

EXECUTIVE SUMMARY

Title: Recommended Changes to Achievement Level Descriptors for the NCEXTEND2 for 2009-10 School Year

Type of Executive Summary:

Action Action on First Reading Discussion Information

Policy Implications:

Constitution _____
 General Statute # _____
 SBE Policy # HSP-C-026
 SBE Policy Amendment
 SBE Policy (New)
 APA # _____
 APA Amendment
 APA (New)
 Other NCLB Act of 2001

Presenter(s): Ms. Angela H. Quick (Deputy Chief Academic Officer, Curriculum, Instruction, Technology and Accountability Services) and Dr. Louis M. Fabrizio (Director of Accountability Policy & Communications)

Description:

The State Board of Education adopted the achievement level descriptors for the NCEXTEND2 EOG mathematics at grades 3-8 in October 2006 and the NCEXTEND2 EOG reading at grades 3-8 and the NCEXTEND2 EOG science at grades 5 and 8 in October 2008. As part of the peer review process with the U.S. Department of Education, the achievement level descriptors have been revised to define more clearly the performance of NCEXTEND2 students in each of the four achievement levels for mathematics, reading, and science.

The NCEXTEND2 is an assessment that tests students on grade-level standards using modified achievement standards; therefore, the achievement level descriptors must reflect the expectations of these students. The revised achievement level descriptors meet this criteria.

The revised achievement level descriptors are recommended for implementation with the 2009-10 school year.

Resources:

Staff psychometricians, other staff from Test Development Section at NCDPI, the test development staff at NCSU-TOPS, Exceptional Children representatives, curriculum staff, and some representatives from other sections and divisions within the agency, North Carolina English/language arts and science teachers, and a group of educators and practitioners.

Input Process:

Recommendations from educators in each content area and/or as expert judges of student achievement during the test data collection, staff from the Test Development Section, test development staff at NCSU-TOPS, and staff from other sections and divisions in the department provided input into the recommendations.

Stakeholders:

Public school educators, the exceptional children's community, the ELL community, state and federal policy makers, parents, students, and the general public

Timeline For Action:

The achievement level descriptors are provided for discussion at the May 2009 meeting of the SBE and for action at the June 2009 SBE meeting.

Recommendations:

The department recommends that the amendments to policy HSP-C-026 be approved.

Audiovisual equipment requested for the presentation:

Data Projector/Video (Videotape/DVD and/or Computer Data, Internet, Presentations-PowerPoint preferred)
Specify: _____

Audio Requirements (computer or other, except for PA system which is provided)
Specify: _____

Document Camera (for transparencies or paper documents – white paper preferred)

Motion By: _____

Seconded By: _____

Vote: Yes _____ No _____

Abstain _____

Approved _____ Disapproved _____

Postponed _____ Revised _____

*Person responsible for SBE agenda materials and SBE policy updates: Lucy Medlin, (919) 807-3771

**NORTH CAROLINA STATE BOARD OF EDUCATION
Policy Manual**

Policy Identification

Priority: High Student Performance

Category: ABCs Accountability Model

Policy ID Number: HSP-C-026

Policy Title: Achievement Level Ranges for the NCEXTEND2 EOG Reading and Mathematics Grades 3-8 and Science Grades 5 & 8

Current Policy Date: 10/02/2008

Other Historical Information: Previous Board Dates: 07/13/2006, 10/12/2006, 02/07/2008

Statutory Reference: GS 115C-174.11

Administrative Procedures Act (APA) Reference Number and Category: None

***** Begin Policy *** (Do not tamper with this line)**

The achievement-level ranges approved by the State Board of Education for the NCEXTEND2 EOG in Reading for use in the ABCs Accountability Program are as follows:

Subject	Grade	Level I	Level II	Level III	Level IV
Reading (effective 2005-06)	3	≤145	146-162	163-172	≥173
	4	≤145	146-161	162-171	≥172
	5	≤144	145-159	160-171	≥172
	6	≤144	145-159	160-173	≥174
	7	≤143	144-159	160-173	≥174
	8	≤143	144-158	159-172	≥173
Reading (effective 2007-08)	3	≤246	247-260	261-270	≥271
	4	≤245	246-259	260-268	≥269
	5	≤243	244-257	258-265	≥266
	6	≤242	243-256	257-266	≥267
	7	≤242	243-256	257-267	≥268
	8	≤242	243-257	258-269	≥270

The achievement level ranges approved by the State Board of Education for the NCEXTEND2

EOG in Mathematics for use in the ABCs Accountability Program are as follows:

Subject	Grade	Level I	Level II	Level III	Level IV
Mathematics (effective 2005-06)	3	≤147	148-158	159-167	≥168
	4	≤144	145-158	159-171	≥172
	5	≤143	144-158	159-170	≥171
	6	≤143	144-156	157-174	≥175
	7	≤143	144-155	156-177	≥178
	8	≤143	144-155	156-172	≥173
Science (effective 2007-08)	5	≤144	145-156	157-164	≥165
	8	≤140	141-154	155-160	≥161

NCEXTEND2 EOG Grade 3 Reading--Achievement Level Descriptors for Reading NCEXTEND2 Test

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient knowledge and skills in this subject area at grade level. Students performing at Achievement Level I demonstrate a need to develop the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 3. Students show little evidence of applying reading skills and strategies required to comprehend a variety of third grade level texts such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level demonstrate emerging knowledge and skills in this subject area and are minimally prepared at grade-level. Students performing at Achievement Level II demonstrate emerging reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 3. Students may show limited evidence of literal comprehension of a variety of third grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students inconsistently make basic inferences, draw simple conclusions, and locate information in a variety of texts, including simple charts, maps, and diagrams.

