

# Oregon Department of Education 2008–2009

# **Technical Report**

Oregon's Statewide Assessment System

Standard Setting Volume 3

Last updated on July 18, 2008



Oregon's Statewide Assessment System Technical Report: Volume 3, Standard Setting

Last updated on July 18, 2008.

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Volume 1: 2007–2008 Annual Report Volume 2: Test Development Volume 3: Standard Setting Volume 4: Reliability and Validity Volume 5: Test Administration Volume 6: Score Interpretation Guide Volume 7: Alternate Assessment, Program Description Volume 8: Alternate Assessment, 2005-06 Statistical Summary

All volumes can be found at http://www.ode.state.or.us/search/page/?id=787.

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#### **1. OVERVIEW**

Oregon's Statewide Assessment System provides instructionally useful information to educators about student mastery of the knowledge and skills described by the content standards. The content standards are benchmarked against national standards and were, designed with stakeholder involvement, to be rigorous, coherent, and demanding. In 1996 a panel of national experts reviewed Oregon's content and performance standards; they concluded that the standards were rigorous and powerful tools for holding students accountable for their learning. Since 1997, *Education Week* has consistently awarded Oregon high marks for its standards and assessment system.

A major effort by the Oregon Department of Education resulted in the establishment of content standards that serve as the goal structure for the state assessments. The sections below provide a detailed description of the content standards development process.

The OAKS is designed to measure the grade-specific content described in the standards and is intended to serve the following goals:

- Provide instructionally useful evaluation of individual student progress toward mastery of the academic content standards;
- Guide instructional program improvement;
- Ensure that the state is progressing toward the state and federal goals for high standards for all; and
- Inform the public.

All tests are developed to be representative and valid measures of the knowledge required by Oregon's Academic Content Standards; to facilitate accessibility for all students, the tests are designed according to the principles of universal design.

Expectations for teaching and learning are organized into the following Curriculum Goals, Grade-level Standards, and Foundations:

- 1. Common Curriculum Goals (CCG) that describe the knowledge and skills expected of all students as a result of their educational experience (OAR 581-022-0102)
- 2. Grade-level Standards that describe what students should know and be able to do at grades 3 through High School
- 3. K–2 Grade-level Foundations that describe one way curriculum might be organized to help students prepare to meet the third grade standards

#### 2. OVERVIEW OF OREGON'S ASSESSMENT OF KNOWLEDGE AND SKILLS (OAKS)

Items on the Knowledge and Skills Tests and Performance Assessments are written to represent the state's content standards, and tests are composed of items such that the emphasis of the tests matches the emphasis of the content standards. Performance standards define what students must do to meet or exceed Oregon's Academic Content Standards.

#### 2.1 Statewide Assessment System

The Oregon Statewide Assessment System consists of the Knowledge and Skills Assessments (KSAs), which measure student performance in Math, Reading/Literature, Science, and Social Science via multiple-choice tests aligned to grade-level content standards, and the Writing Performance Assessment which measures student performance in writing via open-ended essay questions.

The KSAs are administered via OAKS Online, a progressive, computer-based system. Students unable to take standard administrations of OAKS Online have other options—side-by-side tests in Spanish and Russian for English Language Learners, Extended Assessments for students with IEP plans, and Braille or Large Print paper-pencil Assessments for students with visual impairments. The tests are used for NCLB accountability and measure student progress. Students are provided the opportunity to demonstrate mastery of the state's content standards.

Students in grades 3–8 and 10 take the state Reading/Literature and Math KSAs, and students in grades 5, 8, and 10 take the state Science and Social Sciences KSAs. Students in grades 4, 7, and 10 are tested in Writing, using the Performance Assessment. All are state-developed, criterion-referenced tests designed to align to the content standards and measure what students should know and be able to do in each subject and at each grade level.

Table 1 summarizes the available state tests.

#### Table 1.

#### Summary of Tests and Testing Options

	Testing format			
Subject Tests	TESA	Paper and pencil	Language(s) tested	Grade levels tested
Reading/Literature KSA	$\checkmark$	$\checkmark$	English	3-8, 10
Spanish Reading/Literature KSA (Aprenda)		✓	Spanish	3
Mathematics KSA	$\checkmark$	$\checkmark$	English Spanish/English Russian/English	3–8, 10
Science KSA	$\checkmark$	√ √ √	English Spanish/English Russian/English	5, 8, 10
Social Sciences KSA	$\checkmark$		English Spanish/English	5, 8, 10
Writing PA	$\checkmark$	√ √	English Spanish/English	4, 7, 10
English Language Proficiency	Web-based, On	, not OAKS line	English	K–12
Extended Assessment, Reading		$\checkmark$	English	3-8, 10
Extended Assessment, Math		$\checkmark$	English	3-8, 10
Extended Assessment, Writing		$\checkmark$	English	4, 7, 10
Extended Assessment, Science		$\checkmark$	English	5, 8, 10

KSA = Knowledge and Skills Assessment, PA = Performance Assessment.

All of the tests and testing options are described below. Additional information describing test development and administration can be found in *Volume 2: Test Development* and *Volume 5: Test Administration*. Information about the English Language Proficiency Exam is provided in a separate technical report. All of the technical reports can be downloaded from the Oregon Department of Education website at <u>http://www.ode.state.or.us/search/page/?id=787</u>.

#### 2.2 Academic Content Standards

All of the state tests are designed to measure the grade-level expectations for what students should know and be able to do as described in Oregon's Academic Content Standards.

In 1996, a panel of national experts reviewed Oregon's content and performance standards. The panel reported that the standards were rigorous and highlighted the state's assessment system as a powerful tool to hold students accountable for their learning. Since 1997, *Education Week*, a national

education newspaper, has conducted an annual comprehensive review of public education in all 50 states and awarded Oregon high marks for its standards and assessment system each year.

Table 2 provides the dates of most recent adoption and anticipated revision by the State Board of Education for the content standards in each content area.

Dates of Adoption for Academic Content Standards

Content area	Most recent adoption date	Anticipated revision date
English language arts	K–3, June 2002 4–8 and High School, January 2003	2012
	3-8, March 2007	
Mathematics	High School, April 2002	High School, 2009
Science	April 2001	2009
Social sciences	April 2001	2010
English language proficiency	June 2004	2013

Oregon's Academic Content Standards are available on the Web site via the state's Searchable Standards Tool that allows you to locate, view, and export standards by subject, grade level (benchmark), and/or strand (subtopic or Score Reporting Category, [SRC]) at <a href="http://www.ode.state.or.us/teachlearn/real/standards/">http://www.ode.state.or.us/teachlearn/real/standards/</a>

#### 2.3 Academic Achievement Standards

Performance standards were originally set on September 19, 1996. The Oregon State Board of Education adopted the performance standards for grades 3, 5, 8, and 10 in Reading/Literature and Mathematics. Science performance standards for grades 5, 8, and 10 were adopted on October 20, 1999.

Oregon reviewed its performance levels for all grades in the content areas of Math, Reading/Literature, and Science in 2006–07. The State Board of Education reviewed the recommended achievement standards at its meeting January 18 and 19, 2007, and received regular reports on the feedback from the field review and public input prior to adopting the standards in March 2007. Following adoption by the Board, these performance levels were applied to all tests administered during the 2006–2007 school year.

The assessments use four levels of achievement – "Exceeds," "Meets," "Nearly Meets," and "Does Not Yet Meet." The grade and content specific descriptors for each level are provided in Appendix A.

#### 3. STANDARD SETTING

Standard setting was done separately for Math, Reading/Literature, and Science; the same process was followed across all subjects at grades 3, 5, 8, and high school for Reading/Literature and Mathematics; grades 5, 8, and high school for Science.

Achievement standards were reestablished in 2006-07 for all subjects following the schedule below.

Table 3.	
Summary of Standard Setting Panel Meetings, December 2006	

	Grade (spans)	Number of panelists	Dates
Reading/Literature	3, 5, 8,and 10	78	December 11-13, 2006
Math	3, 5, 8, and 10	76	December 11-13, 2006
Science	5, 8,and 10	56	December 11-13, 2006

#### 3.1 Goals

The goals of the standard-setting procedure were as follows:

- Establish what students should know and be able to do in terms of the Oregon Academic Content Standards and as measured by the state assessments at each grade, in each subject, and at the "Does Not Yet Meet," "Nearly Meets," "Meets," and "Exceeds" levels.
- Consider impact data describing the implications of proposed cut scores in making judgments about item difficulty and the placement of the bookmarks.
- Consider and assimilate public opinion regarding the appropriateness and feasibility of the standards.
- Provide recommendations to the Oregon State Board of Education on the appropriate placement of the performance levels for each test.

To meet these goals, Oregon stakeholders and educators reviewed each of the tests and recommended cut scores for each of the performance standards. The panel used student impact data, research, and stakeholder input in determining the placement of each cut score.

#### 3.2 Panel Recruitment and Composition

The Department solicited involvement from all levels of the education system and from the community. Over 550 individuals expressed interest in participating. From these, the Department selected 278 to represent the needs and demographics of Oregon students, including geographic region, district size, gender, race/ethnicity, and role in education or the community.

Each panel consisted of 16-20 members organized in 3 groups (tables), including teachers, curriculum specialists, administrators, students, community members, and higher education faculty. Educators set standards in the grade/subject in which they had expertise and the most experience in identifying and determining proficiency. Parents and community/business representatives participated fully with educators on the panels. Participants received reimbursement for travel expenses, and districts received a stipend to cover substitute teacher costs for panelists.

Appendix B describes panel composition for each subject and grade span.

#### 3.3 Panel Training

Panelists received training to help them understand the content standards and statewide assessment system. Content standards and the test design were explained to and reviewed by each of the panel members so that they were thoroughly familiar with the testing experience of students.

#### Training

Following the presentation by the ODE, Ricardo Mercado, a member of the CTB Standard Setting Team provided an overview of the purpose of standard setting and described the implementation of the BSSP. Participants were introduced to key concepts and key materials of the BSSP, including the Ordered Item Booklet (OIB) and the item map. During this training, it was explained that table leaders would facilitate discussion at their tables and help participants complete tasks in a timely manner. Participants were given a synopsis of each day's activities. Participants engaged in a brief, mock standard setting using released Grade 4 Mathematics items from the National Assessment of Educational Progress (NAEP). During this mock standard setting, participants reviewed and used the tools of the BSSP, including a sample OIB and item map. Following the mock standard setting, participants were directed to their preassigned, breakout rooms and tables. Each grade and content area was in a separate breakout area.

#### **Target Student Descriptors**

Prior to the standard setting, the ODE developed achievement-level descriptors for the average student within each of the following achievement levels: Does Not Yet Meet, Nearly Meets, Meets, and Exceeds. Once participants were in their preassigned, breakout rooms, the group leader within each grade and content area facilitated the target student discussion to help participants articulate the achievement levels, with one exception: the Grade 5 Mathematics group leader had participants review the OIB prior to facilitating the discussion of target student descriptors.

A target student is defined as a student whose performance minimally meets the criteria for entry into a particular achievement level, for example, the "just" Meets student. For each grade and content area there were three target student descriptors, one for each cut score (Nearly Meets, Meets, and Exceeds). Participants created descriptors of the target students using the appropriate Oregon standards, the previously developed achievement-level descriptors, and the expectations the participants have of students in the achievement levels. These definitions served as a basis for establishing a common understanding of the type of student that should be considered when setting each cut score on the test. Participants were encouraged to take notes during the target student discussion and were referred to the target student descriptors throughout the standard setting.

#### **Examine the Test**

Participants examined an operational paper-pencil test for their grade and content area to experience the test from the student's perspective.

#### Study Items in the Ordered Item Booklet

Participants at each table studied each of the 70 items in the OIB in terms of what each item measures and why it is more difficult than the items preceding it. At each table, one participant,

denoted as the scribe, recorded the group's comments about what each item measured. The locations for each item were not included on the item maps during Round 1.

#### **Bookmark Training**

Prior to setting their Round 1 bookmarks, participants received supplemental training on bookmark placement for the minimally competent student in each achievement level. This training was presented by Christina Schneider, a member of the CTB Standard Setting Team. Participants were instructed to use four tools when placing their bookmarks: the Oregon content standards, the target student descriptors, the achievement-level descriptors, and the content as represented by the items on the test.

Participants were given training materials and three explanations of bookmark placement. The training materials titled "Bookmark Placement" and "Frequently Asked Questions about Bookmark Placement" were read aloud. The first explanation of bookmark placement demonstrated the mechanics: participants were instructed that all items preceding the bookmark define the knowledge, skills, and abilities that a "just" Meets student, for example, is expected to know. The second explanation of bookmark placement was more conceptual in that participants were instructed to examine each item in terms of its content and to make a judgment about the type of content that a student would need to know in order to be considered "just" Meets. The final explanation discussed the relationship between the bookmarks and the scale scores. The participants were tested on their understanding of bookmark placement with a short check set. A listing of the training materials provided to panelists can be found in *Bookmark Standard Setting Technical Report 2006 for Reading/Literature and Mathematics Grades 3, 5, 8, and CIM and Science Grades 5, 8, and CIM.* 

#### 3.4 Method: Bookmarking

To meet the goals listed above, the panel followed the methods of the bookmarking standard-setting procedure (Mitzel, Lewis, Patz, & Green, 2001). The process selected for reestablishing the achievement standards on the statewide assessments in Reading/Literature, Mathematics, Science, and the ELPA consisted of three key phases.

**Step 1:** The Department establishes and trains a broadly representative panel for each grade and subject area to review test materials and recommend cut scores. To recommend cut scores for each of the performance standards, panels use the following: (1) ordered item booklets (OIBs), (2) impact data, and (3) predictable growth information.

Step 2: Explore impact data and seek public input

Phase 3: Field review and public input

Step 4: Research review

In each subject area, standard-setting panels met for two four-day sessions. Although standard setting was conducted for each content and grade level separately, all panels followed the same procedure. Below, we describe the standard-setting procedures for each step in detail. Outcomes are provided for each of the content areas and grades in Appendices F, G, and H for

Reading/Literature, Math and Science. ELPA results are provided in a separate ELPA Program Technical Report.

#### 3.4.1 Step 1: Setting the Bookmarks

Details regarding the standard setting process can be found in *The Oregon 2006 Academic Standard Setting Documentation* <u>http://www.ode.state.or.us/search/page/?id=920</u>. The following is a brief overview:

To familiarize panelists with the assessment system and reiterate the goals of the process, the meetings began with a review of the content standards, assessments, and current performance standards. The review included the critical knowledge for all students in each subject and at each grade as determined by the content standards and examples of how that knowledge might be described and measured on tests.

These descriptions are the Performance-Level Descriptors (PLDs) provided in Appendix A.

#### Round 1 Bookmark Placement

Once participants demonstrated that they understood how to place their bookmarks through the check set, they placed bookmarks in the following order: Meets, Exceeds, and Nearly Meets. Participants were instructed that bookmark placement is always an individual activity.

Prior to placement of the Round 1 bookmarks, the group leaders displayed an overhead transparency of the bookmarks that represented the existing cut scores for the Oregon Statewide Assessments. Participants were asked whether the existing cut scores reasonably represented the break in skills among the achievement levels that participants determined in their review of the items. If the existing cut scores reasonably represented the break of skills, participants were instructed that they could keep the existing bookmarks. If the current bookmarks did not reasonably represent the change in skills, participants were instructed to place their bookmarks on new pages in their OIBs.

Participants placed their Round 1 bookmarks for Nearly Meets, Meets, and Exceeds, while keeping in mind the Oregon content standards, the target student descriptors, the achievement-level descriptors, and the content as represented by the items on the test.

#### Round 2 Bookmark Placement

In each grade and content area, the table leader at each table facilitated a discussion of all the bookmark placements for the table. Participants were encouraged to focus on the differences among their bookmarks by discussing the items between the lowest and highest bookmarks at their table.

Participants were then directed back to their OIBs and item maps to continue content-based discussions. At this point, table leaders were each given a copy of the item map that included the location of each item in the OIB. After discussion, participants were reminded to place their bookmarks independently.

#### Round 3 Bookmark Placement

Participants received feedback based on their Round 2 bookmark placements from a member of the CTB Standard Setting Team in collaboration with an ODE representative. On an overhead

transparency, participants were shown the median bookmark placement for each achievement level for each table as well as the medians for their grade and content area. In addition, participants were shown impact data based on the median Round 2 bookmarks. Impact data was defined for participants as the percentages of students who would be classified in each achievement level based on the median bookmarks. CTB staff answered process-related questions, and the ODE staff answered all policy-related questions concerning the impact data. It was emphasized to the participants that the impact data were being presented as a "reality check."

During this portion of the standard setting, a fire alarm went off in the hotel in which the workshop was located. After a brief evacuation, the workshop resumed.

After the presentation of Round 2 results, participants discussed the rationale of their bookmark placement across tables within their grade and content area. The group leader facilitated the discussion among all participants. After the discussion, participants were instructed to place their bookmarks independently for the final time.

#### **Round 3 Results**

Participants received feedback based on their final bookmark placements from a member of the CTB Standard Setting Team in collaboration with an ODE representative. On an overhead transparency, participants were shown the median bookmarks for each table as well as the medians for their grade and content area and the impact data based on the median Round 3 (final) bookmarks. In addition, participants were shown the impact data for all grades within their content areas as an introduction to the cross-grade discussion. If necessary, the panels would have been allowed a fourth round of voting had they expressed a pervasive dissatisfaction with their recommended cut-scores. Table 4 displays the median recommendations from the panels based on their 3rd round of votes.

	Math	Reading/Literature	Science
Grade 3			N/A
Does not yet meet	200 and lower	198 and lower	N/A
Nearly Meets	201-203	199-202	N/A
Meets	204-214	203-215	N/A
Exceeds	215 and higher	216 and higher	N/A
Grade 5			
Does not yet meet	213 and lower	208 and lower	215 and lower
Nearly Meets	214-217	209-217	216-224
Meets	218-229	218-229	225-237
Exceeds	230 and higher	230 and higher	238 and higher
Grade 8			
Does not yet meet	224 and lower	223 and lower	228 and lower
Nearly Meets	225-229	224-229	229-233
Meets	230-240	230-240	234-245
Exceeds	241 and higher	241 and higher	246 and higher
Grade 10			
Does not yet meet	230 and lower	230 and lower	234 and lower
Nearly Meets	231-235	231-235	235-239
Meets	236-245	236-247	240-249
Exceeds	246 and higher	248 and higher	249 and higher

Table 4.Summary of Standard Setting Panel Meetings after Round 3, December 2006

Once all grade panels for each content area in Mathematics and Reading/Literature completed Round 3, CTB interpolated the cut scores for the off-grades (Grades 4, 6, and 7) using the quadratic curve of best fit as the interpolation method. This policy model was specified a priori by the ODE. Historically, the percentage of students classified as Meets or above on the Oregon Statewide Assessments has followed a declining quadratic trend when tracked across grades.

Table leaders from each panel were brought together to examine the cut scores and associated impact data determined for the off-grades by interpolation. The purpose of this smoothing discussion was to establish a system of cut scores that was well articulated and, at the same time, considerate of the participants' original recommendations. A representative from the ODE was present during these discussions to answer policy-related questions.

Table leaders made various adjustments to the cut scores to promote cross-grade articulation. These changes were all small (two scale score points or less). In Grade 3 Reading, table leaders recommended increasing the Exceeds cut score by two scale score points to bring the percentage of students classified as Exceeds in that grade more consistent with the percentages in Grades 4 and 5. Table leaders in Grades 5 and 8 Reading recommended decreasing the Exceeds cut score by two scale score points in Grade 7, using similar reasoning. Table leaders in Grade 3 recommended a one-point increase in the Meets cut score, after informal consultation with their participants, to bring the percentage of students classified as Meets in that grade more in line with the percentages of the other grades, and to increase the number of students classified as Nearly Meets in that grade. Grade

8 table leaders recommended a one-point increase in the Meets cut score at that grade for similar reasons. Table leaders in Reading did not recommend any changes to the Nearly Meets cut scores.

In Mathematics, table leaders in Grade 3 recommended a two-point increase in the Exceeds cut score in that grade, as well as a one-point increase in the Exceeds cut score for Grade 4, in order to make the percentage of students classified as Exceeds more consistent with the percentages in other grades. Table leaders in Grade 5 concurred and recommended a one point reduction in the Exceeds cut score of that grade, and they recommended, in collaboration with Grade 8, a one-point decrease in the Exceeds cut scores of Grades 6 and 7.

Grade 3 table leaders also recommended a one-point increase in the Meets cut score for that grade to promote better articulation with Grades 4 and 5. Table leaders in Grade 5 recommended a one-point increase in the Meets cut score for Grade 6 to promote better articulation with surrounding grades. Grade 5 table leaders also recommended a one-point increase in the Nearly Meets cut score for Grade 6 for the same reason.

At the time of the cross-grade articulation discussion, Science table leaders reported that they and their participants were satisfied with their recommended cut scores, and that the impact data associated with their cut scores were reasonable. Science table leaders recommended no changes to their cut scores.

At the conclusion of the cross-grade articulation discussion, all table leaders were asked to review their recommended cut scores in their ordered item booklets and item maps. Specifically, table leaders were asked to verify that the changes that they recommended during the cross-grade articulation discussion were reasonable when compared to the content of the assessments. All table leaders reported that their recommended cut scores were reasonable when compared to the content of the assessments.

Table 5.
ummary of Standard Setting Panel Meetings After Cross Grade Articulation, December
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	Math	Reading/Literature	Science
Grade 3			N/A
Does not yet meet	200 and lower	198 and lower	N/A
Nearly Meets	201-204	199-202	N/A
Meets	205-216	204-217	N/A
Exceeds	217 and higher	218 and higher	N/A
Grade 4			N/A
Does not yet meet	207 and lower	204 and lower	N/A
Nearly Meets	208-211	205-210	N/A
Meets	212-224	211-222	N/A
Exceeds	225 and higher	223 and higher	N/A
Grade 5			N/A
Does not yet meet	213 and lower	208 and lower	215 and lower
Nearly Meets	214-217	209-217	216-224
Meets	218-228	218-229	225-237
Exceeds	229 and higher	230 and higher	238 and higher
Grade 6			
Does not yet meet	215 and lower	213 and lower	N/A
Nearly Meets	216-220	214-221	N/A
Meets	221-231	222-233	N/A
Exceeds	232 and higher	234 and higher	N/A
Grade 7			
Does not yet meet	220 and lower	218 and lower	N/A
Nearly Meets	221-225	219-226	N/A
Meets	226-237	227-238	N/A
Exceeds	238 and higher	239 and higher	N/A
Grade 8			
Does not yet meet	224 and lower	223 and lower	228 and lower
Nearly Meets	225-229	224-229	229-233
Meets	230-240	231-240	234-245
Exceeds	241 and higher	241 and higher	246 and higher
Grade 10			
Does not yet meet	230 and lower	230 and lower	234 and lower
Nearly Meets	231-235	231-235	235-239
Meets	236-245	236-247	240-249
Exceeds	246 and higher	248 and higher	249 and higher

Panelists evaluated the process. Generally, feedback was positive and included the following:

• 90.9% of participants agreed or strongly agreed with the statement, "The Bookmark Procedure was well described."

