

2.0 A Parent and Educator Guide to Understanding the Colorado Measures of Academic Success (CMAS) Student Performance Report

2.1 Program Overview

CMAS is Colorado's standards-based assessment designed to measure the Colorado Academic Standards (CAS). The CAS contain the concepts and skills students need to learn in order to be successful in the current grade and to make academic progress from year to year.

In spring 2019, CMAS mathematics and English language arts (ELA)* assessments were given to students in grades 3 through 8, CMAS science assessments were given in grades 5, 8, and 11, and CMAS social studies assessments were given in grades 4 and 7 (social studies assessments are administered on a sampling basis to one-third of the elementary and middle schools each year). The purpose of CMAS is to indicate the degree to which students have mastered the CAS in the assessed content areas at the end of the tested grade level. CMAS results are intended to provide one measure of a student's academic progress relative to the CAS. An individual student performance report is created for each student who takes a CMAS assessment so that parents can understand their student's command over the CAS in the assessed grade level and content area.

As a requirement of Colorado School Law C.R.S. §22-7-1006.3 (4) (a) and (b), Spanish-speaking students in grades 3 and 4 who meet established eligibility criteria may take the Colorado Spanish language arts (CSLA) assessment in place of the ELA assessment. CSLA assessments are parallel and comparable to the CMAS ELA assessments in test design, item type, scoring and reporting. Therefore, separate CSLA reports and descriptions are not included in this guide (refer to ELA reporting information and examples).

2.2 Performance Levels and Types of Scores on the Student Reports

To understand each part of the individual student performance reports, it is important to become familiar with the types of assessment scores included on the reports. Student performance on the Colorado assessments is described at varying levels on the individual student reports using scale scores, performance levels, subclaim performance indicators, and percentile ranking. State, district, and school average results are included in relevant sections of the report to help parents understand how their student's performance compares to that of other students. In some instances, a dash (—) appears in place of average results for a school and/or district. This indicates there are too few students (less than 16) to maintain student privacy, and therefore, results are not reported.

2.2.1 Scale Scores

A scale score is a numerical value that summarizes student performance. When the points a student earns on an assessment are placed on a common scale, the student's score becomes a scale score. Scale scores adjust for slight differences in difficulty on versions of the assessment that can vary slightly from student to student within a year (referred to as forms of the assessment) or between school years (referred to as administrations). Scale scores allow for comparisons of assessment scores, within a particular grade and subject area, across administrations. As an example, a student who receives a score of 700 on one form of the 7th grade mathematics assessment is expected to score a 700 on any form of the assessment. A student who scored 650 on the 8th grade science assessment in 2019 demonstrated the same level of mastery of concepts and skills as an 8th grade student who scored 650 on the science test in 2017. Scale scores cannot be used to compare student performance across grades (e.g., grade 4 to grade 7) or subject areas (e.g., science to mathematics).

Mathematics, ELA, and CSLA scale scores for the overall test range from 650 to 850. ELA and CSLA reports also provide separate scale scores for reading. Reading scale scores range from 110 to 190.

CMAS science and social studies scale scores range from 300 to 900. Science and social studies scale scores are reported for the overall test, content standards and Scientific Inquiry/Nature of Science (referred to as reporting categories), and item type.

CoAlt science and social studies scale scores are reported for the overall test and range from 0 to 250.

2.2.2 Performance Levels

Scale scores are used to determine a student's performance level for the overall assessment. Performance levels describe the concepts and skills students are expected to demonstrate within a certain range of scores at the overall assessment level (i.e., ELA, mathematics, science, or social studies). Descriptors for each grade level and content area are included in **Appendix B** of this document.

CMAS Performance Levels

There are five cross-grade and content area performance levels for CMAS mathematics, ELA, and CSLA assessments. There are four cross-grade and content area performance levels for CMAS science and social studies assessments.