Achievement Level III

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level demonstrate basic grade level knowledge and skills. Students performing at Achievement Level III demonstrate basic grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 3. Students can comprehend a variety of basic third grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students can analyze and interpret text by making basic inferences, drawing simple conclusions, predicting outcomes, comparing and contrasting, and determining main idea. They also use basic text features and text structures to comprehend. Students may demonstrate simple character analysis, identify problems, and determine the meaning of some unfamiliar vocabulary in context.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those requirements to be proficient.

Students performing at this level demonstrate skills and knowledge beyond that required to be proficient at grade level. Students performing at Achievement Level IV demonstrate an application of the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 3. Students can comprehend a variety of third grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students may extend ideas by connecting, integrating and analyzing information. They apply an understanding of text features and structures to comprehend. Students recognize familiar figurative language and understand author's word choice.

NCEXTEND2 EOG Grade 4 Reading--Achievement Level Descriptors for Reading NCEXTEND2 Test

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient knowledge and skills in this subject area at grade level. Students performing at Achievement Level I demonstrate the need to develop the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 4. Students show little evidence of applying reading skills and strategies required to comprehend a variety of fourth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level demonstrate emerging knowledge and skills in this subject area and are minimally prepared at grade level. Students performing at Achievement Level II demonstrate emerging reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 4. Students may show limited evidence of literal comprehension of a variety of fourth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students apply emerging knowledge of text structure and may make some connections to information. They may also draw simple

conclusions, make simple predictions, and interpret information in a variety of texts that include basic graphs, charts, and maps.

Achievement Level III

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level demonstrate basic grade level knowledge and skills. Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 4. Students can comprehend a variety of fourth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students may examine author's word choice and identify author's purpose. They utilize basic skills and strategies such as making straightforward inferences, drawing simple conclusions, comparing and contrasting, and determining main idea. They also use basic text features and text structures to comprehend. Students examine reasons for characters' actions, and can determine meaning of some unfamiliar vocabulary from in context.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those requirements to be proficient.

Students performing at this level demonstrate skills and knowledge beyond that required to be proficient at grade level. Students performing at Achievement Level IV demonstrate an application of the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 4. Students can comprehend a variety of fourth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students can make simple connections and integrate information from the text. They can demonstrate an understanding of the text through concrete inferences, making connections, and drawing simple conclusions. Students also understand familiar figurative language and make judgments about author's word choice.

NCEXTEND2 EOG Grade 5 Reading--Achievement Level Descriptors for Reading NCEXTEND2 Test

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient knowledge and skills in this subject area on grade level. Students performing at Achievement Level I demonstrate a need to develop the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 5. Students show little evidence of applying reading skills and strategies required to comprehend a variety of fifth grade level texts such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level demonstrate emerging knowledge and skills in this subject area and are minimally prepared at grade level. Students performing at achievement Level II demonstrate emerging reading comprehension skills relative to those required in the North Carolina *Standard Course of Study* at grade 5. Students may show limited evidence of literal comprehension of a variety of fifth grade level texts such as fiction, literary and informational nonfiction, poetry and drama. Students apply knowledge of text structure to locate information for specific purposes. They may also draw simple conclusions, make basic inferences, and identify sequence of events and characters in a variety of texts.

Achievement Level III

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level demonstrate basic grade level knowledge and skills. Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 5. Students demonstrate basic comprehension of a variety of texts. Students can understand some figurative language. They can apply basic skills and strategies such as making simple predictions, making inferences, drawing conclusions, comparing and contrasting, and making connections. Students can determine reasons for characters' actions; as well as integrate information and ideas on a concrete level. They can also determine the meaning of some unfamiliar vocabulary in context.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction

in cognitive complexity, students are able to demonstrate content mastery beyond those requirements to be proficient.

Students performing at this level demonstrate skills and knowledge beyond that required to be proficient at grade level. Students performing at Achievement Level IV demonstrate an application of reading comprehension skills required in the North Carolina *Standard Course of Study* at Grade 5. Students can comprehend a variety of fifth grade texts such as fiction, literary and informational nonfiction, poetry, and drama. Students examine relationships and extend ideas by connecting and integrating information within the entire text. They demonstrate an understanding of the text through the inferences and connections they make and the conclusions they draw. Students also recognize commonly used figurative language and understand author's craft.