- 87.6% of participants agreed or strongly agreed with the statement, "The training materials were helpful."
- 83.1% of participants agreed or strongly agreed with the statement, "Overall, I am satisfied with my group's final bookmarks."
- 94.7% of participants agreed or strongly agreed with the statement, "Overall, I valued the conference as a professional development experience."

Details regarding the participants' evaluation of the standard setting process can be found in *The Oregon 2006 Academic Standard Setting Documentation*.

#### 3.4.2 Step 2: Impact Data and Regional Meetings with the Public

After the panels proposed the initial drafts of the performance standards, a two-stage field review was conducted. Regional meetings with educators and members of the community were held in January and February, 2007. There were two sessions held each day. The late afternoon session was targeted to educators and the early evening session was target to the members of the community. Attendees of the regional meetings provided feedback about the appropriateness and feasibility of the standards. Additionally, the Department of Education posted a video on the web that gave an overview of the process and outcome of the standard setting session. The web page contained a brief survey to collect comments that people might have after viewing the video.

Participants in the standards setting conference on cut score placement in Portland, December 11-13, 2006 involved 276 participants representing 29 counties and 74 school districts. From these participants we received the following input.

Content Area	% Strongly Agree or Agree with the results of the session and the value of the
	experience
Reading teams	83%
Math teams	88%
Science teams	83%
Overall average	85%

## Table 6:Feedback from standards setting conference attendees.

Additionally, public hearings were held at 15 sites statewide— at Multnomah ESD, Portland Public Schools, Willamette ESD, Salem Public Library, Douglas ESD, Umatilla-Morrow ESD, Hermiston Public Schools, Redmond School District, High Desert ESD, the COSA Conference at Salishan, Southern Oregon ESD, Lane Co ESD, Wy'East Admin, the Oregon Reading Conference, and Malheur ESD. Across all hearings, 246 individuals participated. 91% were very confident or fairly confident that the process appropriately placed the cut scores. Among on-line respondents 62% were confident or better, the absence of any discussion opportunities, that the process was appropriately undertaken.

Among those expressing concerns across the state, there was a high level of confidence in the process for identifying cut scores. Elementary school representatives were concerned about how these new standards might affect schools currently in failing category on AYP and schools with high

achieving levels that may drop from their current successes. Those from secondary schools suggested that even though they supported change in cut scores at high school, there was a concern that the public would perceive that high school is lowering performance standards. In addition, there was an increasing interest at the high school level, in line with the ending of CIM, to test students in 10th-12th grades, after they have completed the requisite content.

There was a ubiquitous assertion that ODE must have a strong communication process for the public regarding change in cut scores and the impact of those changes on AYP. Similarly, many expressed the opinion that ODE should provide a comparison with past achievement levels to demonstrate that students are continuing to make academic progress.

#### 3.4.3 Step 3: Research Review

With data from students who had been tested using Oregon's statewide assessments, the impact of the cut scores was reviewed. Students who were at the "meets" level in grade 8 were compared to how they had scored in grades 3 and 5 and 10. Previously, this work resulted in increasing the spread for grade 3 Reading/Literature and Mathematics standards, while all other benchmark standards remained the same for the two content areas.

Appendix G summarizes data used in the Impact and Review Step.

#### 4. FORMAL ADOPTION OF CHALLENGING ACADEMIC CONTENT STANDARDS

Finally, the State Board of Education held a formal hearing to address the reestablishment of the performance standards; during this hearing, Board members reviewed the draft performance standards and received the report of a panel of national experts.

#### 5. FINAL CUT SCORES

The final Board-approved cut scores are available on the Department's Web site at <u>http://www.ode.state.or.us/search/results/?id=223</u> and are described below.

#### Table 7. Final Cut Scores

	Math	Reading/Literature	Science
Grade 3			
Very Low	below 190	below 189	N/A
Low	190-200	189-198	N/A
Nearly Meets	201 - 204	199 - 203	N/A
Meets	205 - 216	204 - 217	N/A
Exceeds	217 & above	218 & above	N/A
Grade 4			
Very Low	below 198	below 198	N/A
Low	198-207	198-204	N/A
Nearly Meets	208 - 211	205-210	N/A
Meets	212 - 224	211 – 222	N/A
Exceeds	225 & above	223 & above	N/A
Grade 5			
Very Low	below 203	below 202	below 209
Low	203-213	202-208	209-215
Nearly Meets	214 - 217	209 - 217	216 - 224
Meets	218 - 228	218 - 229	225 - 237
Exceeds	229 & above	230 & above	238 & above
Grade 6			
Very Low	below 207	below 207	N/A
Low	207-215	207-213	N/A
Nearly Meets	216 - 220	214 - 221	N/A
Meets	221 - 231	222 - 233	N/A
Exceeds	232 & above	234 & above	N/A
Grade 7			
Very Low	below 211	below 211	N/A
Low	211-220	211-218	N/A
Nearly Meets	221 - 225	219 - 226	N/A
Meets	226 - 237	227 - 238	N/A
Exceeds	238 & above	239 & above	N/A
Grade 8			
Very Low	below 213	below 213	below 217
Low	213-224	213-223	217-228
Nearly Meets	225 - 229	224 - 230	229 - 233
Meets	230 - 240	231 - 240	234 - 245
Exceeds	241 & above	241 & above	246 & above
Grade 10			
Very Low	below 214	below 217	below 220
Low	214-230	217-230	220-234
Nearly Meets	231 - 235	231 - 235	235 - 239
Meets	236 - 245	236 - 247	240 - 248
Exceeds	246 & above	248 & above	249 & above

#### APPENDIX A Performance-Level Descriptors

Table A.1.
Performance-Level Descriptors for Reading/Literature

Grade	Performance Descriptor
Grade 3	
Does not meet standards	Student scores at this level indicate a minimal and/or inaccurate grasp of the grade level knowledge and skills outlined in the content standards for Reading/Literature. Students have a limited comprehension of the literal meaning of text and grade-level vocabulary, which prevents them from making meaningful interpretations or recognizing implied ideas. They are unable to recognize cause and effect relationships and the presence of opinions in text.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students may comprehend the literal meaning of text and grade-level vocabulary, but inconsistently interpret the meaning of implied or unstated ideas and concepts. They struggle to recognize cause and effect relationships and the presence of opinions.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students who score at this level demonstrate an accurate [accurate denotes "on target, right" feel word choice isn't in line with other descriptors. Possible adequate, functional or delete it.] comprehension of grade-level text and use context to make meaning of unfamiliar vocabulary. They recognize directly-stated problems and solutions and interpret text to determine themes and messages. They make accurate predictions based on textual evidence, and can identify directly-stated cause and effect relationships and opinions. They can draw conclusions about character traits and actions.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students have a strong comprehension of complex texts. They effectively use context clues to interpret challenging vocabulary and analyze text to determine problems, solutions, themes and messages. They make predictions based on textual evidence, identify implicit cause and effect relationships and can differentiate between facts and opinions.
Grade 4	
Does not meet standards	Student scores at this level indicate a minimal and/or inaccurate grasp of the grade level knowledge and skills outlined in the content standards for Reading/Literature. Students may be able to answer literal comprehension questions based on the text, but are unable to infer or recognize implied ideas. A limited comprehension of text prevents any sort of analysis of its purpose.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students may comprehend the literal meaning of text and grade-level vocabulary, but inconsistently interpret the meaning of implied or unstated ideas and concepts. They can sometimes identify an author's main purpose, but lack the skills to recognize instances of persuasion in informational text.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. These students have an accurate comprehension of grade-level text and use context to make meaning of unfamiliar vocabulary. They interpret text to determine themes and messages, analyze characters, and make accurate predictions based on textual evidence. They can identify the author's purpose and the presence of persuasion in informational text.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students have a strong comprehension of complex text. They effectively use context clues to interpret challenging vocabulary and analyze text to determine themes and messages. They make predictions based on textual evidence, trace the development of ideas and plot in nonlinear text, and analyze characters' actions and motivations. They can identify elements of persuasion and cause and effect relationships in informational text and analyze its features to support comprehension.

Grade	Performance Descriptor
Grade 5	
Does not meet standards	Student scores at this level indicate a minimal and/or inaccurate grasp of the grade level knowledge and skills outlined in the content standards for Reading/Literature. Students have a limited comprehension of the literal meaning of text and grade-level vocabulary which prevents them from making meaningful interpretations or recognizing implied ideas. A limited recognition of text elements and devices prevents them from meaningfully analyzing text.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students may comprehend the literal meaning of text and grade-level vocabulary, but inconsistently interpret the meaning of implied or unstated ideas and concepts. They can sometimes identify an author's main purpose, but lack the skills to recognize instances of persuasion in informational text, or how the author uses devices to enhance literary text.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students have an accurate comprehension of grade-level text and use context to make meaning of unfamiliar vocabulary. They interpret text to determine themes and messages, analyze characterization, and make accurate predictions. They can identify the author's purpose and the effect of elements and devices commonly used in literary text.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students comprehend text at or above their grade level of enrollment. They effectively use context clues to interpret challenging vocabulary and analyze text for complex themes and messages. They make insightful predictions based on foreshadowing clues, analyze characterization, and thoughtfully evaluate the author's use of devices in literary text and elements of persuasion in informative text.
Grade 6	
Does not meet standards	Student scores at this level indicate a minimal and/or inaccurate grasp of the grade level knowledge and skills outlined in the content standards for Reading/Literature. Students have a limited comprehension of the literal meaning of text and grade-level vocabulary which prevents them from making meaningful interpretations or recognizing implied ideas. A limited recognition of text elements and devices prevents them from meaningfully analyzing text.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students may comprehend the literal meaning of text and grade-level vocabulary, but inconsistently interpret the meaning of implied or unstated ideas and concepts. They can sometimes identify an author's main purpose, but are unable to recognize how the author uses devices to enhance literary text.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students have an accurate comprehension of grade-level text and use context to make meaning of unfamiliar vocabulary. They interpret text to determine themes and messages, analyze characterization, and make accurate predictions. They can identify the author's purpose and the effect of elements and devices commonly used in literary text.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students accurately comprehend text at or above their grade level of enrollment. They effectively use context clues to interpret challenging vocabulary and analyze text for complex themes and messages. They make insightful predictions, analyze characterization, and thoughtfully evaluate the author's use of devices and structural elements.

Grade	Performance Descriptor
Grade 7	
Does not meet standards	Student scores at this level indicate a minimal and/or inaccurate grasp of the grade level knowledge and skills outlined in the content standards for Reading/Literature. Students have a limited comprehension of the literal meaning of text and grade-level vocabulary which prevents them from making meaningful interpretations or recognizing implied ideas. A limited knowledge of text structures, elements, and devices prevents them from meaningfully analyzing text.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students may comprehend the literal meaning of text and grade-level vocabulary, but inconsistently recognize implied or unstated ideas and concepts. They can sometimes identify an author's main purpose, but lack the skills to recognize or analyze structural elements and how the author uses devices to enhance literary text.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students have an accurate comprehension of grade-level text, including unfamiliar vocabulary, and can analyze information to form conclusions. They interpret text to determine themes and messages, make accurate predictions, and can identify the effect of an author's use of structural elements and common literary elements and devices.
Exceeds standards	Student scores at this level indicate a strong academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students comprehend text at or beyond their grade level of enrollment. They have the ability to use multiple strategies to decipher unfamiliar vocabulary and analyze text for complex themes and messages. They make insightful predictions, analyze characterization, and thoughtfully evaluate the author's use of devices and structural elements.
Grade 8	
Does not meet standards	Student scores at this level indicate a minimal and/or inaccurate grasp of the grade level knowledge and skills outlined in the content standards for Reading/Literature. Students have a limited comprehension of the literal meaning of text and grade-level vocabulary which prevents them from making meaningful interpretations or recognizing implied ideas. A limited knowledge of text structures, elements and devices prevents them from meaningfully analyzing text.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students may comprehend the literal meaning of text and grade-level vocabulary, but inconsistently recognize implied or unstated ideas and concepts. They can sometimes identify an author's main purpose, but lack the skills to analyze how text is supported, its structural elements, and how the author uses devices to develop literary text.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students have an accurate comprehension of grade-level text, including unfamiliar vocabulary, and can synthesize information to form conclusions. They interpret text to determine themes and messages, make accurate predictions, and can identify an author's reasons for structural decisions and the use of common literary elements and devices.
Exceeds standards	Student scores at this level indicate a strong academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students have a strong comprehension of different types of text. They can interpret idioms and figurative expressions, and can synthesize information found in various parts of text. They analyze text for complex themes and messages, make insightful predictions, and thoughtfully evaluate the author's craft and textual support.

Grade	Performance Descriptor
Grade 10	
Does not meet standards	Student scores at this level indicate a minimal and/or inaccurate grasp of the grade level knowledge and skills outlined in the content standards for Reading/Literature. Students have limited comprehension of the literal meaning of text and grade-level vocabulary which prevents them from making meaningful interpretations or recognizing implicit ideas. Limited knowledge of text structures, elements and devices prevents them from meaningfully analyzing text.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students may comprehend the literal meaning of text and grade-level vocabulary, but inconsistently recognize implicit or subtle meanings or themes. They can sometimes identify an author's main purpose but lack the skills to analyze textual support, structural elements, and the author's use of devices to enrich text.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students have an accurate comprehension of grade-level text, including unfamiliar vocabulary. They interpret text to determine themes and messages; make accurate predictions; and can identify the author's purpose, reasons for structural choices; and the effects of common literary elements and devices.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for Reading/Literature. Students have a thorough comprehension of text, including complex vocabulary, beyond High School level expectations. They analyze text for subtle themes and messages, make insightful predictions, and effectively evaluate the author's purpose, structural choices, and craft.

# Table A.2.Performance-Level Descriptors for Mathematics

Grade/ Performance Level	Performance Descriptor
Grade 3	
Does not meet standards	Student scores at this level indicate a minimal and/or an inaccurate grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students indicate basic but inconsistent performance of skills in number and operations, measurement, working with data, algebra and geometry. Typically, these students are developing fluency in place value and basic number operations; fitting an unknown into a pattern when given the rule; reading data in a chart, table, and graph.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students occasionally carry out routine procedures, such as computing with whole numbers, identifying examples of different 2 and 3-dimensional shapes, extending patterns, and reading sets of data. These students solve problems for which the method or solution is straightforward.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students consistently solve routine problems involving whole numbers and simple fractions, compare geometric figures, and describe data. In general, these students can interpret or provide a visual representation to match a problem situation.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students readily identify and connect basic mathematical concepts and procedures to more complex and novel problem situations. These students solve problems involving one operation, sets of data, properties of geometric figures, and patterns or relationships. Students use logical reasoning to draw conclusions.

Grade/ Performance Level	Performance Descriptor
Grade 4	
Does not meet standards	Student scores at this level indicate a minimal and/or an inaccurate grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students indicate basic but inconsistent performance of fundamental knowledge and skills in number and operations, measurement, working with data, algebra, and geometry. Typically, they are developing fluency in place value and grade-level number operations; continuing a pattern when given the rule; reading data in a chart, table, and graph.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students inconsistently carry out routine procedures, such as rounding numbers, computing with whole numbers, identifying examples of different classes of quadrilaterals, extending patterns, and finding mode, median and range of a set of data. These students solve problems for which the method or solution is easily recognized and straightforward.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students consistently solve routine problems involving whole numbers, decimals and simple fractions; describe perimeter and area; compare geometric figures; translate a situation using numbers and symbols; and describe data. Generally, these students can interpret or provide a visual or symbolic representation to match a problem situation and purpose.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students readily identify and connect fundamental mathematical concepts, properties and procedures to more complex and novel problem situations. These students solve multi-step problems involving more than one operation, multiple sets of data, properties of geometric figures, and patterns or relationships. Students use informal and some formal reasoning to evaluate and justify solutions.
Grade 5 Does not meet standards	Student scores at this level indicate a minimal and/or an inaccurate grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students indicate basic but inconsistent performance of fundamental knowledge and skills in number and operations, measurement, working with data, algebra, and geometry. Typically, they are developing fluency in place value and fraction and decimal operations; continuing a pattern when given the rule; reading data in a chart, table, and graph.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students inconsistently carry out routine procedures, such as computing with rational numbers; finding perimeter and area of triangles and quadrilaterals; determining patterns; finding mode, median and range of a set of data; and identifying points on a coordinate graph. These students solve problems for which the method or solution is easily recognized and straightforward.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students consistently solve with fluency and accuracy routine problems involving whole numbers, decimals and percents; have efficient strategies to determine perimeter and area; compare geometric figures; and can represent and interpret data. In general, these students can interpret or provide a visual or symbolic representation to match a problem situation.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students readily identify and connect basic mathematical concepts and procedures, applying these to more complex problem situations. These students solve multi-step problems involving more than one operation, multiple sets of data, properties of geometric figures, and patterns or relationships. Students use informal and some formal reasoning to evaluate and justify solutions.

Grade/ Performance Level	Performance Descriptor
Grade 6	
Does not meet standards	Student scores at this level indicate a minimal and/or an inaccurate grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students indicate basic but inconsistent performance of fundamental knowledge and skills in number and operations, measurement, working with data, algebra and geometry. Typically, they are developing fluency in place value and grade-level number operations; continuing a pattern when given the rule; and reading data in a chart, table, and graph.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students inconsistently carry out routine procedures, such as computing with fractions, finding perimeter and area of polygons, extending patterns and predicting probabilities. These students solve problems for which the method or solution is easily recognized and straightforward.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students consistently solve routine problems involving whole numbers, decimals, and simple fractions with fluency and accuracy. They find perimeter and area of polygons, write an equation to describe a situation, compare geometric figures, and describe and use data. In general, these students can interpret or provide a visual or symbolic representation to match a problem situation.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students readily identify and connect fundamental mathematical concepts, properties and procedures to more complex and novel problem situations. These students use rational numbers to solve multi-step problems, predict theoretical probabilities, define algebraic relationships, and apply side and angle properties of geometric figures. Students use informal and some formal reasoning to evaluate and justify solutions.
Grade 7	
Does not meet standards	Student scores at this level indicate a minimal and/or an inaccurate grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students indicate basic but inconsistent performance of fundamental knowledge and skills in number and operations, measurement, working with data, algebra and geometry. Typically, they are developing fluency in place value and grade-level number operations; continuing a pattern when given the rule; reading data in a chart, table, graph, and tree diagrams.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students inconsistently carry out routine procedures, sometimes requiring guidance for tasks such as prime factorization, evaluating how data added to a set of data affect measures of central tendency, and identifying properties of figures on a coordinate graph. These students can solve problems for which the method or solution is easily recognized and straightforward.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students consistently solve routine problems applying mathematical properties of rational numbers; interpret algebraic equations; and interpret data using frequency distribution tables, box-and-whisker plots, stem-and-leaf plots, and line graphs. In general, these students can interpret or provide a visual or symbolic representation to match a problem situation and purpose.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students readily identify and connect fundamental mathematical concepts, properties, and procedures, to more complex and novel problem situations. These students use known objects to estimate surface area and volume, compute experimental and theoretical probabilities for single and compound events, and determine the image of a point on a graph under translations and reflections. Students use informal and some formal reasoning to evaluate and justify solutions.

Grade/ Performance Level	Performance Descriptor
Grade 8	
Does not meet standards	Student scores at this level indicate a minimal and/or an inaccurate grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students indicate basic but inconsistent performance of fundamental knowledge and skills in number and operations, measurement, working with data, algebra and geometry. Typically, these students are developing fluency in application of powers, coordinate geometry, calculating missing geometric measurements, and predicting and reporting outcomes of probabilities.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students recall and recognize mathematical concepts, terms and properties, yet are inconsistent in application. They inconsistently carry out routine procedures, such as writing numbers in scientific notation, solving equations, reading graphs, and using formulas to find areas and volumes. Students solve problems for which the method or solution is easily recognized and straightforward.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students at this level consistently apply mathematical concepts, terms and properties to problem situations. Students readily solve problems involving rational numbers, proportions and percents, similar figures, algebraic representations, and interpreting probability and data. In general these students can interpret or provide a visual or symbolic representation to match a problem situation and purpose.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students readily identify and connect fundamental mathematical concepts, properties and procedures. For example, they apply proportional reasoning across the standards (i.e., percents, measurement conversions, similar figures, slope, and probability), to more complex problem situations. They indicate flexibility in representing mathematical relationships by using diagrams, graphs, and symbolic algebra.
Grade 10	
Does not meet standards	Student scores at this level indicate a minimal and/or an inaccurate grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students indicate basic but inconsistent performance of fundamental skills. Typically, they are developing fluency in problem solving using algebra, geometry and probability.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the grade level knowledge and skills outlined in the state content standards for mathematics. Students inconsistently carry out routine procedures, such as reading graphs, performing specified computations and solving simple equations. These students solve problems for which the method or solution is easily recognized and straightforward.
Meets standards	Student scores at this level indicate a solid academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students consistently solve problems using various strategies. These students can reason mathematically, and generally have a firm understanding of algebraic and geometric concepts.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the grade level knowledge and skills outlined in the state content standards for mathematics. Students readily bring together skills and knowledge from multiple concepts and areas of mathematics to solve complex problems using sophisticated strategies.