CMAS Performance Levels	
CMAS Mathematics, ELA, and CSLA	CMAS Science and Social Studies
Level 5: Exceeded Expectations*	Level 4: Exceeded Expectations*
Level 4: Met Expectations*	Level 3: Met Expectations*
Level 3: Approached Expectations	Level 2: Approached Expectations
Level 2: Partially Met Expectations	Level 1: Partially Met Expectations
Level 1: Did Not Yet Meet Expectations	

*Students in the top two performance levels met or exceeded the expectations of the CAS and are considered on track to being college and career ready in the content areas of language arts, mathematics, science, or social studies. Students in the remaining performance levels may need academic support to successfully engage in further studies in the content area.

CoAlt Performance Levels

CoAlt science and social studies assessments include four performance levels.

CoAlt Performance Levels
Science and Social Studies
Advanced*
At Target*
Approaching Target
Emerging

*The top two performance levels indicate that with appropriate supports, the student is prepared for further study in the content area.

2.2.3 Percentile Ranking

A percentile ranking is included on all CMAS individual student performance reports. The percentile ranking shows how well the student performed in comparison to other students in the state. For example, a student in the 75th percentile performed better than 75 percent of students in the state.

2.2.4 Additional Performance Indicators

In addition to scale scores, performance levels, and percentile rankings, individual student performance reports include other indicators to help parents and educators understand their student's performance. These performance indicators are described below for each assessment.

CMAS Mathematics, ELA, and CSLA

CMAS mathematics, ELA, and CSLA student reports include subclaim performance graphics comparing the performance of the student, their district, and the state. ELA student reports include a reading scale score with a proficiency indicator based on the cut score for the overall test.

Subclaim performance on the assessments is reported as the percent of points earned for overall writing and for each of the writing, reading, and mathematics subclaims. Percent earned refers to the number of points earned out of the total number of points possible within a reporting category. The percent earned indicator can only be used to compare performance of the individual student to the average district and average state performance on the specific set of items being considered. Some groups of items may be more difficult than other sets of items, so unlike the scale score, the percent earned indicator cannot be compared across groups of items or across school years.

For the overall writing claim and each subclaim, a marker indicates the average performance on that claim or subclaim of students who just crossed into the Met Expectations performance level on the overall test.

CMAS Science and Social Studies

CMAS science and social studies reports include percent earned indicators for Prepared Graduate Competencies (PGCs) and Grade Level Expectations (GLEs)* in elementary and middle school and for PGCs in high school. Percent earned refers to the number of points earned out of the total number of points possible within a reporting category. The percent earned indicator can only be used to compare performance of the individual student to the average district and average state performance on the specific set of items being considered. Some groups of items may be more difficult than other sets of items, so unlike the scale score, the percent earned indicator cannot be compared across groups of items or across school years.

For each PGC or GLE, a marker indicates the average performance on that subscore of students who just crossed into the Met Expectations performance level on the overall test.

*PGCs and GLEs are described more fully in **Appendix C**.

CoAlt Science and Social Studies

CoAlt science and social studies reports include the percent of points earned. The percent of points earned refers to the number of points a student earned out of the total number of points possible within a reporting category. The percent of points earned indicator can only be used to compare performance of the individual student to the average state performance on the specific set of items being considered. Some groups of items may be more difficult than other sets of items; so unlike the scale score, the percent of points earned indicator cannot be compared across groups of items or across school years. Percent of points earned are provided at the standard level. For social studies, the standards are history, geography, economics, and civics. For science, the standards are physical science, life science, and earth systems science.

2.3 Description of Individual Student Performance Reports for CMAS Mathematics, ELA, and CSLA

Sample CMAS grade 4 ELA and mathematics Student Performance Reports are displayed in Sections 2.4 and 2.5. Each page of the sample report is included individually. The sample report provides the same type of information that is included on all of the mathematics, ELA, and CSLA reports. To learn more about each part of the Student Performance Report, match the white letters in gray circles from the sample report to the information included with the corresponding letters on the following pages.

2.3.1 General Information

Refer to page 1 of the Student Performance Report.

A. Identification Information

The student's name, state assigned student identification number (SASID), birthdate, school, and district.

B. Test Date

The season and year the student took the assessment.

C. Subject Area

The subject area of the student's assessment (i.e., mathematics, ELA, or CSLA).

D. Grade Level

The grade level of the student's assessment.