NCEXTEND2 EOG Grade 6 Reading--Achievement Level Descriptors for Reading NCEXTEND2 Test

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient knowledge and skills in this subject area to be successful at the next grade level. Students performing at Achievement Level I demonstrate the need to develop reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 6. Students show little evidence of reading skills and strategies required to comprehend a variety of sixth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level demonstrate inconsistent knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level. Students performing at Achievement Level II demonstrate limited reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 6. Students inconsistently show evidence of literal comprehension of a variety of sixth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. They may apply strategies such as determining meaning of unfamiliar vocabulary through context clues. Students may also make basic inferences, show evidence of utilizing text structure, recognize connections to prior knowledge, and apply reading strategies in a limited manner.

Achievement Level III

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level consistently demonstrate basic knowledge of grade level subject matter and skills and are prepared for the next grade level. Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 6. Students show evidence of literal comprehension of a variety of sixth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students compare and contrast elements within text to make meaning based on evidence. Students may infer, draw conclusions, and determine author's purpose. They may recognize literary elements and different points of view.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those required to be proficient.

Students performing at this level consistently demonstrate the knowledge and skills in this subject area required to become proficient at the next grade level. Students performing at Achievement Level IV demonstrate application of the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 6. Students show evidence of comprehension of a variety of sixth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students infer, draw conclusions, and determine author's purpose. They apply information in a variety of situations, and analyze the effect of figurative language, author's craft, and literary elements.

NCEXTEND2 EOG Grade 7 Reading--Achievement Level Descriptors for Reading NCEXTEND2 Test

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient knowledge and skills in this subject area to be successful at the next grade level. Students performing at Achievement Level I demonstrate the need to develop reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 7. Students show little evidence of reading skills and strategies required to comprehend a variety of seventh grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level demonstrate inconsistent knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level. Students performing at Achievement Level II demonstrate limited reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 7. Students inconsistently show evidence of literal comprehension of a variety of seventh grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. They may apply strategies such as determining meaning of unfamiliar vocabulary through context clues. Students may also make basic inferences, show evidence of utilizing text structure, recognize connections to prior knowledge, and apply reading strategies in a limited manner.

Achievement Level III

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level consistently demonstrate basic knowledge of grade level subject matter and skills and are prepared for the next grade level. Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 7. Students show evidence of literal comprehension of a variety of seventh grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students recognize organizational structure and relationships. Students compare and contrast elements within text to make meaning based on evidence. They may infer, draw conclusions, and determine author's purpose. They may recognize literary elements and different points of view.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those requirements to be proficient.

Students performing at this level consistently demonstrate knowledge and skills in this subject area required to become proficient at the next grade level. Students performing at Achievement Level IV demonstrate application of the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 7. Students show evidence of comprehension of a variety of seventh grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. They apply information in a variety of situations, and analyze the effect of figurative language, author's craft, and literary elements.

NCEXTEND2 EOG Grade 8 Reading--Achievement Level Descriptors for Reading NCEXTEND2 Test

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in this subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient knowledge and skills in this subject area to be successful at the next grade level. Students performing at Achievement Level I demonstrate the need to develop reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 8. Students show little evidence of reading skills and strategies required to comprehend a variety of eighth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level demonstrate inconsistent knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level. Students performing at Achievement Level II demonstrate limited reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 8. Students inconsistently show evidence of literal comprehension of a variety of eighth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. They may apply strategies such as determining meaning of unfamiliar vocabulary through context clues. Students may make basic inferences, show evidence of utilizing text structure, recognize connections to prior knowledge, and apply reading strategies in a limited manner.

Achievement Level III

Students performing at this level consistently demonstrate mastery of grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level consistently demonstrate basic knowledge of grade level subject matter and skills and are prepared for the next grade level. Students performing at Achievement Level III demonstrate grade level reading comprehension skills as required in the North Carolina *Standard Course of Study* at grade 8. Students show evidence of literal comprehension of a variety of eighth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students compare and contrast elements within text to make meaning based on evidence. Students may infer, draw conclusions, and determine author's purpose. They may recognize literary elements and different points of view.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those required to be proficient.

Students performing at this level consistently demonstrate knowledge and skills in this subject area required to be proficient at the next grade level. Students performing at Achievement Level IV demonstrate application of the reading comprehension skills required in the North Carolina *Standard Course of Study* at grade 8. Students show evidence of comprehension of a variety of eighth grade level texts, such as fiction, literary and informational nonfiction, poetry, and drama. Students infer, draw conclusions, and determine author's purpose. They apply information in a variety of situations, and analyze the effect of figurative language, author's craft, and literary elements.