Grade	Performance Descriptor
Grade 5	
Does not meet standards	Student scores at this level indicate a minimal and/or inaccurate grasp of the benchmark level knowledge and skills outlined in the state content standards for Science. These students inconsistently explain and/or minimally describe the fundamental properties of matter, force and energy and the basic structures, functions and interactions of living organisms in the environment. They can minimally identify Earth's properties and Earth's relationship in space.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the benchmark level knowledge and skills outlined in the state content standards for Science. These students can partially explain and describe the fundamental properties of matter, force and energy and the basic structures, functions and interactions of living organisms in the environment. They can partially identify Earth's properties and can recognize some of Earth's relationship in space.
Meets standards	Student scores at this level indicate a solid academic performance based on the benchmark level knowledge and skills outlined in the state content standards for Science. These students can explain and describe most fundamental properties of matter, force and energy and the basic structures, functions and interactions of living organisms in the environment. They can describe most of Earth's properties and can explain Earth's relationship in space.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the benchmark level knowledge and skills outlined in the state content standards for Science. These students can consistently explain and describe the fundamental properties of matter, force and energy and the basic structures, functions and interactions of living organisms in the environment. They can consistently describe Earth's properties and correctly explain Earth's relationship in space.
Grade 8	
Does not meet standards	Student scores at this level indicate a minimal and/or inaccurate grasp of the benchmark level knowledge and skills outlined in the state content standards for Science. These students can inconsistently explain and/or minimally describe the properties of matter, force and energy and have limited knowledge about the structures, functions and interactions of living organisms in the environment. They have a minimal and/or inaccurate understanding of Earth's properties, Earth's motion and its relationship in space.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the benchmark level knowledge and skills outlined in the state content standards for Science. These students can partially explain and describe the properties of matter, force and energy and the structures, functions and interactions of living organisms in the environment. They can partially identify Earth's properties and how these properties change over time. Students can explain some of Earth's motion and its relationship in space.
Meets standards	Student scores at this level indicate a solid academic performance based on the benchmark level knowledge and skills outlined in the state content standards for Science. These students can explain and describe properties of matter, force and energy and the structures, functions and interactions of living organisms in the environment. They can describe Earth's properties and how some of these properties change over time. Students can explain Earth's motion and its relationship in space.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the benchmark level knowledge and skills outlined in the state content standards for Science. These students can consistently explain and describe the properties of matter, force and energy and structures, functions and interactions of living organisms in the environment. They can consistently explain and describe Earth's properties and how these properties change over time. Students can effectively explain Earth's motion and its relationship in space.

# Table A.3.Performance-Level Descriptors for Science

Grade	Performance Descriptor
Grade 10	
Does not meet standards	Student scores at this level indicate a minimal and/or inaccurate grasp of the benchmark level knowledge and skills outlined in the state content standards for Science. These students inconsistently explain, describe and analyze the properties of matter, force and energy and the complex structures, functions and interactions of living organisms in the environment. They have a minimum and/or inaccurate understanding of Earth's properties and explain only the simplistic principles of Earth's relationship in space and interaction with other objects in space.
Nearly Meets	Student scores at this level indicate an incomplete grasp of the benchmark level knowledge and skills outlined in the state content standards for Science. These students can incompletely explain, describe and analyze the properties of matter, force and energy and the complex structures, functions and interactions of living organisms in the environment. They can partially describe and analyze Earth's properties and can explain some of Earth's relationship in space and interaction with other objects in space.
Meets standards	Student scores at this level indicate a solid academic performance based on the benchmark
	level knowledge and skills outlined in the state content standards for Science. These
	students can mostly explain, describe and analyze the properties of matter, force and energy
	and the complex structures, functions and interactions of living organisms in the
	environment. They can describe and analyze Earth's properties and can accurately explain
	Earth's relationship in space and interaction with other objects in space.
Exceeds standards	Student scores at this level indicate a very strong academic performance based on the
	benchmark level knowledge and skills outlined in the state content standards for Science.
	These students can consistently explain, describe and analyze the properties of matter, force
	and energy and the complex structures, functions and interactions of living organisms in the
	environment. They can consistently describe and analyze Earth's properties and effectively
	explain Earth's relationship in space and interaction with other objects in space.

#### APPENDIX B Standard-Setting Panel Composition by Subject Area and Grade

#### Table B.1.

#### Reading/Literature Standard-Setting Panel Composition, Grade 3

Panelist ID	Panelist name	Expertise	City
1	Bonnie Harper	READING	Helix
2	Cheri Shea	READING	Portland
3	Connie Owens	READING/MATHEMATICS	Gladstone
4	Cynthia Hodgdon	ELEMENTARY MATHEMATICS/READING	Irrigon
5	Diann Gillaspie	READING - 3RD GRADE	Coquille
6	Jeremiah Patterson	READING	Gladstone
7	John O'Neill Jr.	ADMINISTRATION	Forest Grove
8	Kathy Saterdahl	READING-ELEMENTARY	Bend
9	Kayla Reents	READING - 3RD GRADE	Coquille
10	Kristie Buckley	READING/MATHEMATICS	Glide
11	Lisa Becker	READING	Fairview
12	Michelle Zundel	ANY	Ashland
13	Mike Campbell	GRADE 1	Molalla
14	Norma Barber	READING	Ukiah
15	Patty Ball	READING	Corvallis
16	Peg Cowens	READING/LITERATURE	Grants Pass
17	Tammy Doty	ELEMENTARY	Lapine
18	Tanya Grape-Frisendahl	READING	Salem
19	Teresa Furukawa	3RD GRADE	Salem

## Table B.2.Reading/Literature Standard-Setting Panel Composition, Grade 5

Panelist ID	Panelist name	Expertise	City
20	Charlotte Fisher	ELEMENTARY (READING/LANGUAGE	Dallas
		ARTS/MATHEMATICS	
21	Cheryl Lemke	READING	Medford
22	Cindi Schmitz	READING	Silverton
23	Dave VanLoo	READING-ELEMENTARY	Bend
24	Dawn Kennison-Kerrigan	LANGUAGE ARTS	Hermiston
25	Dayle Spitzer Eder	MATHEMATICS/SCIENCE/LANGUAGE ARTS	Hillsboro
26	Dean Richards	MATHEMATICS/LITERATURE	Clackamas
27	Derek Edens	ASSESSMENT	Portland
28	Fran MacKenzie		Roseburg
29	Gary Thompson	READING	Portland
30	Jannie Heller	READING/LITERATURE	Cave Junction
31	Jerry Archer	READING/MATHEMATICS	Pendleton
32	John Blanck	LANGUAGE ARTS	Portland
33	Kevin Milner	READING	Newberg
34	Laurie Glazener	ASSESSMENT, READING	Springfield
Panelist ID	Panelist name	Expertise	City
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35	Louise Johnston	READING	Portland
36	Marietta Donohue		Welches
37	Michelle Coleman	READING-ELEMENTARY	Bend
38	Pam Edens	LITERACY	Beaverton
39	Patricia Bieze	MATHEMATICS	Portland
40	Shelley Liscom	ADMINISTRATION	Pendleton
41	Wade Smith	CURRICULUM/INSTRUCTION	Lexington

# Table B.3.Reading/Literature Standard-Setting Panel Composition, Grade 8

Panelist ID	Panelist name	Expertise	City
42	Alex Bick	SPECIAL ED	Bend
43	Annette Jacobsen	READING/LITERATURE, ASSESSMENT	Mcminnville
44	Cari Price	LANGUAGE ARTS/READING	Salem
45	Doug Geygan	LANGUAGE ARTS/SOCIAL STUDIES	Bend
46	Heather Johnstone	PARENT	Newberg
47	Jana Avison	READING/LITERATURE	Salem
48	Jennifer Clair	READING OSAT	Roseburg
49	Josh Marks	SPED MATHEMATICS	Bend
50	Julie Barnes	READING	Cave Junction
51	Kristin Sacks	SECONDARY LITERACY	Tigard
52	Molly Matthews		Grand Ronde
53	Monica Schalock		
54	Patti Virden	SPED	Salem
55	Renee Stickles	READING/LITERATURE	Salem
56	Shelley Wilcoxen	READING	Portland
57	Susan Equinoa	ENGLISH	Albany
58	Teri Rowell		Lagrande
59	Terry McElligott	LANGUAGE ARTS/SOCIAL STUDIES	Newberg

## Table B.4.Reading/Literature Standard-Setting Panel Composition, Grade 10

Panelist ID	Panelist name	Expertise	City
60	Arthur L. Dingle	READING/LANGUAGE ARTS	Brookings
61	Carlos Montgomery		
62	Christine Richardson	WRITING	Newberg
63	Dave Mues	LANGUAGE ARTS	Hines
64	Gabriel Shannon		Portland
65	Georgiana Yee	READING GRADES 8 OR 10	Sherwood
66	Jim Raible	READING/LITERATURE	Ione

Panelist ID	Panelist name	Expertise	City
67	Joe LaFountaine	PARENT/PRINCIPAL	Salem
68	Kathy Haynie	ELA	Oregon City
69	Katie Gisler	ENGLISH	Albany
70	Marilyn LaHue	READING	Newberg
71	Mark Recker	LANGUAGE ARTS	Silverton
72	Mary Holmes	ENGLISH 9-12	Gladstone
73	Michelle Shigemasa	9-12 LANGUAGE ARTS	Hillsboro
74	Rick Dills	READING	Hood River
75	Steve Harloff	READING	Forest Grove
76	Teri Houghton	ELA	Grants Pass
77	Tim Drilling	MATHEMATICS/SCIENCE	Gresham

# Table B.5.Mathematics Standard-Setting Panel Composition, Grade 3

Panelist ID	Panelist name	Expertise	City
1	Alicia Glasscock	SPED READING	Beaverton
2	Andrea Lane	MATHEMATICS	John Day
3	Craig Martin	MATHEMATICS	Ashland
4	Diane Delvers	SPED	Gladstone
5	Dick Bertelsen	MATHEMATICS	Gresham
6	Gary Hendricks	ALL - GRADE 4	Milton-Freewater
7	Ginger Colwell	MATHEMATICS/READING	Albany
8	Jackie Cooke	MATHEMATICS	Vancouver
9	Jan Kittelson	SITE COUNCIL	Tigard
10	Jane Osborne	MATHEMATICS	Hood River
11	Janelle Rebick	TEACHER	Bend
12	Jill Conant	READING	Nyssa
13	Kathy Bowers	MATHEMATICS, ELEMENTARY	Salem
14	Larry Bentz	MATHEMATICS	Gresham
15	Lesley Johnson	SCIENCE	Salem
16	Robert Bonner	GRADE 3	Newberg
17	Stephen Buckley	MATHEMATICS AND SCIENCE	Glide
18	Tami Hansey	ELEMENTARY	Myrtle Creek
19	Theresa Kalstad	MATHEMATICS, LANGUAGE ARTS	Portland
20	Tiffanie Hansey	ELEMENTARY	Myrtle Creek

Panelist ID	Panelist name	Expertise	City
21	Cheryl Ogburn	MATHEMATICS	Portland
22	Craig Koontz	MATHEMATICS	Albany
23	Deb Gaffney	READING/LITERATURE/WRITING (ELEMENT'ARY/MIDDLE SCHOOL)	Newport
24	Don Grossarth	MATHEMATICS, S STUDIES	Salem
25	Francie Bostwick	MATHEMATICS	Medford
26	Gary Montgomery	ELEMENTARY READING & MATHEMATICS	Medford
27	Julie Fox	MATHEMATICS – $5^{TH}$	Gladstone
28	Karen Lokting		Beaverton
29	Katie Legace	PRINCIPAL, MS	Bend
30	Kayda Mitchell	MATHEMATICS	Newberg
31	Laura Lethe	MATHEMATICS	Keizer
32	Linda Errick	ANY	Sutherlin
33	Lyn Philiben	MATHEMATICS	Bend
34	Marla Baber	MATHEMATICS	Portland
35	Nancy Fowler	MATHEMATICS	Beaverton
36	Olivia Variel	ALL	Bend
37	Ross Eells	MATHEMATICS GRADES 3-8	Mcminnville
38	Scot Anderson	MATHEMATICS	Albany
39	Stephanie Legard	MATHEMATICS	Mcminnville

# Table B.6.Mathematics Standard-Setting Panel Composition, Grade 5

# Table B.7.Mathematics Standard-Setting Panel Composition, Grade 8

Panelist ID	Panelist name	Expertise	City
40	Anna Som	MATHEMATICS	Albany
41	Betsy Shane	JUNIOR HIGH MATHEMATICS	Boardman
42	Brent Freeman	MATHEMATICS	Ashland
43	Cathy Windsheimer	MATHEMATICS	Portland
44	Drew Braun		Eugene
45	Evelyn Mears	MATHEMATICS	Albany
46	Jeff Lee	MATHEMATICS	Salem
47	Jill Hayden	MATHEMATICS	The Dalles
48	Jill Plattner	MATHEMATICS/TITLE I MATHEMATICS	Bend
49	Jill Sumerlin	MATHEMATICS	Tillamook
50	Jon R. Bennett	MATHEMATICS - MIDDLE SCHOOL	Myrtle Creek
51	Julia Murphy	MATHEMATICS	Sutherlin
52	Karen Stiner	MATHEMATICS - 8TH GRADE	Bend
53	Ken Gilbert	MATHEMATICS	Albany
54	La Dona May	MATHEMATICS	Terrebonne
55	MaryAnn Heglie-King	MATHEMATICS	Eugene

56	Nicholas Gilbertson	MATHEMATICS	Molalla
57	Sally Wood	MATHEMATICS	Estacada
58	Sandra Harris	MATHEMATICS	Hillsboro

### Table B.8.

### Mathematics Standard-Setting Panel Composition, Grade 10

Panelist ID	Panelist name	Expertise	City
59	Brenda Paustian	MATHEMATICS	Ashland
60	Brian Goldman	MATHEMATICS	Portland
61	Cheryl Klampe-VanHess	MATHEMATICS	Stayton
62	David Dopperman	MATHEMATICS	Aloha
63	Eda Davis-Butts	UMSAAT	Corvallis
64	Ellen Irish	MATHEMATICS 9-12	
65	Jennifer Jones	MATHEMATICS, SITE COUNCIL	Phoenix
66	Jerry Renfro	MATHEMATICS 9-12	Gladstone
67	LaDona Barton-Copeland	MATHEMATICS	Hines
68	Larry Susuki		Ontario
69	Les Willett	MATHEMATICS	North Bend
70	Marie Cramer	MATHEMATICS	Keizer
71	Nancy Sanders	MATHEMATICS	Scio
72	Patty Sandoz	MATHEMATICS	La Grande
73	Randy Shockey	MATHEMATICS	Forest Grove
74	Shawna Blanchette	MATHEMATICS	Phoenix
75	Sheila Otto	MATHEMATICS	Eugene
76	Tom Owen	MATHEMATICS AND SCIENCE	Portland

# Table B.9Science Standard-Setting Panel Composition, Grade 5

Panelist ID	Panelist name	Expertise	City
1	Angela Pak	GRADES 4/5	Mulino
2	Annie Morton	TEACHER/PRINCIPAL	Salem
3	Beckianne Kilkenny	SCIENCE	Beaverton
4	Brian Skaar	READING/LIT	Philomath
5	Cheryl Eggers	SCIENCE	Milwaukie
6	Debbie Freeman	SCIENCE	Hermiston
7	Della Emerick		
8	Don Brown	LA K-5	Beaverton
9	Kimberly Harrington	GRADE 4	Hillsboro
10	Kris Alman	MATHEMATICS	Portland
11	Kristin Takano	MATHEMATICS/SCIENCE ESL	Newport
12	Laurie Dougherty	READING	Gearhart
13	Leslie Graham	MATHEMATICS OR SCIENCE	Lagrande
14	Linda Dougherty	K-5, READING, MATHEMATICS AND	Salem

		SCIENCE	
15	Linda Wallmark	MATHEMATICS/SCIENCE GRADE 5	Salem
16	Patricia George	ELEMENTARY EDUCATION	Milwaukie
17	Susan Talbot	MATHEMATICS	Pendleton
18	Teena Staller	SCIENCE	Medford
19	Tracy McLafferty	SPED	Estacada
20	Virginia Christensen	6TH GRADE	Oakland

# Table B.10Science Standard-Setting Panel Composition, Grade 8

Panelist ID	Panelist name	Expertise	City
21	Andrea Sande	6TH GRADE LITERACY/MATHEMATICS	
22	Catherine Perkins	SCIENCE	Portland
23	Celeste Kimbrough	SCIENCE - 8TH	Gladstone
24	Clayton Gillette	SCIENCE	Medford
25	Dawn Bonder	SITE COUNCIL	Portland
26	Dee Carlson	MATHEMATICS	Beaverton
27	Doralee Hayden	ANY	Sutherlin
28	Erin Roby	SCIENCE	Hillsboro
29	Jennifer Cox	ELEMENTARY MATHEMATICS	Boardman
30	Kristina Healy	SCIENCE	Ashland
31	Lynda Sanders	SCIENCE	Coos Bay
32	Michael Rockow	SCIENCE	Salem
33	Nancy Bailey	SCIENCE - 8TH	Gladstone
34	Nancy Earl	SPED	Salem
35	Polly Beam	PRINCIPAL	Klamath Falls
36	Ragna TenEyck	TAG/LD	Forest Grove
37	Riff Canaday	SCIENCE	Newberg
38	Robert Dunton		Corbett
39	Roxanne Bailey	SCIENCE	Hines
40	Ruth McDonald	SCIENCE (MIDDLE)	Newport
41	Sue Durgan	HEALTH	Baker City

# Table B.11Science Standard-Setting Panel Composition, Grade 10

Panelist ID	Panelist name	Expertise	City
42	Becky Vanderwoude	SCIENCE	Grants Pass
43	Buzz Brazeau	SCIENCE	Hermiston
44	Chris Clouse	9-12 MATHEMATICS & SCIENCE	Grants Pass
45	D. Allan Bruner	SCIENCE	Colton
46	David Novak	SCIENCE	Eugene
47	James Long	MATHEMATICS AND SCIENCE	Corvallis

48	Jill Merolla	SCIENCE 9-12	Gladstone
49	Karen Peterson	SCIENCE	Mcminnville
50	Laura Oldenkamp		Canby
51	Malvina Holloway	SCIENCE	
52	Maxine Thompson	COMMUNICATING DATA TO PUBLIC	Portland
53	Rachel Marble	SCIENCE	Tigard
54	Rick Foster	SCIENCE	Phoenix
55	Robert Espenel	EDUCATIONAL ADMINISTRATION	Molalla
56	Sean McElhaney	SCIENCE	Molalla
57	Todd Thomas	GRADUATION REQUIREMENTS	Newberg
58	Trish Beckius	SCIENCE	Newberg

### APPENDIX C Standard-Setting Panel Training Materials

from Bookmark Standard Setting Technical Report 2006 for Reading/Literature and Mathematics Grades 3, 5, 8, and CIM and Science Grades 5, 8, and CIM by CTB/McGraw-Hill LLC, 20 Ryan Ranch Road, Monterey, California 93940-5703



### **Bookmark Placement**

These directions are written for placing the *Meets* bookmark and apply analogously to the *Nearly Meets* and *Exceeds* bookmarks.

For whom am I placing this bookmark? The Target Student

When you place your *Meets* bookmark, you are separating the highest ability *Meets* students from the lowest ability *Meets* students. In other words, you are keeping in mind the Target Student who will just make it into the *Meets* level.

#### How do I place my bookmark? The Mechanics

The bookmark is exactly that: a bookmark. It separates the content students are expected to master from the content they are *not* expected to master. In the example below, a participant has placed the *Meets* bookmark on page 7. With this bookmark placement, the participant says that a student must master the content represented by items 1 through 6 to be *Meets*.

To place your bookmark, start at page 1 in the Ordered Item Booklet (OIB). Page through the OIB **looking at the content covered** until you find the *first* page where you think a student has demonstrated a sufficient body of evidence to indicate that the student is *Meets* relative to the content standards. This is the content you are saying a *Meets* Target Student needs to master to just make it into the *Meets* level.

Hold the pages that contain the content you expect the student to master in your left hand. Place your bookmark on the page AFTER the last item you expect the student to master. This page number is your bookmark. Write it on your Rating Form.

**Hint:** It may be helpful to first identify the interval of items in which you are reasonably certain the bookmark should be placed; then you can place the bookmark within that interval. If you are uncertain about where to place your bookmark, make your best decision; you will have two more rounds of voting to reconsider your bookmark.

#### What does my Meets Bookmark mean? Some Answers

- You expect *Meets* students to master the knowledge, skills, and abilities contained in the items *before* your bookmark.
- *Meets* students should know and be able to do the items *before* the bookmark. For multiple-choice items, *Meets* students should know the correct response.

#### Is my bookmark the same as a raw score? NO

It is very important to remember that your bookmark placement is *not* equal to a raw score. In the example above, the *Meets* bookmark was placed on page 7. The participant was *not* saying that a student must get six items correct to be classified as *Meets*. This participant is saying that a barely *Meets* student must master the content measured by the items on pages 1 through 6. The numbers in the OIB correspond to the rank order of difficulty of each item. The order of difficulty numbers do *not* correspond to raw scores.

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#### **Frequently Asked Questions about Bookmark Placement**

These questions are written in reference to the *Meets* bookmark and apply analogously to the *Nearly Meets* and *Exceeds* bookmarks.

#### How do I know if I placed my bookmark in the "right" place?

The "right" place is a matter of judgment, *your* judgment. You are placing your bookmark based on the content you expect students to know and be able to do.

I set my bookmark based on the content I expect students to know and be able to do, that is, the content I expect students to master. What is the definition of mastery?

We look at mastery by considering the likelihood with which students will respond correctly to the items. This question is answered in more depth in the handout "Mastery."

### If a student misses some items before the *Meets* bookmark and gets some correct after the bookmark, is that student still *Meets*?

A student does *not* have to get every item before the bookmark correct to be *Meets*. *Meets* students can miss some items *before* the bookmark and correctly respond to some items *after* the bookmark.

## Does the page number on which I place my bookmark correspond to the raw score a student must get on the test?

*No.* Remember, you are placing your bookmark based on the content you expect students to know and be able to do. You are *not* making your decision based on the number of items students must answer correctly. The bookmark is placed on a *page* in the Ordered Item Booklet. This page number corresponds to the difficulty ordering of the item, *not* to the raw score.

## Should I place my bookmark in the first place in the Ordered Item Booklet where all the content standards have occurred?

Not necessarily. The test only samples the content domain. In some cases, some content standards will only be represented by difficult items that would be hard for most students to master.

#### How many bookmarks do I set?

You set one less bookmark than the number of achievement levels. In Oregon, you will set 3 bookmarks to separate students into 4 achievement levels.