E. Explanation of Overall Performance

A brief explanation of the overall assessment results is given to help understand the information provided in the box below the explanation.

2.3.2 Overall Assessment Scores

Refer to page 1 of the Student Performance Report.

F. Overall Scale Score, Performance Level and Percentile Rank

The student's overall scale score (the number between 650 and 850), performance level (Exceeded Expectations, Met Expectations, Approached Expectations, Partially Met Expectations, Did Not Yet Meet Expectations), and percentile ranking are provided. For each content area, students receive an overall scale score and, based on that score, are placed in one of five performance levels, with Level 5 indicating the student exceeded expectations and Level 1 indicating the student did not yet meet expectations (see **Appendix A** for more information on scale scores and **Appendix B** for more information on performance levels). The percentile ranking shows how well the student performed in comparison to other students in the state. For example, a student in the 52nd percentile performed better than 52 percent of students in the state.

G. Graphical Representation of Overall Performance: Overall Scale Score and Performance Level

This graphic provides an illustration of the five performance levels and identifies where the student's overall scale score is positioned along the performance scale. The student's score is indicated by the black diamond positioned along the range of overall scale scores that define each performance level. The arrows represent the probable range, which is based on the standard error of measurement at that scale score and indicates the range of scores the student would likely receive if the assessment were taken multiple times. The probable range of scores differs across forms and across levels of performance within forms. The ranges of overall scale scores are indicated underneath the graphic. For all grade levels in mathematics, ELA, and CSLA, students cross into Partially Met Expectations (performance level 2) when they achieve a scale score of 700, Approached Expectations (performance level 3) when they achieve a scale score of 725, and Met Expectations (performance level 4) when they achieve a scale score of 750. The scale score needed to reach Exceeded Expectations (performance level 5) varies. Refer to **Appendix A** for the full list of scale score ranges for each performance level.

Average scale scores at the school, district, and state levels are identified to the left of the graph and are indicated by smaller diamonds on the graph. The location of the diamonds can be compared to see how the student performed in comparison to the average student in their school, district, or the state. If the student's score diamond is to the right of the school, district, or state average diamond, then the student performed better than that group's average. If the student's diamond is to the left of the school, district, or state diamond, then on average, that group performed better than the student.

The dotted lines on the graph show the lowest scores needed to achieve Partially Met Expectations, Approached Expectations, Met Expectations, and Exceeded Expectations performance levels. The scale scores representing each of those scores are indicated on the bottom of the graph.

H. Percentage of Students at Each Performance Level

The bars beneath the overall performance graphic show the percentage of students within Colorado who performed at each of the five performance levels and gives a sense of how the student's performance compares to other students' performance in Colorado.

I. Performance Level Description (PLD)

PLDs provide details about the specific grade-level content area concepts and skills typically demonstrated by students within a performance level. The PLD that corresponds to the student's performance level is included on the report. The full list of performance level descriptors for each grade level and content area is included in **Appendix B** of this document.

2.3.3 Performance by Sub-Reporting Category

Refer to page 2 of the Student Performance Report.

J. Graph Key

Explanatory text for the bars in the Percent of Points Earned graph: student's performance, district average, state average, and average of students who just crossed into the Met Expectations overall performance level.

K. Graphical Representation of Reading Scale Score

ELA and CSLA student reports include the student's scale score for reading (refer to Section 2.2.1). The student's reading scale score is indicated by the top black diamond. Arrows around the student's diamond represent the probable range, which is based on the standard error of

measurement and indicates the range of scores the student would likely receive if the assessment were taken multiple times. Reading scale scores range from 110 to 190. A single cut score at 150 indicates a level of performance comparable to the Met Expectations cut on the overall ELA assessment.

The average scale scores at the school, district, and state levels are identified to the left of the graph and are indicated by smaller diamonds on the graph. The location of the diamonds can be compared to see how the student performed in comparison to the average student in their school, district, or the state. If the student's score diamond is to the right of the school, district, or state average diamond, then the student performed better than that group's average. If the student's diamond is to the left of the school, district, or state diamond, then on average, that group performed better than the student.