Recommended NCEXTEND2 EOG Grade 3 Mathematics--Achievement Level Descriptors

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in the subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at Achievement Level I show minimal conceptual understanding and computational accuracy; and often respond with inappropriate answers or procedures. They rarely use problem-solving strategies. In grade three, students are given the opportunity to develop the following skill. Expectations include number sense for whole numbers through 9,999. Instruction includes multiplication facts and single digit multiplication and division. Third graders compare, order, and represent rational numbers (halves, fourths, thirds, sixths, and eighths) concretely and symbolically. They use appropriate vocabulary to compare, describe, and classify polygons and polyhedra (two- and three- dimensional shapes). Students measure length, capacity, weight, time, and temperature. They identify, create, and extend patterns. In third grade, students read, collect, organize, and display data using a variety of graphs. Third graders use the rectangular coordinate system to graph and identify points. They use symbols to represent unknown quantities in number sentences and to solve simple equations. Students solve problems using a variety of strategies, including listing arrangements and combinations of up to three items. Third graders apply these concepts, as well as those developed in previous years.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at Achievement Level II show limited evidence of conceptual understanding and computational accuracy and sometimes respond with appropriate answers or procedures. They demonstrate limited use of problem-solving strategies. In grade three, students are given the opportunity to develop the following skills. Expectations include number sense for whole numbers through 9,999. Instruction includes multiplication facts and single digit multiplication and division. Third graders compare, order, and represent rational numbers (halves, fourths, thirds, sixths, and eighths) concretely and symbolically. They use appropriate vocabulary to compare, describe, and classify polygons and polyhedra (two- and three- dimensional shapes). Students measure length, capacity, weight, time, and temperature. They identify, create, and extend patterns. In third grade, students read, collect, organize, and display data using a variety of graphs. Third graders use the rectangular coordinate system to graph and identify points. They use symbols to represent unknown quantities in number sentences and to solve simple equations. Students solve problems using a variety of strategies, including listing arrangements and combinations of up to three items. Third graders apply these concepts, as well as those developed in previous years.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at Achievement Level III generally show conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They use basic problem-solving strategies. In grade three, students are given the opportunity to develop the following skills. Expectations include number sense for whole numbers through 9,999. Instruction includes multiplication facts and single digit multiplication and division. Third graders compare, order, and represent rational numbers (halves, fourths, thirds, sixths, and eighths) concretely and symbolically. They use appropriate vocabulary to compare, describe, and classify polygons and polyhedra (two- and three- dimensional shapes). Students measure length, capacity, weight, time, and temperature. They identify, create, and extend patterns. In third grade, students read, collect, organize, and display data using a variety of graphs. Third graders use the rectangular coordinate system to graph and identify points. They use symbols to represent unknown quantities in number sentences and to solve simple equations. Students solve problems using a variety of strategies, including listing arrangements and combinations of up to three items. Third graders apply these concepts, as well as those developed in previous years.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade-level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those required to be proficient.

Students performing at Achievement Level IV commonly show conceptual understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies. In grade three, students are given the opportunity to develop the following skills. Expectations include number sense for whole numbers through 9,999. Instruction includes multiplication facts and single digit multiplication and division. Third graders compare, order, and represent rational numbers (halves, fourths, thirds, sixths, and eighths) concretely and symbolically. They use appropriate vocabulary to compare, describe, and classify polygons and polyhedra (two- and three- dimensional shapes). Students measure length, capacity, weight, time, and temperature. They identify, create, and extend patterns. In third grade, students read, collect, organize, and display data using a variety of graphs. Third graders use the rectangular coordinate system to graph and identify points. They use symbols to represent unknown quantities in number sentences and to solve simple equations. Students solve problems using a variety of strategies, including listing arrangements and combinations of up to three items. Third graders apply these concepts, as well as those developed in previous years.

Recommended NCEXTEND2 EOG Grade 4 Mathematics--Achievement Level Descriptors

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in the subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient knowledge and skills in this subject area. Students performing at Achievement Level I show minimal conceptual understanding and computational accuracy; and often respond with inappropriate answers or procedures. They rarely use problem-solving strategies. In grade four, students are given the opportunity to develop the following skills. Expectations include number sense for rational numbers 0.01 through 99,999 and fluency with multiplication and division using multi-digit numbers. They add and subtract rational numbers (halves, fourths, eighths, thirds, sixths, twelfths, fifths, tenths, hundredths, and mixed numbers) with like denominators. Students solve problems involving the perimeter of plane figures and the area of rectangles. In fourth grade, students identify, predict, and describe the results of transformations of plane figures. They collect, organize, analyze, and display data using a variety of graphs. Students use range, median, and mode to describe a set of data. Fourth graders design and use simple experiments to investigate, discuss, and describe the probability of an event. Students use symbols to represent simple proportional relationships and solve problems. They use the order of operations to verify and translate mathematical relationships with symbols, words, numbers, and pictures. Fourth-graders apply these concepts as well as those developed in previous years.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level inconsistently demonstrate knowledge and skills in this subject area. Students performing at Achievement Level II show limited evidence of conceptual understanding and computational accuracy and sometimes respond with appropriate answers or procedures. They demonstrate limited use of problem-solving strategies. In grade four, students are given the opportunity to develop the following skills. Expectations include number sense for rational numbers 0.01 through 99,999 and fluency with multiplication and division using multi-digit numbers. They add and subtract rational numbers (halves, fourths, eighths, thirds, sixths, twelfths, fifths, tenths, hundredths, and mixed numbers) with like denominators. Students solve problems involving the perimeter of plane figures and the area of rectangles. In fourth grade, students identify, predict, and describe the results of transformations of plane figures. They collect, organize, analyze, and display data using a variety of graphs. Students use range, median, and mode to describe a set of data. Fourth graders design and use simple experiments to investigate, discuss, and describe the probability of an event. Students use symbols to represent simple proportional relationships and solve problems. They use the order of operations to verify and translate mathematical relationships with symbols, words, numbers, and pictures. Fourth-graders apply these concepts as well as those developed in previous years.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level consistently demonstrate basic knowledge and skills in this subject area. Students performing at Achievement Level III generally show conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They use basic problem-solving strategies. In grade four, students are given the opportunity to develop the following skills. Expectations include number sense for rational numbers 0.01 through 99,999 and fluency with multiplication and division using multi-digit numbers. They add and subtract rational numbers (halves, fourths, eighths, thirds, sixths, twelfths, fifths, tenths, hundredths, and mixed numbers) with like denominators. Students solve problems involving the perimeter of plane figures and the area of rectangles. In fourth grade, students identify, predict, and describe the results of transformations of plane figures. They collect, organize, analyze, and display data using a variety of graphs. Students use range, median, and mode to describe a set of data. Fourth graders design and use simple experiments to investigate, discuss, and describe the probability of an event. Students use symbols to represent simple proportional relationships and solve problems. They use the order of operations to verify and translate mathematical relationships with symbols, words, numbers, and pictures. Fourth-graders apply these concepts as well as those developed in previous years.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade-level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those required to be proficient.