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nly 1 of	<i>studen</i> i nonstrat	bookle			item 28	<u>35</u> 100	item 48	100	
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ts have nts in t	sponde tuse Gr	nition o ent refle his is tr ver thar	stude:	item 8	<u>99</u> 100		item 18	2  22		item 38	<u>78</u> 100	
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C-10



1 1. Kitty is taking a trip on which she plans to drive 300 miles each day. Her trip is 1,723 miles long. She has already driven 849 miles. How much farther must she drive? S 574 miles 874 miles © 1,423 miles • 2,872 miles ,





- **3.** *N* stands for the number of stamps John had. He gave 12 stamps to his sister. Which expression tells how many stamps John has now?

  - N-12
  - © 12- N
  - I2 x N











9 **9.** There are 3 fifth graders and 2 sixth graders on the swim team. Everyone's name is put in a hat and the captain is chosen by picking one name. What are the chances that the captain will be a fifth grader? I out of 3 © 3 out of 5 • 2 out of 3

### APPENDIX D Ordered Item Booklets Supplied to Panelists

### Table D.1.

### Standard-Setting Ordered Item Bookmap for Reading/Literature

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
3	1	30111350	193	3.7	1.2.3
3	2	30111410	194	4.4	3.2.3
3	3	30113090	198	7.5	4.2.3
3	4	30206590	198	7.5	3.1.3
3	5	30111370	199	8.5	3.1.3
3	6	30206170	199	8.5	1.2.3
3	7	30113030	200	9.4	1.2.3
3	8	30113100	200	9.4	3.1.3
3	9	30204930	200	9.4	4.3.3
3	10	30236350	201	10.4	2.1.3
3	11	30237650	201	10.4	1.2.3
3	12	30109970	202	12.9	4.2.3
3	13	30113050	202	12.9	3.2.3
3	14	30111380	203	15.6	3.1.3
3	15	30237280	203	15.6	2.3.3
3	16	30237310	204	18.3	3.6.3
3	17	30403390	204	18.3	4.5.3
3	18	30206560	205	21.3	4.2.3
3	19	30113070	206	24.3	4.2.3
3	20	30111400	207	27.3	4.2.3
3	21	30224710	207	27.3	3.1.3
3	22	30229230	207	27.3	4.2.3
3	23	30237300	207	27.3	1.2.3
3	24	30204900	208	30.6	1.2.3
3	25	30401110	208	30.6	4.4.3
3	26	30403380	208	30.6	4.4.3
3	27	30109880	209	34	1.2.3
3	28	30204910	210	37.5	4.4.3
3	29	30229240	210	37.5	4.1.3
3	30	30236330	210	37.5	2.1.3
3	31	30237690	210	37.5	4.6.3
3	32	30401100	211	41	3.6.3
3	33	30403340	211	41	3.5.3
3	34	30109900	212	44.4	1.2.3
3	35	30224720	212	44.4	2.3.3
3	36	30229210	212	44.4	3.1.3
3	37	30401120	212	44.4	3.6.3
3	38	30402250	212	44.4	1.2.3
3	39	30401150	213	48.1	3.6.3

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
3	40	30109950	214	51.6	4.1.3
3	41	30109960	214	51.6	4.2.3
3	42	30402180	214	51.6	1.2.3
3	43	30206610	215	54.7	2.2.3
3	44	30401060	215	54.7	1.2.3
3	45	30402020	215	54.7	2.3.3
3	46	30208480	216	58	4.2.3
3	47	30235320	216	58	1.2.3
3	48	30238910	216	58	3.1.3
3	49	30402270	216	58	3.6.3
3	50	30208430	217	62.2	1.2.3
3	51	30229220	217	62.2	3.3.3
3	52	30403310	218	65.8	1.1.3
3	53	30208500	219	68.1	1.2.3
3	54	30259700	219	68.1	3.2.3
3	55	30402220	219	68.1	4.3.3
3	56	30259730	220	71.6	4.2.3
3	57	30270290	220	71.6	4.6.3
3	58	30206530	221	74.6	3.1.3
3	59	30206550	221	74.6	2.2.3
3	60	30208450	221	74.6	3.3.3
3	61	30224400	221	74.6	1.2.3
3	62	30235950	221	74.6	1.2.3
3	63	30259660	221	74.6	1.2.3
3	64	30270270	221	74.6	4.3.3
3	65	30235000	224	81	1.2.3
3	66	30235380	224	81	4.2.3
3	67	30235120	225	83.6	1.2.3
3	68	30208440	226	85	3.2.3
3	69	30259710	226	85	4.1.3
3	70	30236020	227	87.1	4.3.3
4	1	40235720	199	3.1	4.7.4
4	2	40464950	199	3.1	3.1.4
4	3	40415370	201	4.4	3.1.4
4	4	40465190	203	5.9	2.1.4
4	5	40464930	204	6.7	3.1.4
4	6	40472810	204	6.7	1.1.4
4	7	40464940	205	7.7	3.1.4
4	8	40473440	205	7.7	4.7.4
4	9	40438420	206	8.7	1.2.4
4	10	40473240	206	8.7	4.4.4
4	11	40401380	208	11.4	5.1.4
4	12	40401330	209	14.1	3.1.4
4	13	40235690	210	17.2	4.7.4
4	14	40415390	210	17.2	4.2.4

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
4	15	40464910	211	20.4	1.1.4
4	16	40473210	211	20.4	1.1.4
4	17	40464900	212	24.1	1.1.4
4	18	40465170	212	24.1	2.1.4
4	19	40401290	213	27.9	2.3.4
4	20	40415410	214	31.7	4.2.4
4	21	40457330	214	31.7	5.3.4
4	22	40235780	215	35.8	4.7.4
4	23	40418120	215	35.8	3.2.4
4	24	40207530	216	39.9	1.1.4
4	25	40207550	216	39.9	4.7.4
4	26	40235730	216	39.9	3.3.4
4	27	40268780	217	44.1	4.7.4
4	28	40305840	217	44.1	2.2.4
4	29	40439340	217	44.1	1.2.4
4	30	40268820	218	47.9	4.7.4
4	31	40418090	218	47.9	1.1.4
4	32	40207540	219	51.6	1.1.4
4	33	40439810	219	51.6	4.3.4
4	34	40401540	220	55.6	1.1.4
4	35	40411800	220	55.6	2.1.4
4	36	40415380	220	55.6	3.1.4
4	37	40439380	220	55.6	4.3.4
4	38	40401470	221	59.2	3.2.4
4	39	40418110	221	59.2	4.7.4
4	40	40439400	221	59.2	1.1.4
4	41	40201000	222	62.5	4.5.4
4	42	40401590	222	62.5	4.1.4
4	43	40418170	222	62.5	4.4.4
4	44	40418270	222	62.5	5.1.4
4	45	40401410	223	66	1.3.4
4	46	40405560	223	66	5.3.4
4	47	40418140	223	66	3.3.4
4	48	40305820	224	69.8	1.3.4
4	49	40418300	224	69.8	4.2.4
4	50	40268770	225	72.9	3.2.4
4	51	40305830	225	72.9	2.2.4
4	52	40401340	225	72.9	3.1.4
4	53	40418240	225	72.9	1.1.4
4	54	40401570	226	75.7	1.3.4
4	55	40439330	226	75.7	1.1.4
4	56	40405540	227	78.7	5.1.4
4	57	40418080	227	78.7	1.1.4
4	58	40200950	228	81.1	4.7.4
4	59	40256700	228	81.1	1.3.4

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
4	60	40401550	228	81.1	3.1.4
4	61	40411760	228	81.1	2.1.4
4	62	40200970	229	83.5	4.5.4
4	63	40411770	231	87.2	2.1.4
4	64	40401520	232	89.1	1.1.4
4	65	40418340	232	89.1	3.1.4
4	66	40401460	233	90.7	4.7.4
4	67	40457340	233	90.7	5.2.4
4	68	40268740	236	94.2	1.1.4
4	69	40401490	236	94.2	4.6.4
4	70	40401440	240	97.1	4.7.4
5	1	50273310	202	2.8	4.7.5
5	2	50269650	204	3.8	1.1.5
5	3	50269700	204	3.8	4.1.5
5	4	50254390	205	4.4	5.1.5
5	5	50271270	205	4.4	4.4.5
5	6	50273350	205	4.4	3.2.5
5	7	50306220	205	4.4	2.2.5
5	8	50479440	205	4.4	3.3.5
5	9	50273360	206	5.1	3.2.5
5	10	50479450	207	5.8	3.2.5
5	11	50232180	208	6.7	1.1.5
5	12	50269740	208	6.7	5.1.5
5	13	50254410	209	7.7	4.3.5
5	14	50477950	209	7.7	6.1.5
5	15	50479460	209	7.7	1.1.5
5	16	50271470	210	8.8	5.1.5
5	17	50254380	211	10	4.1.5
5	18	50272350	211	10	5.1.5
5	19	50273330	211	10	6.3.5
5	20	50306210	211	10	2.2.5
5	21	50271360	212	11.2	1.1.5
5	22	50306200	212	11.2	2.2.5
5	23	50210860	213	12.7	1.1.5
5	24	50210870	214	14.3	3.2.5
5	25	50271390	214	14.3	5.2.5
5	26	50269680	215	16.2	3.1.5
5	27	50210850	216	20.1	1.1.5
5	28	50210880	216	20.1	3.2.5
5	29	50269640	216	20.1	1.1.5
5	30	50271440	217	24.3	3.1.5
5	31	50416570	217	24.3	6.3.5
5	32	50271430	218	28.6	4.3.5
5	33	50210930	220	37.6	6.2.5
5	34	50272360	220	37.6	3.1.5

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
5	35	50414210	222	46.1	2.2.5
5	36	50418600	222	46.1	3.1.5
5	37	50418760	222	46.1	5.2.5
5	38	50111870	223	49.9	2.1.5
5	39	50245400	223	49.9	3.2.5
5	40	50417480	223	49.9	1.3.5
5	41	50418740	223	49.9	3.1.5
5	42	50229690	224	53.9	1.1.5
5	43	50417520	224	53.9	3.1.5
5	44	50418580	224	53.9	1.3.5
5	45	50417590	225	57.9	2.2.5
5	46	50242880	226	61.6	6.3.5
5	47	50417570	226	61.6	2.2.5
5	48	50111860	227	64.8	2.1.5
5	49	50212300	227	64.8	4.7.5
5	50	50213730	227	64.8	4.4.5
5	51	50212290	228	68.1	3.2.5
5	52	50418730	228	68.1	5.1.5
5	53	50210920	229	71.4	6.3.5
5	54	50244040	229	71.4	1.1.5
5	55	50417460	229	71.4	5.1.5
5	56	50212320	231	76.8	6.2.5
5	57	50244090	231	76.8	3.1.5
5	58	50245390	231	76.8	4.7.5
5	59	50245410	231	76.8	4.5.5
5	60	50417500	231	76.8	1.1.5
5	61	50245420	232	80	4.5.5
5	62	50212310	234	84.8	4.7.5
5	63	50242900	234	84.8	6.1.5
5	64	50236080	235	87	1.1.5
5	65	50244110	235	87	4.2.5
5	66	50245440	237	90.4	1.1.5
5	67	50245460	237	90.4	6.2.5
5	68	50244070	239	93.3	1.2.5
5	69	50111940	240	94.5	2.1.5
5	70	50417470	241	95.4	5.3.5
6	1	60468270	210	5.5	1.1.6
6	2	60468290	211	6.5	3.2.6
6	3	60225460	212	7.8	3.1.6
6	4	60458160	212	7.8	3.1.6
6	5	60459120	212	7.8	6.2.6
6	6	60468130	213	9	1.1.6
6	7	60458110	214	10.4	1.1.6
6	8	60468190	214	10.4	4.9.6
6	9	60225480	215	11.8	2.1.6

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
6	10	60458130	215	11.8	3.1.6
6	11	60225450	216	13.4	2.1.6
6	12	60269120	216	13.4	4.9.6
6	13	60468360	216	13.4	6.1.6
6	14	60450570	217	15.1	1.1.6
6	15	60468300	217	15.1	3.2.6
6	16	60468240	218	17	6.1.6
6	17	60450620	219	19.1	5.1.6
6	18	60450630	219	19.1	4.3.6
6	19	60458140	219	19.1	5.3.6
6	20	60458190	219	19.1	1.2.6
6	21	60269090	220	22.2	3.2.6
6	22	60442420	220	22.2	2.1.6
6	23	60468170	220	22.2	3.3.6
6	24	60468260	220	22.2	1.1.6
6	25	60269070	221	25.7	1.1.6
6	26	60450610	221	25.7	5.1.6
6	27	60269150	222	29.6	6.1.6
6	28	60468280	222	29.6	1.1.6
6	29	60450560	223	33.5	1.1.6
6	30	60458250	223	33.5	5.1.6
6	31	60225430	224	37.5	2.1.6
6	32	60438850	224	37.5	5.3.6
6	33	60459060	224	37.5	4.9.6
6	34	60500870	224	37.5	1.1.6
6	35	60269170	226	45.7	6.1.6
6	36	60458150	227	49.7	3.1.6
6	37	60468150	227	49.7	3.2.6
6	38	60458950	228	53.5	2.1.6
6	39	60459020	228	53.5	6.1.6
6	40	60450640	229	57.4	1.1.6
6	41	60459000	229	57.4	2.1.6
6	42	60501450	229	57.4	6.1.6
6	43	60458960	230	60.9	2.1.6
6	44	60501380	230	60.9	1.2.6
6	45	60438920	231	64.2	5.2.6
6	46	60450670	231	64.2	4.2.6
6	47	60501740	231	64.2	1.1.6
6	48	60269160	232	67.8	6.1.6
6	49	60500950	232	67.8	4.3.6
6	50	60455490	233	71.4	4.6.6
6	51	60501390	233	71.4	3.2.6
6	52	60501400	233	71.4	3.2.6
6	53	60458430	234	74.7	2.2.6
6	54	60500880	234	74.7	1.1.6

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
6	55	60455450	235	77.5	6.1.6
6	56	60455470	235	77.5	6.1.6
6	57	60501830	235	77.5	5.1.6
6	58	60501820	236	80.4	4.3.6
6	59	60501360	237	83.1	1.2.6
6	60	60501770	237	83.1	3.1.6
6	61	60501420	238	85.2	4.9.6
6	62	60500940	239	87.3	4.2.6
6	63	60500960	239	87.3	5.3.6
6	64	60500980	239	87.3	5.2.6
6	65	60455510	240	88.9	6.1.6
6	66	60458990	240	88.9	2.1.6
6	67	60501460	240	88.9	6.1.6
6	68	60458980	242	92.3	2.2.6
6	69	60501780	245	95.9	3.1.6
6	70	60501810	245	95.9	4.3.6
7	1	70502600	213	4.5	3.1.7
7	2	70502450	214	5.3	1.1.7
7	3	70447940	216	7.3	2.2.7
7	4	70502690	216	7.3	5.3.7
7	5	70503260	216	7.3	3.2.7
7	6	70466410	217	8.4	2.1.7
7	7	70502550	218	9.9	5.2.7
7	8	70503150	218	9.9	4.1.7
7	9	70502680	220	13	5.2.7
7	10	70223410	221	14.9	1.3.7
7	11	70446450	221	14.9	3.2.7
7	12	70513610	221	14.9	4.2.7
7	13	70446480	222	17	3.2.7
7	14	70502520	222	17	4.2.7
7	15	70513580	222	17	3.1.7
7	16	70215620	223	19.4	3.1.7
7	17	70446520	223	19.4	6.2.7
7	18	70513600	223	19.4	4.1.7
7	19	70446490	224	21.7	4.10.7
7	20	70503240	224	21.7	1.3.7
7	21	70215630	225	24.4	4.4.7
7	22	70447930	225	24.4	2.2.7
7	23	70503200	226	27	5.2.7
7	24	70503270	227	30.7	3.2.7
7	25	70447530	228	34.5	3.1.7
7	26	70247770	229	38.3	3.1.7
7	27	70449320	229	38.3	4.10.7
7	28	70513560	229	38.3	1.1.7
7	29	70215660	230	42	1.1.7

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
7	30	70446500	230	42	6.1.7
7	31	70513620	230	42	5.2.7
7	32	70215650	231	45.8	4.2.7
7	33	70223930	231	45.8	2.1.7
7	34	70248120	231	45.8	1.1.7
7	35	70449350	231	45.8	3.2.7
7	36	70457400	231	45.8	3.2.7
7	37	70503230	231	45.8	1.2.7
7	38	70501890	232	49.9	3.2.7
7	39	70501960	232	49.9	6.1.7
7	40	70502640	232	49.9	4.2.7
7	41	70501950	233	53.4	6.3.7
7	42	70447470	234	57	4.3.7
7	43	70509690	234	57	5.1.7
7	44	70449340	235	61.1	3.2.7
7	45	70502000	235	61.1	1.1.7
7	46	70223940	236	64.7	2.1.7
7	47	70247440	236	64.7	6.1.7
7	48	70447510	236	64.7	3.1.7
7	49	70457390	236	64.7	4.5.7
7	50	70509590	236	64.7	1.1.7
7	51	70221340	238	71.4	1.1.7
7	52	70258080	238	71.4	2.1.7
7	53	70449370	238	71.4	3.2.7
7	54	70449400	238	71.4	6.2.7
7	55	70221370	239	74.8	2.1.7
7	56	70502080	239	74.8	5.2.7
7	57	70447490	240	77.9	4.1.7
7	58	70447560	240	77.9	1.1.7
7	59	70502050	240	77.9	4.2.7
7	60	70220160	241	80.4	4.5.7
7	61	70247390	241	80.4	4.9.7
7	62	70449330	241	80.4	6.2.7
7	63	70502020	241	80.4	3.1.7
7	64	70509650	241	80.4	4.1.7
7	65	70447450	242	83.2	5.3.7
7	66	70509640	242	83.2	3.1.7
7	67	70501970	243	85.2	6.1.7
7	68	70509700	245	89	5.1.7
7	69	70457380	247	92.1	4.7.7
7	70	70447460	249	94.5	5.1.7
8	1	80101100	212	2.8	1.1.8
8	2	80248090	213	3.4	4.3.8
8	3	80101090	215	4.8	1.1.8
8	4	80213580	216	5.6	3.2.8

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
8	5	80213840	217	6.4	4.4.8
8	6	80247360	217	6.4	3.1.8
8	7	80242090	218	7.4	3.2.8
8	8	80247250	218	7.4	4.3.8
8	9	80101150	220	9.7	5.1.8
8	10	80247220	220	9.7	1.1.8
8	11	80220570	221	11.1	1.1.8
8	12	80213010	222	12.5	1.2.8
8	13	80265240	222	12.5	1.2.8
8	14	80248000	223	14.1	1.1.8
8	15	80213030	224	15.9	4.7.8
8	16	80248060	224	15.9	4.3.8
8	17	80242120	225	17.9	4.8.8
8	18	80303980	225	17.9	5.1.8
8	19	80214540	226	20.1	2.1.8
8	20	80247210	226	20.1	1.1.8
8	21	80261160	226	20.1	4.7.8
8	22	80265250	227	22.6	3.2.8
8	23	80265280	227	22.6	4.7.8
8	24	80133720	228	25.3	5.2.8
8	25	80265320	228	25.3	6.1.8
8	26	80101130	229	28.1	4.1.8
8	27	80213600	230	31.1	6.2.8
8	28	80451460	230	31.1	5.1.8
8	29	80100770	231	34.5	4.7.8
8	30	80240180	231	34.5	3.1.8
8	31	80224130	232	39.7	6.2.8
8	32	80303940	232	39.7	3.1.8
8	33	80448250	233	44.8	1.1.8
8	34	80451440	233	44.8	3.1.8
8	35	80214460	234	49.8	2.1.8
8	36	80234800	234	49.8	4.8.8
8	37	80100760	235	54.6	3.2.8
8	38	80214520	235	54.6	2.1.8
8	39	80100820	236	59.2	6.1.8
8	40	80203000	236	59.2	3.2.8
8	41	80234780	237	63.6	3.2.8
8	42	80240210	237	63.6	4.3.8
8	43	80304000	237	63.6	5.1.8
8	44	80100730	238	67.4	1.1.8
8	45	80451510	238	67.4	1.1.8
8	46	80100790	239	71.1	3.2.8
8	47	80100840	239	71.1	4.7.8
8	48	80448360	239	71.1	4.6.8
8	49	80451410	240	74.9	4.2.8

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
8	50	80203040	241	78.4	4.8.8
8	51	80214430	241	78.4	2.1.8
8	52	80240150	241	78.4	5.1.8
8	53	80240220	241	78.4	1.3.8
8	54	80240240	241	78.4	3.1.8
8	55	80303930	242	81.2	3.1.8
8	56	80448260	242	81.2	1.2.8
8	57	80451490	242	81.2	1.1.8
8	58	80221500	243	84.1	6.2.8
8	59	80240170	243	84.1	4.2.8
8	60	80303900	243	84.1	5.1.8
8	61	80265720	244	86.4	2.1.8
8	62	80303910	244	86.4	1.1.8
8	63	80204280	245	88.5	6.1.8
8	64	80221480	246	90.3	6.1.8
8	65	80234810	246	90.3	4.4.8
8	66	80303960	246	90.3	4.2.8
8	67	80203030	247	91.9	4.7.8
8	68	80265710	248	93.4	2.1.8
8	69	80265740	250	95.6	2.1.8
8	70	80448280	252	97.3	1.2.8
10	1	10248900	221	6.3	1.1.C
10	2	10253890	222	7.3	6.2.C
10	3	10006960	223	8.4	2.1.C
10	4	10249320	223	8.4	5.1.C
10	5	10469970	224	9.5	5.1.C
10	6	10470170	224	9.5	4.4.C
10	7	10469700	225	10.8	1.1.C
10	8	10249230	226	12.2	3.1.C
10	9	10249310	226	12.2	5.1.C
10	10	10253860	227	13.8	4.10.C
10	11	10253870	227	13.8	6.1.C
10	12	10421620	227	13.8	1.3.C
10	13	10006990	229	17.2	2.1.C
10	14	10469740	229	17.2	5.1.C
10	15	10458550	230	19.3	4.9.C
10	16	10458530	231	21.3	3.2.C
10	17	10006950	232	23.7	2.1.C
10	18	10458500	232	23.7	4.6.C
10	19	10469730	233	26.4	1.1.C
10	20	10253850	234	29.1	4.9.C
10	21	10307200	235	32.1	2.1.C
10	22	10422220	235	32.1	5.1.C
10	23	10458560	236	35.4	3.2.C
10	24	10470180	236	35.4	1.1.C
Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
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10	25	10470190	236	35.4	4.2.C
10	26	10253910	237	38.8	3.2.C
10	27	10438240	237	38.8	6.1.C
10	28	10278900	239	45.3	6.3.C
10	29	10421630	239	45.3	1.1.C
10	30	10421660	239	45.3	3.1.C
10	31	10307220	240	50.3	2.1.C
10	32	10422230	240	50.3	5.4.C
10	33	10437610	240	50.3	1.1.C
10	34	10458480	240	50.3	1.2.C
10	35	10135410	241	55.4	5.1.C
10	36	10415840	241	55.4	5.4.C
10	37	10438220	241	55.4	3.2.C
10	38	10307510	242	60	3.1.C
10	39	10424230	242	60	6.2.C
10	40	10307170	243	64.3	2.1.C
10	41	10424220	243	64.3	6.1.C
10	42	10307530	244	68.9	4.4.C
10	43	10438230	244	68.9	4.8.C
10	44	10217280	245	72.9	1.1.C
10	45	10307550	245	72.9	4.3.C
10	46	10437820	245	72.9	3.2.C
10	47	10135390	246	76.6	5.3.C
10	48	10218880	246	76.6	3.1.C
10	49	10278800	246	76.6	1.3.C
10	50	10307500	247	80	3.1.C
10	51	10424240	247	80	3.2.C
10	52	10218850	248	83.1	2.1.C
10	53	10424160	248	83.1	4.10.C
10	54	10424190	248	83.1	4.6.C
10	55	10278820	249	85.6	3.2.C
10	56	10307480	249	85.6	1.1.C
10	57	10307560	249	85.6	5.3.C
10	58	10135370	250	88	3.1.C
10	59	10424200	250	88	6.1.C
10	60	10424210	250	88	6.5.C
10	61	10135440	251	90.1	4.3.C
10	62	10218860	252	92	1.1.C
10	63	10278920	252	92	6.1.C
10	64	10218830	254	94.8	2.1.C
10	65	10135330	255	95.7	1.1.C
10	66	10217310	255	95.7	3.1.C
10	67	10278810	255	95.7	3.2.C
10	68	10278860	255	95.7	4.9.C
10	69	10135360	258	97.9	4.2.C

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
10	70	10217350	262	99.2	5.2.C

\* Impact data indicates the percentage of students answering this item incorrectly on the 2005-2006 administration.