L. Writing Claim and ELA/Math Subclaim Category and Performance Indicators

Students demonstrate specific skill sets (subclaims) on the assessments that are identified within each reporting category for ELA and CSLA (e.g., Literary Text within Reading and Written Expression within Writing) and mathematics (e.g., Expressing Mathematical Reasoning). Each subclaim category includes the header identifying the subclaim and a graph showing the percent of points earned for each subclaim and the overall Writing claim.

M. Subclaim Performance Indicator Graphics

The graph shows the percent of points earned for each reading, writing, or mathematics subclaim. The top bar in each of the figures represents the percent of points earned by the student for each of the subclaim categories and the overall Writing claim. Bars representing district and state averages appear below for comparison. The dark vertical line indicates the average percent of points earned by students who just crossed into the Met Expectations performance level on the overall test.


The percent of points earned cannot be compared across years because individual items change from year to year. They also cannot be compared across subclaims because the number of items and the difficulty of items may not be the same.

N. QR Code

The Colorado Academic Standards website can be accessed via the QR Code on the report.

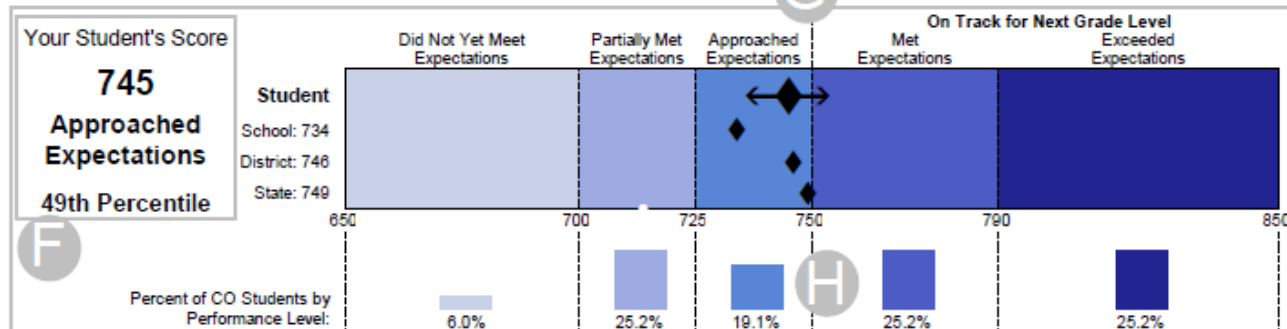
2.4 Sample Individual Student Performance Report – CMAS ELA and CSLA

Page 1

 Confidential Student Performance Report	Colorado Measures of Academic Success	
	Student: FIRSTNAME018 LASTNAME018	A
	SASID: 2019040834 Birthdate: 01/09/2006	B
	School: SAMPLE SCHOOL NAME (4444)	
	District: SAMPLE DISTRICT NAME (5555)	Spring 2019
English Language Arts/Literacy C		D Grade 4

This score report provides information about your student's performance on the Colorado Measures of Academic Success (CMAS) English Language Arts/Literacy test.

- Your student's performance is represented by a scale score, a performance level, and a percentile rank. Scores are placed on a scale so that student performance can be compared across years.
- On the graph, scale scores are represented by diamonds. The arrows around your student's diamond show the range of scores your student would likely receive if the assessment was taken multiple times.
- School, district, and state information is provided so that you can compare your student's performance to the performance of others. The percentage of students in each performance level across the state is reported below the graph.
- Dotted lines show where the range of scores is divided into performance levels.
- You are encouraged to discuss this report with your student's teacher.



Performance Level Descriptor - Approached Expectations

Students who **Approached Expectations** may benefit from additional support to meet expectations at the next grade level and they typically demonstrate the following:

In Reading, the pattern exhibited by student responses indicates:

- With very complex text: the ability to ask and/or answer questions with minimal accuracy, showing minimal understanding of the text when referring to explicit details and examples in the text.
- With moderately complex text: the ability to be generally accurate when asking and/or answering questions, showing basic understanding of the text when referring to explicit details and examples in the text.
- With readily accessible text: the ability to be mostly accurate when asking and/or answering questions, showing understanding of the text when referring to explicit details and examples in the text and when explaining inferences drawn from the text.