Students performing at this level consistently demonstrate knowledge and skills in this subject area. Students performing at Achievement Level IV commonly show conceptual understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies. In grade four, students are given the opportunity to develop the following skills. Expectations include number sense for rational numbers 0.01 through 99,999 and fluency with multiplication and division using multi-digit numbers. They add and subtract rational numbers (halves, fourths, eighths, thirds, sixths, twelfths, fifths, tenths, hundredths, and mixed numbers) with like denominators. Students solve problems involving the perimeter of plane figures and the area of rectangles. In fourth grade, students identify, predict, and describe the results of transformations of plane figures. They collect, organize, analyze, and display data using a variety of graphs. Students use range, median, and mode to describe a set of data. Fourth graders design and use simple experiments to investigate, discuss, and describe the probability of an event. Students use symbols to represent simple proportional relationships and solve problems. They use the order of operations to verify and translate mathematical relationships with symbols, words, numbers, and pictures. Fourth-graders apply these concepts as well as those developed in previous years.

Recommended *NCEXTEND2* EOG Grade 5 Mathematics—Achievement Level Descriptors

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in the subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient knowledge and skills in this subject area. Students performing at Achievement Level I show minimal conceptual understanding and computational accuracy; and often respond with inappropriate answers or procedures. They rarely use problem-solving strategies. In grade five, students are given the opportunity to develop the following skills. Expectations include number sense for rational numbers 0.001 through 999,999 and fluency in adding, subtracting, comparing and ordering fractions and decimals. They use appropriate tools to identify, estimate, and measure the angles of plane figures, including the sums of interior angles. Students identify, define, and describe the properties of plane figures, including parallelism, perpendicularity, and lengths of sides and diagonals. Students identify, create, generalize, and extend patterns. To solve problems, fifth graders collect, organize, analyze, and display data using a variety of graphs. They use range, median, and mode to describe multiple sets of data. Students use algebraic expressions to solve one-step equations and inequalities. They identify, describe, and analyze situations with constant or varying rates of change.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level inconsistently demonstrate knowledge and skills in this subject area. Students performing at Achievement Level II show limited evidence of conceptual understanding and computational accuracy and sometimes respond with appropriate answers or procedures. They demonstrate limited use of problem-solving strategies. In grade five, students are given the opportunity to develop the following skills. Expectations include number sense for rational numbers 0.001 through 999,999 and fluency in adding, subtracting, comparing and ordering fractions and decimals. They use appropriate tools to identify, estimate, and measure the angles of plane figures, including the sums of interior angles. Students identify, define, and describe the properties of plane figures, including parallelism, perpendicularity, and lengths of sides and diagonals. Students identify, create, generalize, and extend patterns. To solve problems, fifth graders collect, organize, analyze, and display data using a variety of graphs. They use range, median, and mode to describe multiple sets of data. Students use algebraic expressions to solve one-step equations and inequalities. They identify, describe, and analyze situations with constant or varying rates of change.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level consistently demonstrate basic knowledge and skills in this subject area. Students performing at Achievement Level III generally show conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They use basic problem-solving strategies. In grade five, students are given the opportunity to develop the following skills. Expectations include number sense for rational numbers 0.001 through 999,999 and fluency in adding, subtracting, comparing and ordering fractions and decimals. They use appropriate tools to identify, estimate, and measure the angles of plane figures, including the sums of interior angles. Students identify, define, and describe the properties of plane figures, including parallelism, perpendicularity, and lengths of sides and diagonals. Students identify, create, generalize, and extend patterns. To solve problems, fifth graders collect, organize, analyze, and display data using a variety of graphs. They use range, median, and mode to describe multiple sets of data. Students use algebraic expressions to solve one-step equations and inequalities. They identify, describe, and analyze situations with constant or varying rates of change.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade-level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those required to be proficient.