<sup>†</sup> Subskill information denotes the "eligible content" included in the item. This describes the specific area within the discipline tested by the item and can be resolved online at <u>http://www.ode.state.or.us/search/results/?id=53</u>.

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
3	1	30401010	190	2.2	1.1.31
3	2	30438230	190	2.2	4.1.33
3	3	30438590	190	2.2	3.3.35
3	4	30112110	191	2.6	2.1.31
3	5	30400190	191	2.6	5.1.32
3	6	30418560	191	2.6	1.1.39
3	7	30212440	192	3	4.1.34
3	8	30293010	192	3	3.4.31
3	9	30411380	192	3	1.2.34
3	10	30216700	193	3.5	2.2.31
3	11	30403250	196	5.8	1.1.39
3	12	30520060	196	5.8	5.1.34
3	13	39700160	197	6.7	2.1.31
3	14	30221230	198	7.7	4.1.33
3	15	30406530	198	7.7	1.1.33
3	16	30415010	199	8.9	3.3.35
3	17	30293610	200	10.2	4.1.31
3	18	30406420	200	10.2	1.1.33
3	19	30432830	200	10.2	2.1.31
3	20	30416990	201	11.4	3.4.31
3	21	30401450	202	12.9	5.1.34
3	22	30404010	202	12.9	4.2.32
3	23	30418860	202	12.9	1.3.33
3	24	30415070	203	16.1	5.1.31
3	25	30438530	203	16.1	2.2.31
3	26	30408840	204	19.6	4.1.31
3	27	30416600	204	19.6	1.1.31
3	28	30237420	205	23.3	3.3.35
3	29	30400070	205	23.3	1.1.33
3	30	30400050	206	27.4	3.4.31
3	31	30500160	206	27.4	5.1.31
3	32	30419370	207	31.5	4.1.31
3	33	30424970	207	31.5	2.2.311
3	34	30418540	208	35.7	1.1.31
3	35	30433160	209	39.8	5.1.34
3	36	30417250	210	44.3	1.2.37
3	37	30401430	211	48.4	1.2.34
3	38	30415180	211	48.4	2.2.38
3	39	30417080	211	48.4	3.4.31
3	40	30418900	211	48.4	4.1.33
3	41	30520560	211	48.4	5.1.31
3	42	30400040	212	52.5	3.4.31
3	43	30235470	213	56.6	1.2.316

# Table D.2.Standard-Setting Ordered Item Bookmap for Mathematics

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
3	44	30237710	213	56.6	5.1.32
3	45	30411720	213	56.6	4.1.31
3	46	30414980	213	56.6	2.2.31
3	47	30236170	214	60.8	3.3.35
3	48	30237540	214	60.8	5.4.33
3	49	30404430	215	64.8	1.1.35
3	50	30447540	215	64.8	4.1.33
3	51	30408400	216	69.1	2.2.31
3	52	30400420	217	72.9	1.1.33
3	53	30401240	218	76.4	2.2.38
3	54	30411780	218	76.4	4.2.31
3	55	30430440	218	76.4	5.1.34
3	56	30404410	219	80	1.1.33
3	57	30430780	219	80	3.4.31
3	58	30433150	221	85.8	5.1.31
3	59	30234360	222	87.7	1.2.34
3	60	30237291	222	87.7	1.2.315
3	61	30419350	223	89.8	5.1.32
3	62	30240270	225	92.7	1.2.34
3	63	30400410	225	92.7	4.2.32
3	64	30401270	225	92.7	2.1.31
3	65	30409010	226	94.1	2.2.34
3	66	30448730	226	94.1	5.1.34
3	67	30435280	228	95.9	5.1.31
3	68	30419680	229	96.9	4.1.34
3	69	30419270	230	97.3	4.2.32
3	70	30103270	231	98	1.2.316
3	71	30420500	233	98.5	3.3.35
4	1	40428140	194	0.9	2.1.41
4	2	40438260	197	1.8	3.4.41
4	3	40448710	197	1.8	4.2.41
4	4	40274200	198	2.2	5.1.42
4	5	40438430	198	2.2	2.2.44
4	6	40239410	200	3.2	1.2.416
4	7	40442070	200	3.2	3.4.42
4	8	40404050	201	3.8	4.1.41
4	9	40404420	202	4.5	1.1.43
4	10	40432110	203	5.2	4.2.42
4	11	40290520	204	6	2.2.41
4	12	40292610	204	6	1.1.41
4	13	40415200	204	6	5.3.42
4	14	40440820	205	7	2.2.41
4	15	40273850	206	8.1	5.1.42
4	16	40422030	206	8.1	1.1.43
4	17	40002450	209	13.7	4.1.43

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
4	18	40403450	209	13.7	5.1.42
4	19	40409160	209	13.7	1.2.411
4	20	40417380	209	13.7	3.1.41
4	21	40432250	209	13.7	1.1.41
4	22	40444010	209	13.7	2.2.41
4	23	40443250	210	16.9	2.2.413
4	24	40423680	211	20.4	5.1.42
4	25	40440940	211	20.4	4.1.41
4	26	40444200	211	20.4	3.3.45
4	27	40412380	212	23.9	1.2.46
4	28	40414970	212	23.9	3.4.42
4	29	40403420	213	27.5	4.1.41
4	30	40404160	214	31.2	1.1.43
4	31	40404180	214	31.2	5.1.44
4	32	40409240	214	31.2	2.1.42
4	33	40217800	215	35	1.2.410
4	34	40408390	215	35	2.2.41
4	35	40428130	216	39.3	2.1.42
4	36	40403640	218	47.3	1.2.416
4	37	40404300	218	47.3	5.3.41
4	38	40408890	218	47.3	3.4.41
4	39	40423240	218	47.3	4.2.42
4	40	40423460	218	47.3	1.1.49
4	41	40435640	218	47.3	4.1.41
4	42	40234400	219	50.9	2.2.41
4	43	40443500	219	50.9	5.1.42
4	44	40411760	220	54.4	1.2.48
4	45	40428240	220	54.4	2.2.46
4	46	40428260	220	54.4	4.2.41
4	47	40409130	221	58	3.1.41
4	48	40443510	221	58	5.1.42
4	49	40216241	222	61.5	4.1.41
4	50	40431800	222	61.5	4.1.41
4	51	40404210	223	64.9	5.1.41
4	52	40444380	223	64.9	3.1.41
4	53	40428310	224	68.7	5.4.43
4	54	40408910	225	72	4.1.41
4	55	40423390	225	72	2.1.42
4	56	40454910	226	75.4	3.1.41
4	57	40407560	228	82	1.2.415
4	58	40403670	229	84.4	5.3.41
4	59	40404190	230	86.6	3.1.41
4	60	40403600	231	88.7	1.1.41
4	61	40248480	234	93.3	2.2.43
4	62	40408950	234	93.3	3.4.41

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
4	63	40448590	234	93.3	3.1.41
4	64	40274380	235	94.4	4.1.41
4	65	40276630	235	94.4	3.3.45
4	66	40407480	235	94.4	2.2.41
4	67	40432480	235	94.4	5.1.45
4	68	40444120	237	96.1	5.1.45
4	69	40404070	240	97.9	3.1.41
5	1	50407580	202	2	3.3.55
5	2	50426610	204	2.8	1.2.511
5	3	50436020	205	3.3	2.2.510
5	4	50437750	205	3.3	4.1.51
5	5	50276770	206	3.9	1.1.513
5	6	50440340	207	4.6	4.2.57
5	7	50244670	208	5.4	2.1.52
5	8	50220360	209	6.4	1.2.511
5	9	50437640	209	6.4	3.1.51
5	10	50241760	210	7.3	5.4.51
5	11	50429610	210	7.3	5.1.54
5	12	50438900	210	7.3	4.2.51
5	13	50438000	211	8.6	1.1.513
5	14	50438860	211	8.6	2.2.510
5	15	50210610	212	9.8	4.1.53
5	16	50436080	212	9.8	5.1.54
5	17	50211771	214	13.1	1.2.516
5	18	50212690	214	13.1	3.1.51
5	19	50244560	215	14.9	4.2.56
5	20	50245850	215	14.9	2.2.511
5	21	50435260	216	18.9	5.1.54
5	22	50440440	216	18.9	5.3.52
5	23	50408090	217	22.9	5.2.53
5	24	50429850	217	22.9	1.1.510
5	25	50406170	218	27.4	3.1.51
5	26	50429910	218	27.4	5.1.51
5	27	50435230	218	27.4	2.2.511
5	28	50446610	218	27.4	4.2.52
5	29	50426800	219	32.1	1.1.514
5	30	50520980	220	36.4	3.1.51
5	31	50211910	221	41	3.3.55
5	32	50438690	222	45.7	4.2.56
5	33	50426600	223	50.1	1.1.513
5	34	50440320	223	50.1	5.4.54
5	35	50446700	223	50.1	4.2.57
5	36	50407290	224	54.6	3.4.51
5	37	50407300	224	54.6	4.1.53
5	38	50436190	224	54.6	1.2.515

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
5	39	59700680	224	54.6	2.2.520
5	40	50210900	225	58.8	2.2.511
5	41	50245870	225	58.8	5.4.54
5	42	50441060	225	58.8	5.4.51
5	43	50429660	226	63.1	5.1.51
5	44	50429810	227	66.8	1.1.51
5	45	50431410	227	66.8	5.3.51
5	46	50437710	227	66.8	4.1.51
5	47	50405160	228	70.3	5.1.55
5	48	50412670	228	70.3	3.4.51
5	49	50426550	228	70.3	2.1.52
5	50	50407220	229	73.6	1.1.51
5	51	50426490	229	73.6	2.1.52
5	52	50437680	230	76.3	3.1.51
5	53	50440160	230	76.3	4.1.53
5	54	50441290	230	76.3	2.2.54
5	55	50431460	231	79	3.4.51
5	56	50446910	231	79	4.3.53
5	57	50429760	232	81.8	2.1.52
5	58	50436220	232	81.8	5.1.55
5	59	50431450	234	86.8	3.4.51
5	60	50104140	235	88.7	1.1.51
5	61	50274160	235	88.7	2.2.511
5	62	50437610	235	88.7	3.1.51
5	63	50447080	235	88.7	4.2.52
5	64	50277210	237	91.8	3.3.55
5	65	50426660	237	91.8	2.2.511
5	66	50211830	239	94	1.2.516
5	67	50419860	239	94	4.2.56
5	68	50403170	240	94.9	3.3.55
5	69	50435410	240	94.9	2.2.54
5	70	50209110	243	97	1.2.510
6	1	60502840	209	4.8	4.2.67
6	2	60414000	212	8.4	1.1.65
6	3	60439610	212	8.4	4.2.67
6	4	60274500	213	9.8	3.4.62
6	5	60241440	214	11.3	5.1.62
6	6	60406930	214	11.3	2.2.621
6	7	60502130	215	13.2	4.2.67
6	8	60220170	217	17.3	3.4.62
6	9	60502090	217	17.3	4.2.66
6	10	60293350	218	19.7	1.3.63
6	11	60403000	219	22.3	5.1.62
6	12	60411240	219	22.3	2.2.621
6	13	60444900	219	22.3	3.1.61

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
6	14	60407150	221	29.7	1.1.611
6	15	60502790	221	29.7	4.2.66
6	16	60417300	222	33.7	2.2.618
6	17	60416700	223	37.9	5.1.61
6	18	60424050	223	37.9	3.1.61
6	19	60404840	224	42.2	1.3.62
6	20	60420750	224	42.2	5.1.65
6	21	60400870	225	46.1	5.1.64
6	22	60420560	225	46.1	4.2.66
6	23	60420790	225	46.1	2.2.621
6	24	60444890	226	50.3	3.1.61
6	25	60406910	227	54.3	1.1.61
6	26	60502120	227	54.3	4.1.61
6	27	60503870	227	54.3	3.4.61
6	28	60503890	227	54.3	3.3.65
6	29	60422870	228	58.2	5.1.64
6	30	60414260	229	61.8	4.2.66
6	31	60106871	230	65.3	5.1.61
6	32	60400750	230	65.3	5.1.62
6	33	60404820	230	65.3	1.1.65
6	34	60501880	230	65.3	3.4.62
6	35	60225870	231	68.7	2.2.64
6	36	60404910	231	68.7	4.2.66
6	37	60409140	231	68.7	3.4.62
6	38	60292660	232	71.9	2.2.611
6	39	60415810	232	71.9	1.2.610
6	40	60416690	232	71.9	1.3.63
6	41	60420570	233	74.9	4.2.66
6	42	60423890	233	74.9	5.1.64
6	43	60426220	233	74.9	3.4.61
6	44	60400730	234	77.9	5.1.61
6	45	60427630	234	77.9	3.1.61
6	46	60403760	236	82.8	2.2.615
6	47	60416930	236	82.8	2.2.611
6	48	60502770	236	82.8	4.2.66
6	49	60207530	237	85	1.1.69
6	50	60407120	237	85	2.2.620
6	51	60419800	237	85	5.1.65
6	52	60420800	237	85	4.2.66
6	53	60503980	237	85	3.4.61
6	54	60406140	238	87	4.2.67
6	55	60411920	239	88.8	1.2.613
6	56	60422220	239	88.8	5.1.65
6	57	60423710	240	90.2	3.4.61
6	58	60428770	240	90.2	3.4.62

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
6	59	60245530	241	91.4	1.1.610
6	60	60400990	241	91.4	4.2.67
6	61	60400820	244	94.5	5.1.63
6	62	60400930	244	94.5	4.1.61
6	63	60407960	244	94.5	2.2.615
6	64	60404920	245	95.6	2.2.615
6	65	60419720	245	95.6	4.2.67
6	66	60422830	246	96.3	2.2.610
6	67	60423860	246	96.3	5.1.64
6	68	60424600	246	96.3	4.2.66
6	69	60407070	247	96.8	2.2.615
6	70	60422810	247	96.8	2.1.61
7	1	70435810	216	8.2	2.1.71
7	2	70404560	218	11.3	1.3.72
7	3	70251690	220	14.9	4.2.72
7	4	70292540	220	14.9	1.1.71
7	5	70442820	221	17	1.2.71
7	6	70403110	222	19.2	2.2.715
7	7	70413480	223	21.6	5.3.71
7	8	70500850	223	21.6	4.2.76
7	9	70408790	224	24.2	1.3.72
7	10	70415950	225	26.7	4.3.71
7	11	70408630	226	29.2	1.1.79
7	12	70446630	227	32.9	4.2.77
7	13	70292270	228	36.6	3.2.74
7	14	70413440	228	36.6	1.1.79
7	15	70501060	228	36.6	4.2.72
7	16	70207360	229	40.3	1.1.714
7	17	70404780	229	40.3	3.3.73
7	18	70003380	230	44.1	3.2.74
7	19	70275330	230	44.1	4.2.72
7	20	70430330	230	44.1	5.3.71
7	21	70291760	231	47.8	5.1.71
7	22	70209370	232	51.3	1.2.711
7	23	70407910	232	51.3	5.3.71
7	24	70415800	232	51.3	5.4.74
7	25	70208650	233	54.8	5.2.73
7	26	70246920	233	54.8	2.2.711
7	27	70430240	233	54.8	3.3.73
7	28	70406160	234	58.3	2.2.720
7	29	70411900	234	58.3	1.2.71
7	30	70415790	234	58.3	3.2.74
7	31	70504400	234	58.3	4.2.76
7	32	70402100	235	61.6	1.2.716
7	33	70249180	236	65	3.2.72

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
7	34	70275160	236	65	2.2.711
7	35	70427130	236	65	3.3.72
7	36	70430370	236	65	4.1.71
7	37	70502640	236	65	4.3.73
7	38	70504700	236	65	4.4.71
7	39	70250410	237	68.4	5.3.71
7	40	70404790	237	68.4	3.3.72
7	41	70430320	237	68.4	3.3.76
7	42	70434500	237	68.4	4.3.71
7	43	70414960	238	71.7	3.4.72
7	44	70454760	238	71.7	4.1.71
7	45	70501430	238	71.7	5.3.71
7	46	70505540	238	71.7	4.3.71
7	47	70277810	239	74.7	3.3.75
7	48	70402370	239	74.7	5.3.71
7	49	70408720	239	74.7	4.2.77
7	50	70413460	239	74.7	1.1.711
7	51	70407770	242	81.8	4.2.76
7	52	70219970	243	83.7	3.2.71
7	53	70504770	243	83.7	4.2.72
7	54	70404750	244	85.3	5.1.77
7	55	70402860	245	86.8	5.1.73
7	56	70501030	245	86.8	2.2.711
7	57	70503340	245	86.8	4.2.72
7	58	70278700	246	88.3	3.4.72
7	59	70501070	246	88.3	4.4.71
7	60	70430920	247	89.7	4.3.71
7	61	70431040	247	89.7	2.2.715
7	62	70431310	247	89.7	4.1.71
7	63	70432610	248	91	2.1.74
7	64	70433430	248	91	2.1.71
7	65	70530390	249	92.1	4.4.71
7	66	70416770	250	93.4	5.4.74
7	67	70501600	250	93.4	5.3.71
7	68	70435710	253	96	2.2.711
7	69	70504100	253	96	2.2.720
7	70	70402230	254	96.6	3.2.72
8	1	80442440	217	6.4	3.1.82
8	2	80402360	219	8.9	5.3.81
8	3	80407920	221	11.5	5.1.89
8	4	80440530	221	11.5	3.1.82
8	5	80443060	221	11.5	2.2.821
8	6	80411190	222	13.3	5.4.87
8	7	80249820	223	15	1.2.81
8	8	80444920	223	15	4.2.812

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
8	9	80111320	224	16.9	5.1.87
8	10	80400980	224	16.9	4.2.82
8	11	80441590	224	16.9	4.3.81
8	12	80249810	225	19.2	4.1.81
8	13	80424000	225	19.2	1.1.810
8	14	80410240	226	21.7	3.2.81
8	15	80443040	226	21.7	2.2.822
8	16	80443120	226	21.7	1.2.816
8	17	80444560	227	24.4	3.3.86
8	18	80252410	228	27.1	4.2.86
8	19	80414280	228	27.1	4.2.82
8	20	80443990	228	27.1	4.2.812
8	21	80270410	229	29.9	5.1.89
8	22	80441340	230	32.3	3.1.82
8	23	80442420	232	38.9	2.1.81
8	24	80507160	233	43	3.4.81
8	25	80411160	234	47.3	5.2.83
8	26	80414230	234	47.3	4.2.87
8	27	80416720	234	47.3	2.2.822
8	28	80440760	234	47.3	4.1.85
8	29	80250680	235	51.5	5.4.84
8	30	80413790	235	51.5	3.4.81
8	31	80414070	235	51.5	1.1.81
8	32	80414380	235	51.5	4.3.82
8	33	80441400	235	51.5	3.1.81
8	34	80441540	235	51.5	1.3.83
8	35	80221580	236	55.4	1.1.87
8	36	80400920	237	59.6	4.1.83
8	37	80404000	237	59.6	5.2.83
8	38	80411140	237	59.6	1.1.810
8	39	80413320	237	59.6	4.3.81
8	40	80502350	237	59.6	3.4.81
8	41	80402320	238	63.2	3.3.85
8	42	80412550	238	63.2	2.1.82
8	43	80269850	239	66.4	3.1.81
8	44	80441530	240	69.6	4.2.82
8	45	80432660	241	72.6	1.1.89
8	46	80440750	241	72.6	4.2.88
8	47	80442480	241	72.6	3.3.86
8	48	80500300	241	72.6	3.3.85
8	49	80220320	242	75.3	1.2.815
8	50	80443820	242	75.3	2.1.81
8	51	80444660	242	75.3	4.1.83
8	52	80403940	243	77.6	4.3.83
8	53	80251300	246	83.4	5.1.81

