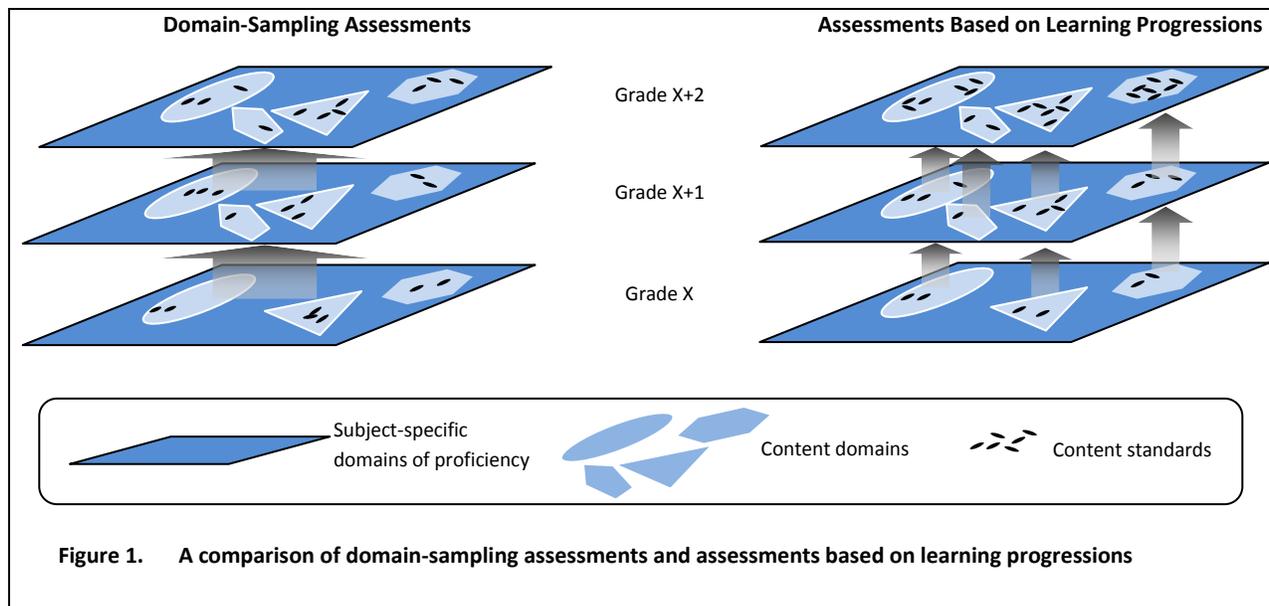
1. Specify in greater detail what the students are to learn.
2. Specify in greater detail the claims to be made about the students in terms of constructs and degrees of expertise, and then design the assessments to provide that type of evidence.

Doing so will help to establish critical cognitive models for the assessed domains (i.e., ELA, mathematics) that will inform the subsequent development of an assessment framework and theory of action that can guide the development of the summative assessment and its items (B. Gong, personal communication, February 21, 2011; Mislevy, Almond, & Lukas, 2003; Mislevy & Haertel, 2006).

While considering what students are to learn and the claims to be made about students from the results of the summative assessment, it is essential that the characteristics of the students be understood and considered—that is, the characteristics of *all* students who will be administered the summative assessment, including English learner (EL) students and students with disabilities (SWDs). These students’ capacities as well as their challenges must be considered upfront and throughout the test and item design and development processes. EL students and SWDs have characteristics (e.g., sensory, cognitive, physical, linguistic, socio-cultural) that require certain supports (via accessibility strategies and/or accommodations) that interact with assessment content, item formats, and administration conditions, for example. Therefore, in order to best ensure the development of a summative assessment that yields valid interpretations and appropriate consequences, design and development discussions must always consider the students.

## The Domain-Sampling Approach and Implications for Test Design and Item Development

The figure below contrasts two fundamentally different ways of designing an assessment: domain-sampling and learning progression.



(Briggs, 2010)

Using the data provided by this study, Consortium work groups can consider the following three activities that relate to the domain-sampling approach for summative assessment design. Each activity is an increasingly sophisticated alternative to domain sampling.

1. *Organize eligible content by “domain clusters.”*

Considering the characteristics (e.g., DOK) of related standards (e.g., comment codes 305 and 306), determine reasonable domain clusters (the shapes that contain the standards) and then, as a first step, ask “What sorts of items, and how many, would we need to create in order to elicit the kind of information that would help us decide if a student was proficient or had mastered the content in the domain cluster?” A domain cluster approach, rather than a standard-by-standard approach, to designing the assessment would lend greater coherence to the task of developing an item framework.

2. *Follow domain clusters over grades.*

An alternative to #1 is to follow domain clusters that appear in successive grades (e.g., see Table 27), Sample Set of College and Career Readiness Anchor Standards Across Grade Levels), and then consider item development in terms of the information that would need to be elicited to best determine “proficiency” in this domain in grade X versus grade X+1. Some educators may consider this a learning progression; however, it only lays out a scope and sequence of clustered standards without explicating any kind of underlying cognitive model. Nonetheless, this approach represents an improvement over #1 in that items are being developed with some general design or theory for how mastery is changing over time.

3. *Merge related domain clusters across and over grades; combine with process skills.*

This alternative is the most demanding approach of the three. Fundamental to this approach are that (1) the CCSS are viewed as a starting point for item development; (2) there are many different ways that items can be conceptualized such that they measure fewer big things (e.g., knowledge, skills, abilities); and (3) items should lend themselves to greater accuracy of measurement. Applying this approach to test and item design, for example, domain clusters that are considered separately in an earlier grade could be better merged at later grades.