Students performing at this level consistently demonstrate knowledge and skills in this subject area. Students performing at Achievement Level IV commonly show conceptual understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies. In grade five, students are given the opportunity to develop the following skills. Expectations include number sense for rational numbers 0.001 through 999,999 and fluency in adding, subtracting, comparing and ordering fractions and decimals. They use appropriate tools to identify, estimate, and measure the angles of plane figures, including the sums of interior angles. Students identify, define, and describe the properties of plane figures, including parallelism, perpendicularity, and lengths of sides and diagonals. Students identify, create, generalize, and extend patterns. To solve problems, fifth graders collect, organize, analyze, and display data using a variety of graphs. They use range, median, and mode to describe multiple sets of data. Students use algebraic expressions to solve one-step equations and inequalities. They identify, describe, and analyze situations with constant or varying rates of change.

Recommended NCEXTEND2 EOG Grade 6 Mathematics—Achievement Level Descriptors

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in the subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient grade-level knowledge and skills in this subject area to be successful at the next grade level. Students performing at Achievement Level I show minimal conceptual understanding and computational accuracy. They frequently respond with inappropriate answers or procedures. They seldom use problem-solving strategies. In grade six, students are exposed to but show minimal proficiency in the following concepts: Add, subtract, multiply, and divide non-negative rational numbers. Students compare, order, and estimate with rational numbers. They develop fluency in the use of factors, multiples, exponential notation, and prime factorization. Students identify and use properties of plane and three-dimensional figures to solve problems. They develop fluency with counting strategies and solve problems by determining the probability of simple, compound, dependent, and independent events. They simplify algebraic expressions as well as use one- and two-step equations and inequalities to represent relationships and solve problems. They apply grade six concepts as well as those developed in previous years to solve relevant and authentic problems.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level demonstrate insufficient grade-level knowledge and skills in this subject area and are not yet prepared for the next grade level. Students performing at Achievement Level II exhibit inconsistent performance and show limited evidence of conceptual understanding. They have difficulty applying problem-solving strategies in unfamiliar situations. In grade six, students are exposed to but show limited proficiency in the following concepts: Add, subtract, multiply, and divide non-negative rational numbers. Students compare, order, and estimate with rational numbers. They develop fluency in the use of factors, multiples, exponential notation, and prime factorization. Students identify and use properties of plane and three-dimensional figures to solve problems. They develop fluency with counting strategies and solve problems by determining the probability of simple, compound, dependent, and independent events. They simplify algebraic expressions as well as use one- and two-step equations and inequalities to represent relationships and solve problems. They apply grade six concepts as well as those developed in previous years to solve relevant and authentic problems.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level consistently demonstrate basic knowledge of grade level subject matter and skills and are minimally prepared for the next grade level. Students performing at Achievement Level III generally show conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They use a variety of problem-solving strategies. In grade six, students are exposed to, and show basic proficiency in the following concepts: add, subtract, multiply, and divide non-

negative rational numbers. Students compare, order, and estimate with rational numbers. They develop fluency in the use of factors, multiples, exponential notation, and prime factorization. Students identify and use properties of plane and three-dimensional figures to solve problems. They develop fluency with counting strategies and solve problems by determining the probability of simple, compound, dependent, and independent events. They simplify algebraic expressions as well as use one- and two-step equations and inequalities to represent relationships and solve problems. They apply grade six concepts as well as those developed in previous years to solve relevant and authentic problems.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade-level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those required to be proficient.

Students performing at this level consistently perform in a manner to be prepared for the next grade level. Students performing at Achievement Level IV show conceptual understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies. In grade six, students are exposed to and show consistent proficiency in the following concepts: add, subtract, multiply, and divide non-negative rational numbers. Students compare, order, and estimate with rational numbers. They develop fluency in the use of factors, multiples, exponential notation, and prime factorization. Students identify and use properties of plane and three-dimensional figures to solve problems. They develop fluency with counting strategies and solve problems by determining the probability of simple, compound, dependent, and independent events. They simplify algebraic expressions as well as use one- and two-step equations and inequalities to represent relationships and solve problems. They apply grade six concepts as well as those developed in previous years to solve relevant and authentic problems.