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
8	54	80401000	246	83.4	4.2.87
8	55	80411110	246	83.4	5.3.82
8	56	80444970	246	83.4	2.1.82
8	57	80224160	247	85.2	2.2.821
8	58	80251770	247	85.2	4.2.82
8	59	80252210	247	85.2	5.1.89
8	60	80411050	247	85.2	2.1.82
8	61	80412760	247	85.2	3.3.86
8	62	80444550	248	86.9	2.2.811
8	63	80275150	249	88.7	5.1.87
8	64	80275750	249	88.7	5.4.87
8	65	80403710	249	88.7	1.1.81
8	66	80411020	249	88.7	4.3.83
8	67	80253910	251	91.4	4.2.86
8	68	80205700	252	92.7	4.2.87
8	69	80442630	255	95.4	2.2.818
8	70	80441390	256	96	1.3.85
10	1	10225300	227	19.9	5.2.C4
10	2	10215340	229	24.6	5.4.C4
10	3	10418200	229	24.6	3.4.C2
10	4	10214490	230	27.1	2.1.C2
10	5	10229440	230	27.1	5.1.C8
10	6	10416430	230	27.1	1.2.C17
10	7	10225800	231	29.8	5.1.C12
10	8	10421560	231	29.8	4.1.C5
10	9	10213800	232	32.5	4.2.C4
10	10	19601330	232	32.5	2.2.C12
10	11	10438340	233	35.5	4.2.C4
10	12	10401790	234	38.9	3.2.C2
10	13	10206420	235	42.2	4.2.C8
10	14	10227340	235	42.2	5.1.C5
10	15	10213570	236	45.6	1.1.C9
10	16	10214160	236	45.6	2.2.C12
10	17	10438930	236	45.6	4.2.C7
10	18	10441910	236	45.6	4.3.C1
10	19	10214440	237	49.2	5.1.C7
10	20	10429140	237	49.2	5.4.C7
10	21	10445270	237	49.2	4.2.C7
10	22	10445500	237	49.2	4.1.C1
10	23	10427320	239	55.8	1.3.C2
10	24	10434810	239	55.8	3.4.C2
10	25	10436810	239	55.8	4.2.C7
10	26	10427760	240	61.5	2.2.C10
10	27	10427860	240	61.5	1.1.C3
10	28	10437340	240	61.5	4.1.C3

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
10	29	10445250	240	61.5	4.2.C5
10	30	10227270	241	66.4	5.3.C2
10	31	10439030	241	66.4	4.3.C3
10	32	10224740	242	70.8	3.4.C1
10	33	10402620	242	70.8	4.2.C2
10	34	10412970	242	70.8	3.3.C5
10	35	10429030	242	70.8	5.2.C4
10	36	10427400	243	74.8	2.2.C12
10	37	10439810	243	74.8	4.2.C7
10	38	10117180	244	78	5.1.C3
10	39	10229690	244	78	3.1.C1
10	40	10410120	244	78	1.2.C11
10	41	10424310	244	78	1.3.C3
10	42	10438920	244	78	5.3.C1
10	43	10433790	245	80.7	3.4.C2
10	44	10225000	246	83.3	3.3.C7
10	45	10225020	247	85.4	4.4.C2
10	46	10425750	247	85.4	2.2.C13
10	47	10426930	247	85.4	4.2.C5
10	48	10412960	248	87.3	3.2.C2
10	49	10421280	248	87.3	1.1.C1
10	50	10425920	249	88.8	5.1.C9
10	51	10433710	249	88.8	5.4.C5
10	52	10215440	250	90.2	3.2.C1
10	53	10434210	250	90.2	5.1.C5
10	54	10439110	250	90.2	4.2.C6
10	55	10442970	250	90.2	4.2.C3
10	56	10442810	251	91.6	4.2.C12
10	57	10225160	252	92.8	5.1.C7
10	58	10401510	252	92.8	4.3.C1
10	59	10422490	252	92.8	2.2.C15
10	60	10427920	252	92.8	5.3.C1
10	61	10434140	252	92.8	3.3.C1
10	62	10438350	253	93.9	4.2.C4
10	63	10219240	254	94.7	3.2.C3
10	64	10214660	255	95.4	1.1.C9
10	65	10229850	257	96.7	4.4.C3
10	66	10402490	258	97.2	3.2.C1
10	67	10427520	258	97.2	5.1.C5
10	68	10442910	258	97.2	4.2.C7
10	69	10414470	259	97.7	3.2.C4
10	70	10439370	259	97.7	4.1.C5

\* Impact data indicates the percentage of students answering this item incorrectly on the 2005-2006 administration.

Subskill information denotes the "eligible content" included in the item. This describes the specific area within the discipline tested by the item and can be resolved online at <a href="http://www.ode.state.or.us/search/results/?id=53">http://www.ode.state.or.us/search/results/?id=53</a>.

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
5	1	50516240	208	1.5	2.3.51.1
5	2	50205420	211	3.2	4.2.51.2
5	3	50613170	211	3.2	2.4.52.3
5	4	50401620	212	4	4.3.51.2
5	5	50414590	212	4	3.1.53.1
5	6	50511400	212	4	2.3.52.1
5	7	50412290	213	4.9	2.4.52.1
5	8	50401230	214	5.8	3.2.51.2
5	9	50000590	215	6.9	2.2.51.1
5	10	50400450	215	6.9	4.2.52.2
5	11	50219710	216	8	2.1.51.2
5	12	50000960	217	9.3	3.4.51.2
5	13	50404380	217	9.3	4.1.51.3
5	14	50510510	218	10.8	3.3.51.4
5	15	50103700	221	16.1	4.2.51.1
5	16	50413830	221	16.1	2.2.51.1
5	17	50207020	222	18.2	4.3.51.1
5	18	50404220	222	18.2	4.1.51.3
5	19	50510780	222	18.2	3.3.51.1
5	20	50205560	224	23.8	4.2.52.1
5	21	50505780	224	23.8	2.3.52.2
5	22	50507280	224	23.8	4.3.51.1
5	23	50505940	225	27.1	3.2.51.1
5	24	50210280	226	31	2.1.51.2
5	25	50219780	227	34.9	3.4.51.2
5	26	50000160	228	39.1	2.2.51.1
5	27	50505730	228	39.1	4.1.51.1
5	28	50503450	229	43.3	3.4.51.1
5	29	50505770	229	43.3	3.3.51.5
5	30	50507500	230	47.8	4.1.51.4
5	31	50110840	231	52	4.2.52.1
5	32	50403210	231	52	2.3.52.1
5	33	50505860	232	56.5	3.3.51.4
5	34	50508120	232	56.5	3.1.52.1
5	35	50413230	233	60.5	2.2.51.1
5	36	50504820	233	60.5	4.1.51.1
5	37	50516610	234	64.4	3.3.51.3
5	38	50100480	235	68.1	2.4.51.1
5	39	50400010	235	68.1	3.1.51.1
5	40	50413960	237	74.5	4.1.51.1
5	41	50404930	238	77.6	3.1.51.1
5	42	50204360	239	80.5	2.2.51.1
5	43	50414690	239	80.5	4.3.51.2

# Table D.3.Standard-Setting Ordered Item Bookmap for Science

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
5	44	50512350	239	80.5	3.3.51.2
5	45	50108050	240	83.3	4.2.51.1
5	46	50505840	241	85	3.4.51.2
5	47	50510470	241	85	2.1.51.2
5	48	50105080	242	87.4	2.3.51.1
5	49	50507560	243	89.4	4.2.52.2
5	50	50107650	244	90.9	2.1.51.1
5	51	50506670	244	90.9	2.1.51.2
5	52	50507340	244	90.9	3.3.51.5
5	53	50508870	244	90.9	3.4.51.2
5	54	50510680	244	90.9	2.3.52.1
5	55	50413270	245	92.8	2.2.51.2
5	56	50413660	245	92.8	4.2.52.1
5	57	50506740	245	92.8	2.1.51.2
5	58	50510670	245	92.8	2.3.52.1
5	59	50511590	245	92.8	4.1.51.3
5	60	50510640	246	93.5	4.1.51.4
5	61	50507250	247	94.8	3.3.51.4
5	62	50401800	248	95.8	3.1.53.1
5	63	50505620	248	95.8	3.4.51.1
5	64	50612010	249	96.4	4.1.51.1
5	65	50400380	251	97.7	3.3.51.4
5	66	50400430	251	97.7	4.2.52.2
5	67	50506770	252	98.1	4.2.52.2
5	68	50506410	253	98.4	4.2.51.1
5	69	50507520	254	98.7	3.3.51.5
5	70	50413320	256	99.2	2.2.51.2
8	1	80418690	214	0.7	3.1.82.1
8	2	80216490	218	2.9	3.2.81.1
8	3	80414750	220	5	3.2.81.2
8	4	80416880	220	5	2.1.81.3
8	5	80222280	221	6.4	3.3.81.3
8	6	80503080	221	6.4	2.4.82.3
8	7	80505420	221	6.4	2.3.81.3
8	8	80606020	221	6.4	4.1.81.1
8	9	80505480	222	7.9	2.3.82.1
8	10	80421980	223	9.7	3.3.81.2
8	11	80423390	223	9.7	4.3.81.1
8	12	80503130	223	9.7	3.4.81.1
8	13	80515540	223	9.7	4.2.81.3
8	14	80505320	224	11.4	2.3.81.1
8	15	80204480	225	13.2	4.2.81.1
8	16	80507920	225	13.2	3.1.82.1
8	17	80220230	226	15	4.2.81.5
8	18	80210990	227	16.9	2.1.81.1

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
8	19	80416240	227	16.9	4.2.82.1
8	20	80506240	227	16.9	4.1.81.1
8	21	80417060	228	19.1	3.3.81.2
8	22	80105521	229	21.3	3.4.81.2
8	23	80424260	230	23.6	2.3.82.1
8	24	80217880	231	26.1	4.2.82.5
8	25	80502940	232	28.9	4.1.81.1
8	26	80503940	232	28.9	2.3.81.3
8	27	80216510	233	31.8	3.1.82.1
8	28	80503160	233	31.8	3.1.83.4
8	29	80419250	235	39.2	2.1.81.1
8	30	80506990	235	39.2	4.2.82.5
8	31	80501220	236	43.2	3.1.83.2
8	32	80425630	237	47.3	3.3.81.2
8	33	80507750	237	47.3	4.3.81.1
8	34	80003690	238	51.4	2.2.81.3
8	35	80205830	238	51.4	4.2.81.1
8	36	80606910	238	51.4	3.2.81.4
8	37	80212670	239	55.4	4.2.81.1
8	38	80222730	239	55.4	3.3.81.4
8	39	80100011	240	59.4	4.2.81.4
8	40	80415610	240	59.4	2.3.82.1
8	41	80416250	241	63	4.2.82.1
8	42	80420880	242	66.9	3.1.83.1
8	43	80100910	243	70.4	2.2.81.3
8	44	80211410	243	70.4	4.2.81.3
8	45	80200630	244	73.8	3.3.81.1
8	46	80415360	244	73.8	2.3.82.1
8	47	80222160	245	77	4.2.81.4
8	48	80424300	245	77	2.4.82.3
8	49	80415720	246	79.8	2.4.82.1
8	50	80500410	246	79.8	4.2.82.5
8	51	80606800	246	79.8	3.2.81.4
8	52	80213560	247	82.3	2.1.81.1
8	53	80506920	247	82.3	4.2.82.2
8	54	80424840	248	84.8	3.2.81.3
8	55	80416090	249	86.7	2.1.81.1
8	56	80606390	250	88.6	4.2.82.4
8	57	80416260	251	90.4	4.2.82.1
8	58	80418900	251	90.4	3.1.82.1
8	59	80503920	251	90.4	2.4.81.1
8	60	80607940	251	90.4	3.2.81.1
8	61	80415570	252	91.8	2.3.81.3
8	62	80204440	253	93	2.1.81.2
8	63	80224310	253	93	4.2.81.5

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
8	64	80412760	254	94	3.1.83.3
8	65	80424930	254	94	2.4.82.2
8	66	80220580	255	94.9	4.2.82.6
8	67	80415740	255	94.9	2.2.81.1
8	68	80210720	257	96.4	2.2.81.1
8	69	80417070	258	97	3.3.81.4
8	70	80507120	258	97	4.2.82.1
10	1	10206890	221	3	3.3.C1.2
10	2	10435440	222	3.4	4.2.C1.3
10	3	10500240	222	3.4	2.1.C1.3
10	4	10210130	223	4.6	4.1.C1.1
10	5	10218060	224	5.9	3.1.C3.7
10	6	10206510	225	6.7	3.3.C1.1
10	7	10217930	225	6.7	2.2.C1.1
10	8	10511740	225	6.7	4.3.C1.2
10	9	10440460	227	9.3	3.4.C1.1
10	10	10510840	227	9.3	4.2.C1.3
10	11	10213350	228	11.5	2.4.C1.2
10	12	10218260	228	11.5	4.2.C2.2
10	13	10511010	228	11.5	3.1.C3.5
10	14	10511700	228	11.5	4.3.C1.1
10	15	10510070	229	13.6	2.1.C1.1
10	16	10214690	231	17.1	4.2.C1.1
10	17	10218070	231	17.1	2.4.C2.2
10	18	10221040	231	17.1	3.4.C1.2
10	19	10510870	232	19.6	3.1.C3.4
10	20	10221470	233	22.3	2.1.C1.2
10	21	10434100	233	22.3	4.2.C1.3
10	22	10221310	234	23.7	3.2.C1.5
10	23	10200581	235	26.6	2.4.C2.3
10	24	10434280	235	26.6	4.2.C2.4
10	25	10218250	236	29.8	3.1.C3.1
10	26	10508450	237	33.3	3.4.C1.5
10	27	10220660	238	36.6	2.1.C1.1
10	28	10211910	240	44	2.2.C1.1
10	29	10005800	241	49.1	3.2.C1.2
10	30	10221201	241	49.1	3.4.C1.4
10	31	10211950	242	52	4.1.C1.1
10	32	10436760	242	52	2.4.C2.4
10	33	10006220	243	56.6	2.1.C1.2
10	34	10200320	243	56.6	4.2.C1.3
10	35	10439270	243	56.6	3.2.C1.4
10	36	10436830	244	61.4	3.1.C3.6
10	37	10511750	244	61.4	4.2.C2.5
10	38	10200561	245	64.4	2.4.C2.3

Grade	Order of Difficulty	Item ID	Item Difficulty	Impact Data*	Subskill No.†
10	39	10500850	245	64.4	4.2.C2.3
10	40	10442410	246	68.9	4.3.C1.2
10	41	10511820	246	68.9	2.4.C1.1
10	42	10005890	247	73.2	3.1.C3.2
10	43	10108700	247	73.2	2.4.C2.2
10	44	10440350	247	73.2	4.2.C1.1
10	45	10509520	248	75.5	2.3.C1.1
10	46	10213000	249	79.3	4.3.C1.1
10	47	10435260	250	81.2	3.1.C3.6
10	48	10437320	250	81.2	2.4.C2.1
10	49	10210480	251	84.6	2.1.C1.1
10	50	10500860	251	84.6	3.1.C3.5
10	51	10200541	252	87.5	2.4.C2.3
10	52	10433690	252	87.5	4.2.C2.5
10	53	10006660	253	88.8	4.2.C1.1
10	54	10434210	253	88.8	3.3.C1.2
10	55	10101850	254	91.4	4.2.C1.2
10	56	10509270	254	91.4	2.4.C1.2
10	57	10510810	254	91.4	4.2.C1.3
10	58	10220860	255	92.4	2.1.C1.1
10	59	10436000	255	92.4	3.1.C3.2
10	60	10212210	256	93	3.2.C1.2
10	61	10440750	256	93	2.2.C1.1
10	62	10227100	257	94.9	4.1.C1.1
10	63	10440530	257	94.9	4.2.C2.3
10	64	10212140	258	95.6	4.3.C1.2
10	65	10434310	258	95.6	3.1.C3.7
10	66	10509400	259	96	2.4.C2.4
10	67	10201190	260	97.3	3.1.C3.3
10	68	10221540	261	97.5	3.1.C3.1
10	69	10440580	262	97.8	2.2.C1.2
10	70	10218390	263	98.5	4.3.C1.1

\* Impact data indicates the percentage of students answering this item incorrectly on the 2005-2006 administration.

<sup>†</sup> Subskill information denotes the "eligible content" included in the item. This describes the specific area within the discipline tested by the item and can be resolved online at <u>http://www.ode.state.or.us/search/results/?id=53</u>.

# APPENDIX E Initial Bookmarks Set By Individual Panelists

## Table E.1.

Median Initial Individual Bookmarks Set for Reading/Literature

Grade	Nearly Meets	Meets standards	Exceeds standards
3	199	203	215
5	210	217	228
8	224	230	239
10	231	237	248

#### Table E.2.

## Median Initial Individual Bookmarks Set for Math

Grade	Nearly Meets	Meets standards	Exceeds standards
3	200	205	215
5	214	217	228
8	225	230	241
10	232	239	247

# Table E.1.Median Initial Individual Bookmarks Set for Science

Grade	Nearly Meets	Meets standards	Exceeds standards
5	216	225	238
8	227	234	246
10	234	240	248

# APPENDIX F Consensus Bookmarks Set Across Grade Spans

## Table F.1.

Consensus Bookmarks Set for Reading/Literature

Grade	Nearly Meets	Meets standards	Exceeds standards
3	199	203	216
5	209	218	230
8	224	230	241
10	231	236	248

# Table F.2.

### Consensus Bookmarks Set for Math

Grade	Nearly Meets	Meets standards	Exceeds standards
3	201	204	215
5	214	218	230
8	225	230	241
10	231	236	246

#### Table F.3. Consensus Bookmarks Set for Science

Grade	Nearly Meets	Meets standards	Exceeds standards
5	216	225	238
8	229	234	246
10	235	240	249

# APPENDIX G Research and Impact Data

### Table G.1.

Cut Scores for Reading/Literature, Meets and Exceeds Standards

	]	Meets standards	Exceeds standards		Meets and Exceeds
Grade	RIT score	Estimated overall percent of students at or above cut (excludes exceeds)	RIT score	Estimated overall percent of students at or above cut	Estimated percent of students rated as proficient
3	204	47.5%	218	34.2%	81.7%
4*	211	45.6%	223	34.0%	79.6%
5	218	45.8%	230	25.6%	71.4%
6*	222	45.1%	234	25.3%	70.4%
7*	227	44.1%	239	25.2%	69.3%
8	231	43.9%	241	21.6%	65.5%
10	236	47.6%	248	16.9%	64.6%

\* interpolated score based on scores set by participants

#### Table G.2.

## Cut Scores for Math, Meets and Exceeds Standards

	1	Meets standards	Exceeds standards		Meets and Exceeds
Grade	RIT score	Estimated overall percent of students at or above cut (excludes exceeds)	RIT score	Estimated overall percent of students at or above cut	Estimated percent of students rated as proficient
3	205	49.7%	217	27.1%	76.7%
4*	212	48.1%	225	28.0%	76.1%
5	218	46.1%	229	26.4%	72.6%
6*	221	42.2%	232	28.1%	70.3%
7*	226	42.5%	238	28.3%	70.8%
8	230	40.3%	241	27.4%	67.7%
10	236	37.7%	246	16.7%	54.4%

\* interpolated score based on scores set by participants

#### Table G.3. Cut Scores for Science, Meets and Exceeds Standards

	Meets standards		Exc	ceeds standards	Meets and Exceeds
Grade	RIT score	Estimated overall percent of students at or above cut (excludes exceeds)	RIT score	Estimated overall percent of students at or above cut	Estimated percent of students rated as proficient
5	225	50.5%	238	22.4%	72.9%
8	234	44.2%	246	20.2%	64.4%
10	240	35.3%	249	20.7%	56.0%

## Table G.4. Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Reading, Grade 3

Participant	Nearly Meets	Meets	Exceeds
2	200	203	215
3	199	203	215
4	198	201	212
5	194	201	216
6	200	201	216
7	199	203	214
8	198	201	216
9	199	204	219
10	198	203	215
11	198	202	215
12	199	203	216
13	198	204	212
14	199	204	213
15	199	203	213
16	193	199	215
17	200	208	215
18	198	203	212
19	201	214	224
20	199	203	215
Median	199	203	215
Maximum	201	214	224
Minimum	193	199	212
SD	1.92	3.16	2.75

Table G.5.

Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Reading, Grade 5

Participant	Nearly Meets	Meets	Exceeds
2	208	216	228
3	211	218	231
4	218	221	234
5	213	221	228
6	211	221	229
7	211	220	229
8	209	216	228
9	211	216	226
10	209	216	226
11	209	216	228
12	211	217	227
13	211	217	228
14	209	211	228
15	209	214	226
16	211	220	229
17	209	217	229
18	208	214	227
19	211	219	235
20	210	220	231
22	209	218	230
23	211	216	222
24	209	219	234
Median	210	217	228
Maximum	218	221	235
Minimum	208	211	222
SD	2.13	2.59	2.96

Table G.6.

Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Reading, Grade 8

Participant	Nearly Meets	Meets	Exceeds
2	220	228	237
3	223	234	241
4	224	230	239
5	220	230	236
6	222	230	238
7	221	230	239
8	224	232	239
9	224	230	241
10	223	232	239
11	225	234	242
12	226	234	242
13	226	233	240
14	224	233	239
15	223	229	238
16	224	231	237
17	224	231	239
18	225	230	239
19	220	228	237
20	224	230	238
22	225	230	237
Median	224	230	239
Maximum	226	234	242
Minimum	220	228	236
SD	1.87	1.88	1.69

Table G.7.

Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Reading, Grade 10

Participant	Nearly Meets	Meets	Exceeds
2	234	240	249
3	229	237	249
4	234	237	243
5	232	235	248
6	229	237	248
7	227	237	248
8	233	240	249
9	230	239	249
10	232	239	248
11	229	240	245
12	232	240	250
13	227	237	250
14	230	237	249
15	232	239	245
16	231	237	248
17	227	237	248
18	231	237	249
Median	231	237	248
Maximum	234	240	250
Minimum	227	235	243
SD	2.29	1.52	1.89

Table G.8. Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Math, Grade 3

Participant	Nearly Meets	Meets	Exceeds
2	200	203	211
3	202	209	224
4	200	203	215
5	200	203	218
6	193	205	213
7	200	205	214
8	202	207	213
9	198	203	215
10	201	204	215
11	200	205	218
12	202	206	218
13	203	206	217
14	200	204	215
15	202	205	218
16	201	204	215
17	200	205	218
18	201	205	215
19	202	205	214
20	196	202	214
Median	200	205	215
Maximum	203	209	224
Minimum	193	202	211
SD	2.36	1.63	2.84

Table G.9. Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Math, Grade 5

Participant	Nearly Meets	Meets	Exceeds
1	210	215	225
2	215	219	230
3	209	216	230
4	214	217	227
5	214	217	223
8	214	216	227
9	214	217	227
10	212	218	239
11	211	218	227
12	214	218	235
13	215	218	225
14	214	217	229
15	214	216	229
16	214	216	229
17	212	219	231
18	214	216	229
19	210	218	227
20	214	216	227
Median	214	217	228
Maximum	215	219	239
Minimum	209	215	223
SD	1.85	1.16	3.69

# Table G.10. Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Math, Grade 8

Participant	Nearly Meets	Meets	Exceeds
2	225	228	237
3	226	232	238
4	226	230	241
5	224	228	239
6	225	228	239
7	224	228	237
8	228	230	241
9	223	233	241
10	224	228	241
11	224	228	237
12	225	233	241
13	224	228	241
14	224	234	239
15	225	230	241
16	225	234	241
17	226	234	241
18	225	233	241
19	228	234	241
20	226	233	246
22	225	233	241
Median	225	230	241
Maximum	228	234	246
Minimum	223	228	237
SD	1.29	2.54	2.07

# Table G.11. Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Math, Grade 10

Participant	Nearly Meets	Meets	Exceeds
2	231	236	245
3	236	238	247
4	236	239	247
5	234	239	248
6	237	242	250
7	231	239	249
8	235	237	247
9	232	239	244
10	229	244	252
11	231	240	250
12	230	237	247
13	230	236	242
14	230	240	250
15	230	239	247
16	232	238	247
17	230	237	244
18	234	239	249
19	232	237	244
20	237	242	247
Median	232	239	247
Maximum	237	244	252
Minimum	229	236	242
SD	2.65	2.12	2.54

Table G.12. Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Science, Grade 5

Participant	Nearly Meets	Meets	Exceeds
1	218	224	236
2	212	225	241
3	211	224	229
4	216	228	242
5	215	224	235
6	216	225	240
7	216	227	238
8	216	228	239
9	213	228	243
10	216	226	237
11	219	225	237
12	217	228	236
13	216	225	233
14	215	228	236
15	212	225	238
16	216	225	238
17	226	230	238
18	218	225	238
19	208	225	238
20	213	225	238
Median	216	225	238
Maximum	226	230	243
Minimum	208	224	229
SD	3.65	1.75	3.07

Table G.13. Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Science, Grade 8

Participant	Nearly Meets	Meets	Exceeds
1	227	234	246
2	227	236	245
3	231	236	246
4	230	237	246
5	227	231	242
6	233	237	248
7	225	233	246
8	228	234	246
9	230	233	245
10	231	234	249
11	229	233	245
12	223	234	246
13	226	231	246
14	225	234	244
15	230	232	245
16	225	234	247
17	227	231	247
18	231	236	245
19	226	231	245
22	229	235	246
Median	227	234	246
Maximum	233	237	249
Minimum	223	231	242
SD	2.62	1.96	1.45

Table G.14. Standard Setting, Step 1RIT Score of Recommended Bookmark Question by Each Participant for Science, Grade 10

Participant	Nearly Meets	Meets	Exceeds
2	233	240	251
3	233	240	249
4	237	241	247
5	234	240	249
6	237	241	247
7	238	244	247
8	235	241	248
9	234	241	249
10	233	236	248
11	233	240	252
12	235	241	249
13	232	241	250
14	233	238	245
15	232	240	252
16	234	237	243
17	234	238	243
Median	234	240	248
Maximum	238	244	252
Minimum	232	236	243
SD	1.8	1.91	2.72

# APPENDIX H Panelist Evaluations

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	0.0%	1.9%	7.2%	61.7%	29.2%	90.9%
Mathematics	3	19	0.0%	0.0%	10.5%	57.9%	31.6%	89.5%
	5	18	0.0%	11.1%	16.7%	44.4%	27.8%	72.2%
	8	20	0.0%	5.0%	0.0%	65.0%	30.0%	95.0%
	10	19	0.0%	0.0%	0.0%	68.4%	31.6%	100.0%
	3	19	0.0%	0.0%	0.0%	57.9%	42.1%	100.0%
Reading/	5	22	0.0%	0.0%	4.5%	68.2%	27.3%	95.5%
Literature	8	20	0.0%	5.0%	15.0%	55.0%	25.0%	80.0%
	10	16	0.0%	0.0%	18.8%	50.0%	31.3%	81.3%
Science	5	20	0.0%	0.0%	10.0%	50.0%	40.0%	90.0%
	8	20	0.0%	0.0%	5.0%	80.0%	15.0%	95.0%
	10	16	0.0%	0.0%	0.0%	81.3%	18.8%	100.0%

Question #1. The Bookmark Procedure was well described.

Question #2.	The training on bookmark	placement made the task clear to me.
<b>N</b>	0	

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	0.0%	3.3%	9.6%	61.7%	25.4%	87.1%
	3	19	0.0%	0.0%	10.5%	63.2%	26.3%	89.5%
Mathematics	5	18	0.0%	11.1%	16.7%	55.6%	16.7%	72.3%
Mathematics	8	20	0.0%	0.0%	5.0%	75.0%	20.0%	95.0%
	10	19	0.0%	0.0%	10.5%	57.9%	31.6%	89.5%
	3	19	0.0%	0.0%	5.3%	52.6%	42.1%	94.7%
Reading/	5	22	0.0%	4.5%	9.1%	50.0%	36.4%	86.4%
Literature	8	20	0.0%	10.0%	15.0%	50.0%	25.0%	75.0%
	10	16	0.0%	0.0%	6.3%	68.8%	25.0%	93.8%
Science	5	20	0.0%	10.0%	5.0%	50.0%	35.0%	85.0%
	8	20	0.0%	0.0%	15.0%	80.0%	5.0%	85.0%
	10	16	0.0%	0.0%	6.3%	81.3%	12.5%	93.8%

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	0.0%	1.0%	11.5%	66.5%	21.1%	87.6%
	3	19	0.0%	0.0%	5.3%	68.4%	26.3%	94.7%
Mathematics	5	18	0.0%	0.0%	16.7%	72.2%	11.1%	83.3%
Mathematics	8	20	0.0%	0.0%	10.0%	70.0%	20.0%	90.0%
	10	19	0.0%	5.3%	5.3%	57.9%	31.6%	89.5%
	3	19	0.0%	0.0%	5.3%	78.9%	15.8%	94.7%
Reading/	5	22	0.0%	0.0%	9.1%	63.6%	27.3%	90.9%
Literature	8	20	0.0%	5.0%	25.0%	60.0%	10.0%	70.0%
	10	16	0.0%	0.0%	18.8%	56.3%	25.0%	81.3%
Science	5	20	0.0%	0.0%	5.0%	60.0%	35.0%	95.0%
	8	20	0.0%	0.0%	20.0%	75.0%	5.0%	80.0%
	10	16	0.0%	0.0%	6.3%	68.8%	25.0%	93.8%

Question #3. The training materials were helpful.

Question #4. The goals for the Bookmark Procedure were clear.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		208	0.0%	7.2%	9.1%	57.7%	26.0%	83.7%
Mathematics	3	19	0.0%	5.3%	10.5%	63.2%	21.1%	84.3%
	5	18	0.0%	11.1%	16.7%	55.6%	16.7%	72.3%
	8	20	0.0%	0.0%	10.0%	60.0%	30.0%	90.0%
	10	19	0.0%	0.0%	15.8%	63.2%	21.1%	84.3%
	3	19	0.0%	5.3%	0.0%	52.6%	42.1%	94.7%
Reading/	5	21	0.0%	4.8%	0.0%	61.9%	33.3%	95.2%
Literature	8	20	0.0%	20.0%	5.0%	65.0%	10.0%	75.0%
	10	16	0.0%	12.5%	6.3%	43.8%	37.5%	81.3%
Science	5	20	0.0%	5.0%	0.0%	55.0%	40.0%	95.0%
	8	20	0.0%	15.0%	25.0%	40.0%	20.0%	60.0%
	10	16	0.0%	0.0%	12.5%	75.0%	12.5%	87.5%
Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
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Overall		208	1.9%	2.4%	4.8%	38.0%	52.9%	90.9%
	3	19	0.0%	0.0%	5.3%	36.8%	57.9%	94.7%
Mathematics	5	18	11.1%	0.0%	5.6%	27.8%	55.6%	83.4%
Mathematics	8	20	0.0%	0.0%	5.0%	40.0%	55.0%	95.0%
	10	19	0.0%	0.0%	10.5%	26.3%	63.2%	89.5%
	3	19	0.0%	0.0%	0.0%	21.1%	78.9%	100.0%
Reading/	5	21	0.0%	0.0%	4.8%	52.4%	42.9%	95.3%
Literature	8	20	0.0%	5.0%	0.0%	65.0%	30.0%	95.0%
	10	16	0.0%	0.0%	6.3%	50.0%	43.8%	93.8%
Science	5	20	5.0%	0.0%	0.0%	30.0%	65.0%	95.0%
	8	20	5.0%	20.0%	15.0%	40.0%	20.0%	60.0%
	10	16	0.0%	0.0%	0.0%	25.0%	75.0%	100.0%

Question #5. Reviewing the test items helped me place my bookmarks.

Question #6. The ordering of the items in the ordered item booklet agreed with my perception of the relative difficulty of the items.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	6.2%	28.2%	19.1%	42.6%	3.8%	46.4%
	3	19	5.3%	36.8%	15.8%	42.1%	0.0%	42.1%
Mathomatica	5	18	0.0%	22.2%	33.3%	44.4%	0.0%	44.4%
Wathematics	8	20	0.0%	25.0%	35.0%	35.0%	5.0%	40.0%
	10	19	15.8%	52.6%	10.5%	21.1%	0.0%	21.1%
	3	19	0.0%	21.1%	15.8%	63.2%	0.0%	63.2%
Reading/	5	22	0.0%	0.0%	13.6%	68.2%	18.2%	86.4%
Literature	8	20	0.0%	15.0%	20.0%	65.0%	0.0%	65.0%
	10	16	6.3%	12.5%	25.0%	50.0%	6.3%	56.3%
	5	20	5.0%	25.0%	25.0%	40.0%	5.0%	45.0%
Science	8	20	25.0%	45.0%	10.0%	20.0%	0.0%	20.0%
	10	16	12.5%	62.5%	6.3%	12.5%	6.3%	18.8%

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	1.0%	11.0%	22.0%	52.6%	13.4%	66.0%
	3	19	0.0%	0.0%	36.8%	63.2%	0.0%	63.2%
Mathematics	5	18	0.0%	11.1%	33.3%	38.9%	16.7%	55.6%
Mathematics	8	20	0.0%	15.0%	30.0%	50.0%	5.0%	55.0%
	10	19	0.0%	15.8%	31.6%	52.6%	0.0%	52.6%
	3	19	0.0%	5.3%	10.5%	73.7%	10.5%	84.2%
Reading/	5	22	0.0%	9.1%	9.1%	54.5%	27.3%	81.8%
Literature	8	20	5.0%	30.0%	10.0%	40.0%	15.0%	55.0%
	10	16	0.0%	12.5%	18.8%	37.5%	31.3%	68.8%
Science	5	20	0.0%	15.0%	5.0%	55.0%	25.0%	80.0%
	8	20	5.0%	5.0%	30.0%	50.0%	10.0%	60.0%
	10	16	0.0%	0.0%	31.3%	62.5%	6.3%	68.8%

Question #7. Reviewing the Target Student helped me place my bookmarks.

Question #8. I considered the content standards when I placed my bookmarks.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		207	0.0%	2.4%	3.9%	40.6%	53.1%	93.7%
	3	18	0.0%	0.0%	5.6%	16.7%	77.8%	94.5%
Mathematics	5	18	0.0%	0.0%	0.0%	55.6%	44.4%	100.0%
Wathematics	8	20	0.0%	0.0%	5.0%	55.0%	40.0%	95.0%
	10	19	0.0%	0.0%	10.5%	31.6%	57.9%	89.5%
	3	19	0.0%	0.0%	0.0%	26.3%	73.7%	100.0%
Reading/	5	22	0.0%	4.5%	0.0%	40.9%	54.5%	95.4%
Literature	8	20	0.0%	0.0%	5.0%	45.0%	50.0%	95.0%
	10	16	0.0%	6.3%	6.3%	43.8%	43.8%	87.6%
Science	5	19	0.0%	10.5%	0.0%	31.6%	57.9%	89.5%
	8	20	0.0%	5.0%	5.0%	60.0%	30.0%	90.0%
	10	16	0.0%	0.0%	6.3%	37.5%	56.3%	93.8%

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	1.4%	2.4%	2.9%	31.1%	62.2%	93.3%
	3	19	0.0%	0.0%	0.0%	26.3%	73.7%	100.0%
Mathematics	5	18	0.0%	5.6%	16.7%	38.9%	38.9%	77.8%
Wathematics	8	20	0.0%	5.0%	0.0%	35.0%	60.0%	95.0%
	10	19	0.0%	0.0%	0.0%	42.1%	57.9%	100.0%
	3	19	0.0%	0.0%	0.0%	5.3%	94.7%	100.0%
Reading/	5	22	4.5%	13.6%	4.5%	45.5%	31.8%	77.3%
Literature	8	20	0.0%	0.0%	0.0%	30.0%	70.0%	100.0%
	10	16	0.0%	0.0%	0.0%	25.0%	75.0%	100.0%
Science	5	20	5.0%	0.0%	0.0%	5.0%	90.0%	95.0%
	8	20	5.0%	0.0%	0.0%	55.0%	40.0%	95.0%
	10	16	0.0%	0.0%	12.5%	31.3%	56.3%	87.6%

Question #9. During Round 1, I placed my bookmarks without consulting other participants.

Question #10. I had enough time to consider my Round 1 bookmarks.

Content Area	Grade	Ν	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	1.4%	6.7%	5.3%	33.5%	53.1%	86.6%
	3	19	0.0%	0.0%	5.3%	21.1%	73.7%	94.8%
Mathematics	5	18	0.0%	0.0%	5.6%	44.4%	50.0%	94.4%
Mathematics	8	20	0.0%	5.0%	0.0%	45.0%	50.0%	95.0%
	10	19	0.0%	10.5%	10.5%	36.8%	42.1%	78.9%
	3	19	0.0%	0.0%	0.0%	26.3%	73.7%	100.0%
Reading/	5	22	0.0%	18.2%	13.6%	40.9%	27.3%	68.2%
Literature	8	20	0.0%	5.0%	0.0%	35.0%	60.0%	95.0%
	10	16	18.8%	0.0%	12.5%	43.8%	25.0%	68.8%
Science	5	20	0.0%	10.0%	0.0%	0.0%	90.0%	90.0%
	8	20	0.0%	15.0%	10.0%	40.0%	35.0%	75.0%
	10	16	0.0%	6.3%	0.0%	37.5%	56.3%	93.8%

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	0.0%	0.0%	0.5%	16.7%	82.8%	99.5%
	3	19	0.0%	0.0%	0.0%	10.5%	89.5%	100.0%
Mathematics	5	18	0.0%	0.0%	0.0%	22.2%	77.8%	100.0%
Wathematics	8	20	0.0%	0.0%	0.0%	15.0%	85.0%	100.0%
	10	19	0.0%	0.0%	0.0%	21.1%	78.9%	100.0%
	3	19	0.0%	0.0%	0.0%	5.3%	94.7%	100.0%
Reading/	5	22	0.0%	0.0%	0.0%	9.1%	90.9%	100.0%
Literature	8	20	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%
	10	16	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
Science	5	20	0.0%	0.0%	5.0%	20.0%	75.0%	95.0%
	8	20	0.0%	0.0%	0.0%	25.0%	75.0%	100.0%
	10	16	0.0%	0.0%	0.0%	25.0%	75.0%	100.0%

Question #11. Overall, my table's discussions were open and honest.

Question #12. Overall, I believe that my opinions were considered and valued by my group.

Content Area	Grade	Ν	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	0.5%	1.9%	4.3%	27.8%	65.6%	93.4%
	3	19	0.0%	0.0%	0.0%	36.8%	63.2%	100.0%
Mathomatica	5	18	0.0%	5.6%	11.1%	27.8%	55.6%	83.4%
Wathematics	8	20	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
	10	19	0.0%	0.0%	5.3%	15.8%	78.9%	94.7%
	3	19	0.0%	0.0%	0.0%	10.5%	89.5%	100.0%
Reading/	5	22	4.5%	0.0%	4.5%	22.7%	68.2%	90.9%
Literature	8	20	0.0%	10.0%	5.0%	30.0%	55.0%	85.0%
	10	16	0.0%	0.0%	0.0%	18.8%	81.3%	100.0%
Science	5	20	0.0%	0.0%	5.0%	25.0%	70.0%	95.0%
	8	20	0.0%	5.0%	10.0%	45.0%	40.0%	85.0%
	10	16	0.0%	0.0%	6.3%	31.3%	62.5%	93.8%

Content Area	Grade	Ν	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	2.4%	9.1%	13.4%	47.8%	27.3%	75.1%
	3	19	0.0%	15.8%	5.3%	42.1%	36.8%	78.9%
Mathematics	5	18	0.0%	0.0%	11.1%	66.7%	22.2%	88.9%
Mathematics	8	20	0.0%	0.0%	5.0%	40.0%	55.0%	95.0%
	10	19	0.0%	10.5%	10.5%	42.1%	36.8%	78.9%
	3	19	0.0%	10.5%	5.3%	63.2%	21.1%	84.3%
Reading/	5	22	0.0%	0.0%	4.5%	50.0%	45.5%	95.5%
Literature	8	20	5.0%	35.0%	25.0%	30.0%	5.0%	35.0%
	10	16	12.5%	18.8%	31.3%	31.3%	6.3%	37.6%
Science	5	20	0.0%	0.0%	15.0%	40.0%	45.0%	85.0%
	8	20	10.0%	0.0%	20.0%	65.0%	5.0%	70.0%
	10	16	0.0%	12.5%	18.8%	56.3%	12.5%	68.8%

Question #13. The presentation of different types of impact data was helpful to me.

Question #14. I learned how to do the bookmark placement as I went along, so my later ones may not be comparable to my earlier ones.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	21.1%	42.1%	12.0%	19.6%	5.3%	24.9%
	3	19	21.1%	57.9%	15.8%	5.3%	0.0%	5.3%
Mathematics	5	18	0.0%	50.0%	16.7%	22.2%	11.1%	33.3%
Mathematics	8	20	20.0%	55.0%	0.0%	25.0%	0.0%	25.0%
	10	19	21.1%	26.3%	15.8%	31.6%	5.3%	36.9%
	3	19	26.3%	21.1%	26.3%	15.8%	10.5%	26.3%
Reading/	5	22	31.8%	31.8%	4.5%	31.8%	0.0%	31.8%
Literature	8	20	30.0%	45.0%	10.0%	15.0%	0.0%	15.0%
	10	16	12.5%	50.0%	12.5%	18.8%	6.3%	25.1%
Science	5	20	35.0%	30.0%	5.0%	20.0%	10.0%	30.0%
	8	20	15.0%	60.0%	10.0%	15.0%	0.0%	15.0%
	10	16	12.5%	37.5%	18.8%	12.5%	18.8%	31.3%

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	0.0%	1.9%	1.4%	52.2%	44.5%	96.7%
	3	19	0.0%	5.3%	0.0%	57.9%	36.8%	94.7%
Mathomatica	5	18	0.0%	0.0%	0.0%	72.2%	27.8%	100.0%
Wathematics	8	20	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	10	19	0.0%	0.0%	0.0%	57.9%	42.1%	100.0%
	3	19	0.0%	0.0%	0.0%	42.1%	57.9%	100.0%
Reading/	5	22	0.0%	4.5%	4.5%	45.5%	45.5%	91.0%
Literature	8	20	0.0%	5.0%	0.0%	40.0%	55.0%	95.0%
	10	16	0.0%	0.0%	6.3%	56.3%	37.5%	93.8%
	5	20	0.0%	0.0%	0.0%	35.0%	65.0%	100.0%
Science	8	20	0.0%	0.0%	5.0%	65.0%	30.0%	95.0%
	10	16	0.0%	6.3%	0.0%	56.3%	37.5%	93.8%

Question #15. I understood how to place my bookmarks.

Question #16. Overall, I am satisfied with my group's final bookmarks.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		207	1.4%	8.7%	6.8%	57.5%	25.6%	83.1%
	3	19	0.0%	10.5%	10.5%	73.7%	5.3%	79.0%
Mathematics	5	18	0.0%	11.1%	0.0%	66.7%	22.2%	88.9%
Mathematics	8	20	0.0%	0.0%	5.0%	55.0%	40.0%	95.0%
	10	18	0.0%	5.6%	0.0%	61.1%	33.3%	94.4%
	3	19	0.0%	0.0%	10.5%	52.6%	36.8%	89.4%
Reading/	5	21	4.8%	4.8%	19.0%	52.4%	19.0%	71.4%
Literature	8	20	0.0%	20.0%	10.0%	55.0%	15.0%	70.0%
	10	16	0.0%	6.3%	0.0%	68.8%	25.0%	93.8%
Science	5	20	0.0%	0.0%	10.0%	35.0%	55.0%	90.0%
	8	20	10.0%	25.0%	5.0%	50.0%	10.0%	60.0%
	10	16	0.0%	12.5%	0.0%	68.8%	18.8%	87.6%

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		208	2.4%	5.3%	15.4%	50.0%	26.9%	76.9%
	3	19	0.0%	10.5%	10.5%	52.6%	26.3%	78.9%
Mathematics	5	18	0.0%	16.7%	22.2%	44.4%	16.7%	61.1%
Mathematics	8	20	0.0%	0.0%	10.0%	55.0%	35.0%	90.0%
	10	19	0.0%	0.0%	15.8%	63.2%	21.1%	84.3%
	3	19	0.0%	5.3%	0.0%	52.6%	42.1%	94.7%
Reading/	5	22	0.0%	0.0%	22.7%	50.0%	27.3%	77.3%
Literature	8	19	0.0%	5.3%	26.3%	57.9%	10.5%	68.4%
	10	16	0.0%	6.3%	18.8%	56.3%	18.8%	75.1%
Science	5	20	0.0%	0.0%	10.0%	25.0%	65.0%	90.0%
	8	20	25.0%	5.0%	25.0%	35.0%	10.0%	45.0%
	10	16	0.0%	12.5%	6.3%	62.5%	18.8%	81.3%

Question #17. I feel this procedure was fair.

Question #18. I am confident that the Bookmark Procedure produced valid standards.

Content Area	Grade	Ν	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		207	2.4%	11.6%	22.2%	49.3%	14.5%	63.8%
	3	18	0.0%	0.0%	22.2%	61.1%	16.7%	77.8%
Mathematics	5	18	0.0%	11.1%	33.3%	50.0%	5.6%	55.6%
Mathematics	8	20	0.0%	0.0%	0.0%	85.0%	15.0%	100.0%
	10	19	0.0%	26.3%	5.3%	52.6%	15.8%	68.4%
	3	19	0.0%	5.3%	5.3%	68.4%	21.1%	89.5%
Reading/	5	21	0.0%	14.3%	38.1%	42.9%	4.8%	47.7%
Literature	8	20	0.0%	25.0%	40.0%	30.0%	5.0%	35.0%
	10	16	6.3%	6.3%	12.5%	50.0%	25.0%	75.0%
Science	5	20	5.0%	0.0%	20.0%	35.0%	40.0%	75.0%
	8	20	15.0%	30.0%	30.0%	20.0%	5.0%	25.0%
	10	16	0.0%	6.3%	37.5%	50.0%	6.3%	56.3%

Content Area	Grade	Ν	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		207	4.3%	8.7%	15.0%	47.3%	24.6%	71.9%
	3	19	0.0%	0.0%	15.8%	57.9%	26.3%	84.2%
Mathematics	5	18	5.6%	0.0%	11.1%	66.7%	16.7%	83.4%
Mathematics	8	20	0.0%	30.0%	10.0%	45.0%	15.0%	60.0%
	10	19	0.0%	5.3%	15.8%	47.4%	31.6%	79.0%
	3	19	0.0%	0.0%	10.5%	47.4%	42.1%	89.5%
Reading/	5	22	13.6%	0.0%	22.7%	36.4%	27.3%	63.7%
Literature	8	20	0.0%	20.0%	10.0%	40.0%	30.0%	70.0%
	10	16	6.3%	12.5%	12.5%	50.0%	18.8%	68.8%
	5	20	10.0%	10.0%	0.0%	55.0%	25.0%	80.0%
Science	8	18	11.1%	5.6%	50.0%	33.3%	0.0%	33.3%
	10	16	0.0%	12.5%	6.3%	43.8%	37.5%	81.3%

Question #19. I would defend the Nearly Meets cut score against criticism that it is too high.

Question #20. I would defend the Nearly Meets cut score against criticism that it is too low.

Content Area	Grade	Ν	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		206	3.4%	6.8%	17.5%	53.9%	18.4%	72.3%
	3	19	0.0%	10.5%	15.8%	52.6%	21.1%	73.7%
Mathematics	5	18	5.6%	0.0%	5.6%	72.2%	16.7%	88.9%
Mathematics	8	20	0.0%	5.0%	10.0%	70.0%	15.0%	85.0%
	10	18	5.6%	0.0%	22.2%	55.6%	16.7%	72.3%
	3	19	0.0%	0.0%	15.8%	47.4%	36.8%	84.2%
Reading/	5	22	0.0%	13.6%	18.2%	36.4%	31.8%	68.2%
Literature	8	20	10.0%	15.0%	10.0%	50.0%	15.0%	65.0%
	10	16	0.0%	6.3%	18.8%	56.3%	18.8%	75.1%
Science	5	20	10.0%	10.0%	5.0%	65.0%	10.0%	75.0%
	8	18	5.6%	0.0%	55.6%	38.9%	0.0%	38.9%
	10	16	0.0%	12.5%	18.8%	50.0%	18.8%	68.8%

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		207	4.3%	12.6%	11.6%	46.9%	24.6%	71.5%
	3	19	0.0%	10.5%	5.3%	52.6%	31.6%	84.2%
Mathematics	5	18	0.0%	5.6%	11.1%	77.8%	5.6%	83.4%
Mathematics	8	20	0.0%	15.0%	10.0%	65.0%	10.0%	75.0%
	10	19	0.0%	10.5%	10.5%	36.8%	42.1%	78.9%
	3	19	0.0%	5.3%	15.8%	47.4%	31.6%	79.0%
Reading/	5	22	13.6%	31.8%	9.1%	22.7%	22.7%	45.4%
Literature	8	20	5.0%	25.0%	5.0%	40.0%	25.0%	65.0%
	10	16	0.0%	12.5%	18.8%	43.8%	25.0%	68.8%
Science	5	20	5.0%	10.0%	0.0%	45.0%	40.0%	85.0%
	8	18	16.7%	5.6%	38.9%	38.9%	0.0%	38.9%
	10	16	6.3%	0.0%	6.3%	50.0%	37.5%	87.5%

Question #21. I would defend the Meets cut score against criticism that it is too high.

Question #22. I would defend the Meets cut score against criticism that it is too low.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		207	4.3%	10.1%	11.6%	51.7%	22.2%	73.9%
	3	19	0.0%	5.3%	10.5%	57.9%	26.3%	84.2%
Mathematics	5	18	0.0%	0.0%	0.0%	77.8%	22.2%	100.0%
Wathematics	8	20	0.0%	15.0%	10.0%	65.0%	10.0%	75.0%
	10	19	10.5%	26.3%	10.5%	26.3%	26.3%	52.6%
	3	19	0.0%	0.0%	10.5%	52.6%	36.8%	89.4%
Reading/	5	22	0.0%	0.0%	4.5%	54.5%	40.9%	95.4%
Literature	8	20	15.0%	30.0%	15.0%	30.0%	10.0%	40.0%
	10	16	0.0%	25.0%	6.3%	43.8%	25.0%	68.8%
Science	5	20	5.0%	5.0%	15.0%	50.0%	25.0%	75.0%
	8	18	11.1%	0.0%	33.3%	55.6%	0.0%	55.6%
	10	16	6.3%	6.3%	12.5%	56.3%	18.8%	75.1%

Content Area	Grade	Ν	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		207	3.4%	6.3%	18.8%	50.2%	21.3%	71.5%
	3	19	0.0%	0.0%	15.8%	63.2%	21.1%	84.3%
Mathematics	5	18	0.0%	11.1%	5.6%	66.7%	16.7%	83.4%
Wathematics	8	20	0.0%	15.0%	15.0%	55.0%	15.0%	70.0%
	10	19	0.0%	5.3%	21.1%	52.6%	21.1%	73.7%
	3	19	5.3%	5.3%	10.5%	52.6%	26.3%	78.9%
Reading/	5	22	13.6%	13.6%	13.6%	36.4%	22.7%	59.1%
Literature	8	20	0.0%	10.0%	15.0%	50.0%	25.0%	75.0%
	10	16	0.0%	0.0%	43.8%	31.3%	25.0%	56.3%
Science	5	20	5.0%	5.0%	15.0%	40.0%	35.0%	75.0%
	8	18	5.6%	0.0%	38.9%	55.6%	0.0%	55.6%
	10	16	6.3%	0.0%	18.8%	50.0%	25.0%	75.0%

Question #23. I would defend the Exceeds cut score against criticism that it is too high.

Question #24. I would defend the Exceeds cut score against criticism that it is too low.

Content Area	Grade	Ν	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		207	4.8%	5.8%	17.9%	53.1%	18.4%	71.5%
	3	19	0.0%	0.0%	15.8%	78.9%	5.3%	84.2%
Mathematics	5	18	11.1%	5.6%	5.6%	72.2%	5.6%	77.8%
Mathematics	8	20	0.0%	15.0%	20.0%	50.0%	15.0%	65.0%
	10	19	10.5%	5.3%	10.5%	52.6%	21.1%	73.7%
	3	19	0.0%	0.0%	21.1%	52.6%	26.3%	78.9%
Reading/	5	22	4.5%	9.1%	13.6%	45.5%	27.3%	72.8%
Literature	8	20	5.0%	15.0%	25.0%	40.0%	15.0%	55.0%
	10	16	6.3%	0.0%	31.3%	31.3%	31.3%	62.6%
	5	20	10.0%	5.0%	5.0%	40.0%	40.0%	80.0%
Science	8	18	5.6%	0.0%	38.9%	55.6%	0.0%	55.6%
	10	16	0.0%	6.3%	12.5%	68.8%	12.5%	81.3%

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		209	0.0%	1.4%	7.7%	42.1%	48.8%	90.9%
	3	19	0.0%	0.0%	0.0%	73.7%	26.3%	100.0%
Mathematics	5	18	0.0%	11.1%	16.7%	33.3%	38.9%	72.2%
Wathematics	8	20	0.0%	0.0%	5.0%	35.0%	60.0%	95.0%
	10	19	0.0%	0.0%	15.8%	36.8%	47.4%	84.2%
	3	19	0.0%	0.0%	5.3%	36.8%	57.9%	94.7%
Reading/	5	22	0.0%	4.5%	9.1%	27.3%	59.1%	86.4%
Literature	8	20	0.0%	0.0%	0.0%	65.0%	35.0%	100.0%
	10	16	0.0%	0.0%	12.5%	37.5%	50.0%	87.5%
Science	5	20	0.0%	0.0%	0.0%	35.0%	65.0%	100.0%
	8	20	0.0%	0.0%	20.0%	45.0%	35.0%	80.0%
	10	16	0.0%	0.0%	0.0%	37.5%	62.5%	100.0%

Question #25. Participating in the Bookmark Procedure increased my understanding of the test.

Question #26. This experience will help me target instruction for the students in my classroom.

Content Area	Grade	Ν	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		202	1.0%	2.5%	19.3%	40.1%	37.1%	77.2%
	3	18	0.0%	0.0%	33.3%	38.9%	27.8%	66.7%
Mathematics	5	18	0.0%	5.6%	27.8%	33.3%	33.3%	66.6%
Mathematics	8	20	0.0%	0.0%	5.0%	40.0%	55.0%	95.0%
	10	19	0.0%	5.3%	5.3%	63.2%	26.3%	89.5%
	3	19	0.0%	5.3%	21.1%	42.1%	31.6%	73.7%
Reading/	5	22	0.0%	4.5%	22.7%	31.8%	40.9%	72.7%
Literature	8	19	5.3%	0.0%	5.3%	57.9%	31.6%	89.5%
	10	12	0.0%	0.0%	25.0%	58.3%	16.7%	75.0%
	5	20	0.0%	5.0%	15.0%	15.0%	65.0%	80.0%
Science	8	19	5.3%	0.0%	36.8%	26.3%	31.6%	57.9%
	10	16	0.0%	0.0%	18.8%	43.8%	37.5%	81.3%

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		208	0.5%	1.4%	3.4%	40.9%	53.8%	94.7%
	3	19	0.0%	5.3%	10.5%	36.8%	47.4%	84.2%
Mathematics	5	18	0.0%	5.6%	5.6%	44.4%	44.4%	88.8%
Mathematics	8	20	0.0%	0.0%	0.0%	30.0%	70.0%	100.0%
	10	19	0.0%	0.0%	0.0%	47.4%	52.6%	100.0%
	3	19	0.0%	0.0%	0.0%	31.6%	68.4%	100.0%
Reading/	5	22	0.0%	0.0%	0.0%	40.9%	59.1%	100.0%
Literature	8	20	0.0%	5.0%	5.0%	45.0%	45.0%	90.0%
	10	15	0.0%	0.0%	0.0%	66.7%	33.3%	100.0%
	5	20	0.0%	0.0%	5.0%	10.0%	85.0%	95.0%
Science	8	20	5.0%	0.0%	10.0%	55.0%	30.0%	85.0%
	10	16	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%

Question #27. This experience will help me target instruction for the students in my classroom.

Question #28. The standard setting was well organized.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		208	1.4%	7.7%	12.0%	44.2%	34.6%	78.8%
	3	19	0.0%	10.5%	21.1%	47.4%	21.1%	68.5%
Mathomatica	5	18	0.0%	16.7%	22.2%	38.9%	22.2%	61.1%
Mathematics	8	20	0.0%	5.0%	15.0%	45.0%	35.0%	80.0%
	10	19	0.0%	0.0%	15.8%	31.6%	52.6%	84.2%
	3	19	0.0%	0.0%	0.0%	63.2%	36.8%	100.0%
Reading/	5	21	4.8%	4.8%	9.5%	52.4%	28.6%	81.0%
Literature	8	20	5.0%	10.0%	25.0%	45.0%	15.0%	60.0%
	10	16	0.0%	6.3%	12.5%	68.8%	12.5%	81.3%
Science	5	20	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%
	8	20	5.0%	25.0%	10.0%	30.0%	30.0%	60.0%
	10	16	0.0%	6.3%	0.0%	50.0%	43.8%	93.8%

Content Area	Grade	N	Teacher	Administrator	Other
Overall		207	74.4%	14.0%	11.6%
	3	18	94.4%	5.6%	0.0%
Mathamatica	5	18	83.3%	0.0%	16.7%
Mathematics	8	20	90.0%	5.0%	5.0%
	10	19	78.9%	10.5%	10.5%
	3	19	68.4%	21.1%	10.5%
Reading/	5	22	45.5%	36.4%	18.2%
Literature	8	20	75.0%	20.0%	5.0%
	10	16	56.3%	18.8%	25.0%
	5	20	80.0%	10.0%	10.0%
Science	8	19	73.7%	10.5%	15.8%
	10	16	75.0%	12.5%	12.5%

Question #29. What is your occupation?

Question #30. How many years in your current profession?

Content Area	Grade	Ν	1-5	6-10	11-15	16-20	21+
Overall		209	8.1%	19.1%	15.8%	21.5%	35.4%
	3	19	5.3%	26.3%	5.3%	21.1%	42.1%
Mathematics	5	18	5.6%	16.7%	16.7%	22.2%	38.9%
Mathematics	8	20	10.0%	25.0%	10.0%	35.0%	20.0%
	10	19	5.3%	21.1%	5.3%	15.8%	52.6%
	3	19	0.0%	15.8%	21.1%	21.1%	42.1%
Reading/	5	22	4.5%	22.7%	13.6%	22.7%	36.4%
Literature	8	20	20.0%	20.0%	30.0%	5.0%	25.0%
	10	16	18.8%	0.0%	12.5%	31.3%	37.5%
	5	20	5.0%	20.0%	20.0%	25.0%	30.0%
Science	8	20	15.0%	30.0%	5.0%	10.0%	40.0%
	10	16	0.0%	6.3%	37.5%	31.3%	25.0%

Content Area	Grade	Ν	Educator	Parent	Community Member	Business Member
Overall		209	93.8%	3.3%	2.4%	0.5%
	3	19	94.7%	0.0%	5.3%	0.0%
Mathematics	5	18	94.4%	5.6%	0.0%	0.0%
	8	20	100.0%	0.0%	0.0%	0.0%
	10	19	94.7%	0.0%	5.3%	0.0%
	3	19	94.7%	0.0%	5.3%	0.0%
Reading/	5	22	95.5%	0.0%	0.0%	4.5%
Literature	8	20	95.0%	5.0%	0.0%	0.0%
	10	16	87.5%	0.0%	12.5%	0.0%
	5	20	95.0%	5.0%	0.0%	0.0%
Science	8	20	90.0%	10.0%	0.0%	0.0%
	10	16	87.5%	12.5%	0.0%	0.0%

Question #31. What is your primary role at this standard setting?

Question #32. What is your education levels	Question #	#32. `	What is	your	educa	tion	level	?
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Content Area	Grade	Ν	HSD or GED	Bachelor's	Master's	Doctorate
Overall		209	1.0%	23.4%	69.4%	6.2%
	3	19	0.0%	47.4%	47.4%	5.3%
Mathematics	5	18	0.0%	33.3%	66.7%	0.0%
Mathematics	8	20	0.0%	25.0%	75.0%	0.0%
	10	19	0.0%	21.1%	73.7%	5.3%
	3	19	0.0%	26.3%	68.4%	5.3%
Reading/	5	22	0.0%	13.6%	72.7%	13.6%
Literature	8	20	5.0%	20.0%	75.0%	0.0%
	10	16	6.3%	25.0%	62.5%	6.3%
	5	20	0.0%	20.0%	70.0%	10.0%
Science	8	20	0.0%	0.0%	85.0%	15.0%
	10	16	0.0%	31.3%	62.5%	6.3%

Content Area	Grade	Ν	Male	Female
Overall		208	28.8%	71.2%
	3	19	26.3%	73.7%
Mathematics	5	18	27.8%	72.2%
Mathematics	8	20	25.0%	75.0%
	10	19	42.1%	57.9%
	3	19	10.5%	89.5%
Reading/	5	21	38.1%	61.9%
Literature	8	20	15.0%	85.0%
	10	16	56.3%	43.8%
	5	20	10.0%	90.0%
Science	8	20	25.0%	75.0%
	10	16	50.0%	50.0%

Question #33. What is your gender?

Question #34. What is your race?

Content Area	Grade	Ν	Asian/ Pacific Islander	Black/ African- American	American Indian	White	Other
Overall		205	1.5%	1.5%	0.5%	94.1%	2.4%
	3	17	0.0%	0.0%	0.0%	100.0%	0.0%
Mathamatica	5	18	0.0%	0.0%	0.0%	94.4%	5.6%
Mathematics	8	19	5.3%	0.0%	0.0%	94.7%	0.0%
	10	19	5.3%	5.3%	0.0%	89.5%	0.0%
	3	19	0.0%	0.0%	0.0%	94.7%	5.3%
Reading/	5	21	0.0%	0.0%	4.8%	95.2%	0.0%
Literature	8	20	0.0%	0.0%	0.0%	95.0%	5.0%
	10	16	6.3%	0.0%	0.0%	93.8%	0.0%
	5	20	0.0%	5.0%	0.0%	85.0%	10.0%
Science	8	20	0.0%	0.0%	0.0%	100.0%	0.0%
	10	16	0.0%	6.3%	0.0%	93.8%	0.0%

Content Area	Grade	N	Yes	No
Overall		208	1.4%	98.6%
	3	18	5.6%	94.4%
Mathomatica	5	18	0.0%	100.0%
Mathematics	8	20	0.0%	100.0%
	10	19	0.0%	100.0%
	3	19	0.0%	100.0%
Reading/	5	22	0.0%	100.0%
Literature	8	20	0.0%	100.0%
	10	16	6.3%	93.8%
Science	5	20	5.0%	95.0%
	8	20	0.0%	100.0%
	10	16	0.0%	100.0%

Question #35. Are you of Hispanic origin?

Question #36. Have you taught Special Education?

Content Area	Grade	Ν	Yes	No
Overall		208	17.8%	82.2%
Mathematics	3	19	21.1%	78.9%
	5	17	5.9%	94.1%
	8	20	10.0%	90.0%
	10	19	10.5%	89.5%
	3	19	21.1%	78.9%
Reading/	5	22	22.7%	77.3%
Literature	8	20	20.0%	80.0%
	10	16	12.5%	87.5%
	5	20	20.0%	80.0%
Science	8	20	30.0%	70.0%
	10	16	18.8%	81.3%

Content Area	Grade	Ν	Yes	No
Overall		208	16.8%	83.2%
	3	19	26.3%	73.7%
Mathematics	5	18	11.1%	88.9%
Mathematics	8	20	20.0%	80.0%
	10	19	5.3%	94.7%
	3	19	10.5%	89.5%
Reading/	5	22	27.3%	72.7%
Literature	8	20	25.0%	75.0%
	10	16	12.5%	87.5%
	5	19	15.8%	84.2%
Science	8	20	10.0%	90.0%
	10	16	18.8%	81.3%

Question #37. Have you taught ESL/ELD?

Question #38. Have you taught Vocational Education?

Content Area	Grade	N	Yes	No
Overall		209	3.8%	96.2%
	3	19	0.0%	100.0%
Mathomatica	5	18	5.6%	94.4%
Mathematics	8	20	0.0%	100.0%
	10	19	15.8%	84.2%
	3	19	0.0%	100.0%
Reading/	5	22	4.5%	95.5%
Literature	8	20	10.0%	90.0%
	10	16	0.0%	100.0%
	5	20	0.0%	100.0%
Science	8	20	5.0%	95.0%
	10	16	0.0%	100.0%

Content Area	Grade	Ν	Yes	No
Overall		209	15.3%	84.7%
	3	19	5.3%	94.7%
Mathematics	5	18	11.1%	88.9%
Mathematics	8	20	20.0%	80.0%
	10	19	26.3%	73.7%
	3	19	5.3%	94.7%
Reading/	5	22	18.2%	81.8%
Literature	8	20	25.0%	75.0%
	10	16	25.0%	75.0%
	5	20	0.0%	100.0%
Science	8	20	10.0%	90.0%
	10	16	25.0%	75.0%

Question #39. Have you taught Alternative Education?

Question #40. Have you taught Adult Education?

Content Area	Grade	N	Yes	No	
Overall		209	27.3%	72.7%	
Mathematics	3	19	10.5%	89.5%	
	5	18	38.9%	61.1%	
	8	20	20.0%	80.0%	
	10	19	42.1%	57.9%	
Reading/ Literature	3	19	21.1%	78.9%	
	5	22	31.8%	68.2%	
	8	20	30.0%	70.0%	
	10	16	18.8%	81.3%	
Science	5	20	30.0%	70.0%	
	8	20	35.0%	65.0%	
	10	16	18.8%	81.3%	

Content Area	Grade	Ν	Mathematics	Mathematics Reading/ Literature	
Overall		209	36.4%	36.8%	26.8%
Mathematics	3	19	100.0%	0.0%	0.0%
	5	18	100.0%	0.0%	0.0%
	8	20	100.0%	0.0%	0.0%
	10	19	100.0%	0.0%	0.0%
Reading/ Literature	3	19	0.0%	100.0%	0.0%
	5	22	0.0%	100.0%	0.0%
	8	20	0.0%	100.0%	0.0%
	10	16	0.0%	100.0%	0.0%
Science	5	20	0.0%	0.0%	100.0%
	8	20	0.0%	0.0%	100.0%
	10	16	0.0%	0.0%	100.0%

Question #41. Which content area did you work on during this standard setting?

Question #42.	Which grade did yo	u work on during this	standard setting?
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Content Area	Grade	Ν	Grade 3	Grade 5	Grade 8	Grade 10
Overall		209	18.2%	28.7%	28.7%	24.4%
Mathematics	3	19	100.0%	0.0%	0.0%	0.0%
	5	18	0.0%	100.0%	0.0%	0.0%
	8	20	0.0%	0.0%	100.0%	0.0%
	10	19	0.0%	0.0%	0.0%	100.0%
	3	19	100.0%	0.0%	0.0%	0.0%
Reading/ Literature	5	22	0.0%	100.0%	0.0%	0.0%
	8	20	0.0%	0.0%	100.0%	0.0%
	10	16	0.0%	0.0%	0.0%	100.0%
Science	5	20	0.0%	100.0%	0.0%	0.0%
	8	20	0.0%	0.0%	100.0%	0.0%
	10	16	0.0%	0.0%	0.0%	100.0%