Recommended NCEXTEND2 EOG Grade 7 Mathematics—Achievement Level Descriptors

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in the subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient grade-level knowledge and skills in this subject area to be successful at the next grade level. Students performing at Achievement Level I show minimal conceptual understanding and computational accuracy. They frequently respond with inappropriate answers or procedures. They seldom use problem-solving strategies. In grade seven, students are exposed to, but show minimal proficiency in the following concepts: Compare, order, estimate, and compute with rational numbers. They solve problems involving similarity, scale drawings, surface area, and volume. Seventh graders graph data and use measures of central tendency and variability to describe and analyze sets of data. They use multiple representations to investigate linear relationships. Students use linear

equations and inequalities, ratios, proportions, and percents to represent relationships and solve problems. They apply grade seven concepts as well as those developed in previous years to solve relevant and authentic problems.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level demonstrate insufficient grade-level knowledge and skills in this subject area and are not yet prepared for the next grade level. Students performing at Achievement Level II exhibit inconsistent performance and show limited evidence of conceptual understanding. They have difficulty applying problem-solving strategies in unfamiliar situations. In grade seven, students are exposed to, but show limited proficiency in the following concepts: Compare, order, estimate, and compute with rational numbers. They solve problems involving similarity, scale drawings, surface area, and volume. Seventh graders graph data and use measures of central tendency and variability to describe and analyze sets of data. They use multiple representations to investigate linear relationships. Students use linear equations and inequalities, ratios, proportions, and percents to represent relationships and solve problems. They apply grade seven concepts as well as those developed in previous years to solve relevant and authentic problems.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level consistently demonstrate basic knowledge of grade level subject matter and skills and are minimally prepared for the next grade level. Students performing at Achievement Level III generally show conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They use a variety of basic problem-solving strategies. In grade seven, students are exposed to and show basic proficiency in the following concepts: compare, order, estimate, and compute with rational numbers. They solve problems involving similarity, scale drawings, surface area, and volume. Seventh graders graph data and use measures of central tendency and variability to describe and analyze sets of data. They use multiple representations to investigate linear relationships. Students use linear equations and inequalities, ratios, proportions, and percents to represent relationships and solve problems. They apply grade seven concepts as well as those developed in previous years to solve relevant and authentic problems.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade-level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction

in cognitive complexity, students are able to demonstrate content mastery beyond those required to be proficient.

Students performing at this level consistently perform in a manner to be prepared for the next grade level. Students performing at Achievement Level IV show conceptual understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies. In grade seven, students are exposed to and show proficiency in the following concepts: compare, order, estimate, and compute with rational numbers. They solve problems involving similarity, scale drawings, surface area, and volume. Seventh graders graph data and use measures of central tendency and variability to describe and analyze sets of data. They use multiple representations to investigate linear relationships. Students use linear equations and inequalities, ratios, proportions, and percents to represent relationships and solve problems. They apply grade seven concepts as well as those developed in previous years to solve relevant and authentic problems.

Recommended NCEXTEND2 EOG Grade 8 Mathematics—Achievement Level Descriptors

Achievement Level I

Students performing at this level do not have sufficient mastery of knowledge and skills in the subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students performing at this level demonstrate insufficient grade-level knowledge and skills in this subject area to be successful at the next grade level. Students performing at Achievement Level I show minimal conceptual understanding and computational accuracy. They frequently respond with inappropriate answers or procedures. They seldom use problem-solving strategies. In grade eight, students are exposed to, but show minimal proficiency in the following concepts: Develop the concept of and make estimates with irrational numbers. Students use the Pythagorean Theorem and apply concepts of indirect measurement to solve problems. Eighth graders represent data on graphs and approximate lines of best fit for scatter plots. Students develop an understanding of functions and write equations for linear relationships. They use linear equations and inequalities to solve problems and justify solutions. They apply grade eight concepts as well as those developed in previous years to solve relevant and authentic problems.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students performing at this level demonstrate insufficient grade-level knowledge and skills in this subject area and are not yet prepared for the next grade level. Students performing at Achievement Level II exhibit inconsistent performance and show limited evidence of conceptual understanding. They have difficulty applying problem-solving strategies in unfamiliar situations. In grade eight, students are

exposed to, but show limited proficiency in the following concepts: Develop the concept of and make estimates with irrational numbers. Students use the Pythagorean Theorem and apply concepts of indirect measurement to solve problems. Eighth graders represent data on graphs and approximate lines of best fit for scatter plots. Students develop an understanding of functions and write equations for linear relationships. They use linear equations and inequalities to solve problems and justify solutions. They apply grade eight concepts as well as those developed in previous years to solve relevant and authentic problems.

Achievement Level III

Students performing at this level consistently demonstrate mastery of the grade level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students performing at this level consistently demonstrate basic knowledge of grade level subject matter and skills and are minimally prepared for the next grade level. Students performing at Achievement Level III generally show conceptual understanding, compute accurately, and respond with appropriate answers or procedures. They use a variety of basic problem-solving strategies. In grade eight, students are exposed to and show basic proficiency in the following concepts: develop the concept of and make estimates with irrational numbers. Students use the Pythagorean Theorem and apply concepts of indirect measurement to solve problems. Eighth graders represent data on graphs and approximate lines of best fit for scatter plots. Students develop an understanding of functions and write equations for linear relationships. They use linear equations and inequalities to solve problems and justify solutions. They apply grade eight concepts as well as those developed in previous years to solve relevant and authentic problems.

Achievement Level IV

Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade-level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those required to be proficient.

Students performing at this level consistently perform in a manner to be prepared for the next grade level. Students performing at Achievement Level IV show conceptual understanding, compute accurately, and respond consistently with appropriate answers or procedures. They demonstrate flexibility by using a variety of problem-solving strategies. In grade eight, students are exposed to and show proficiency in the following concepts: develop the concept of and make estimates with irrational numbers. Students use the Pythagorean Theorem and apply concepts of indirect measurement to solve problems. Eighth graders represent data on graphs and approximate lines of best fit for scatter plots. Students develop an understanding of functions and write equations for linear relationships. They use linear equations and inequalities to solve problems and justify solutions. They apply grade eight concepts as well as those developed in previous years to solve relevant and authentic problems.

NCEXTEND2 EOG Grade 5 Science—Achievement Level Descriptors

Achievement Level I

Students performing at this level ~~do not have sufficient mastery of demonstrate insufficient~~ knowledge and skills in this subject area to be successful at the next grade level.

~~With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.~~

Students demonstrate insufficient understanding of the diversity within ecosystems, the concept that basic landforms change, weather and climate, and the concepts of force and motion.

Achievement Level II

Students performing at this level demonstrate inconsistent ~~mastery of~~ knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

~~With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.~~

Students demonstrate inconsistent understanding of the relationships within ecosystems, the components of the processes that change basic landforms, some factors influencing weather and climate, and the relationship between force and motion.

Achievement Level III

Students performing at this level consistently demonstrate ~~mastery of sufficient knowledge of~~ grade-level subject matter and skills and are ~~well~~ prepared for the next grade level.

~~With appropriate modifications such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.~~

Students demonstrate a sufficient understanding of the interdependence within ecosystems, the processes that change basic landforms, factors influencing weather and climate, and forces and motion in basic technological designs.

Achievement Level IV

Students performing at this level consistently ~~perform in a superior manner demonstrate content mastery~~ clearly beyond that required to be proficient ~~and are well prepared for the next at~~ grade-level ~~work~~.

~~With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those requirements to be proficient.~~

Students demonstrate a considerable understanding of the interdependence within ecosystems as well as the ability to analyze the relationships within, the processes that change basic landforms while considering possible outcomes, the factors influencing weather and climate as well as interpreting how

changes would affect the system, and forces and motion in basic technological designs as well as applying the concepts to possible situations.

NCEXTEND2 EOG Grade 8 Science—Achievement Level Descriptors

Achievement Level I

Students performing at this level do not have sufficient mastery ~~demonstrate insufficient knowledge~~ and skills in this subject area to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are insufficiently able to demonstrate content mastery.

Students demonstrate insufficient understanding of some basic principles of scientific inquiry and technological design; basic characteristics of water; chemical changes in matter; some factors affecting biological and geological evolution; some basic structures of an animal cell; micro-organisms that cause diseases.

Achievement Level II

Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students inconsistently demonstrate content mastery required to be proficient.

Students demonstrate inconsistent understanding of basic principles and methodologies of scientific inquiry and technological design; the distribution, use, and properties of water and the water cycle; some properties of pure substances and the recognition of chemical changes in matter; factors affecting biological and geological evolution which cause change over time; the basic structures and some functions of an animal cell and some single-celled organisms; simple relationships between micro-organisms and diseases, and basic applications of biotechnology.

Achievement Level III

Students performing at this level consistently demonstrate mastery ~~sufficient knowledge~~ of grade--level subject matter and skills and are well prepared for the next grade level.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery required to be proficient.

Students demonstrate a sufficient understanding of principles and methodologies of scientific inquiry and technological design; the distribution, use, properties, quality and stewardship of water systems; the properties of pure substances, the recognition or measurement of chemical changes in matter, and impacts of chemicals on humans; processes that affect biological and geological evolution, and how technologies can be used to monitor changes over time; the structures, functions, and processes of an animal cell, and the variety of single-celled organisms; relationships between micro-organisms and disease, human impacts on disease control, and the applications of biotechnology.

Achievement Level IV

Students performing at this level consistently ~~perform in a superior manner demonstrate content mastery~~ clearly beyond that required to be proficient ~~and are well prepared for the next~~ at grade level work.

With appropriate modifications, such as fewer questions, only two items presented per page, simplified language in items (grade-level content vocabulary is not simplified), fewer answer choices, and reduction in cognitive complexity, students are able to demonstrate content mastery beyond those required to be proficient.

Students demonstrate a considerable understanding of the application of principles and methodologies of scientific inquiry and technological design; relationships and unifying concepts of the distribution, use, properties, quality and stewardship of water systems; the application of the properties of pure substances, the recognition, measurement, and prediction of chemical changes in matter, and impacts of chemicals on humans; relationships and unifying concepts of the processes that affect biological and geological evolution, and how technologies can be used to monitor and predict changes over time; cellular structures, functions, and processes and explain how all three are interrelated and the variety of single-celled organisms; relationships between micro-organisms and disease, human impacts on disease control, biotechnology and apply them to real-world situations.