In Written Expression, students typically address the prompts and provide basic development of ideas, including when drawing evidence from multiple sources, while in the majority of instances demonstrating organization that sometimes is controlled. Students typically:

- Develop topic and/or narrative elements in a manner that is general in its appropriateness to the task and purpose.
- Demonstrate some organization.
- Include some linking words and phrases, descriptive words, and/or temporal words, limiting the clarity with which ideas are expressed.

In Knowledge and use of Language Conventions, students typically demonstrate basic command of the conventions of Standard English consistent with edited writing. There are few patterns of errors in grammar and usage that impede understanding, demonstrating partial control over language.

To view the full version of the performance level descriptors (PLDs), visit:

http://www.cde.state.co.us/assessment/grade_4_english_language_arts_plds

Purpose

This report describes your student's mastery of the Colorado Academic Standards in Reading and Writing.

For more information on the CMAS assessment program, visit
<http://www.cde.state.co.us/assessment/cmas>

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FIRSTNAME018 LASTNAME018

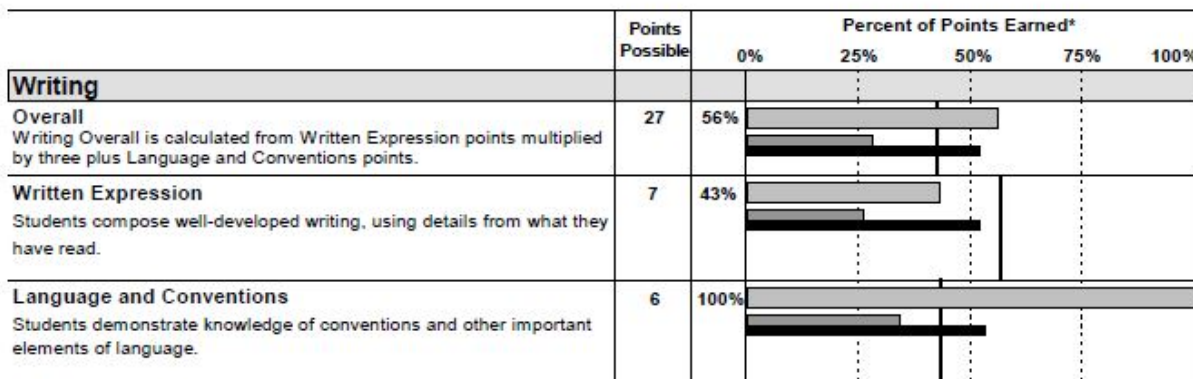
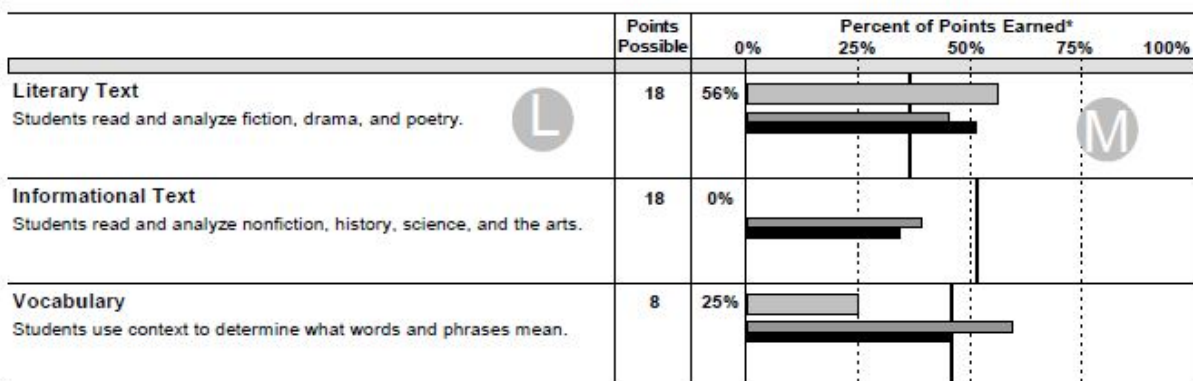
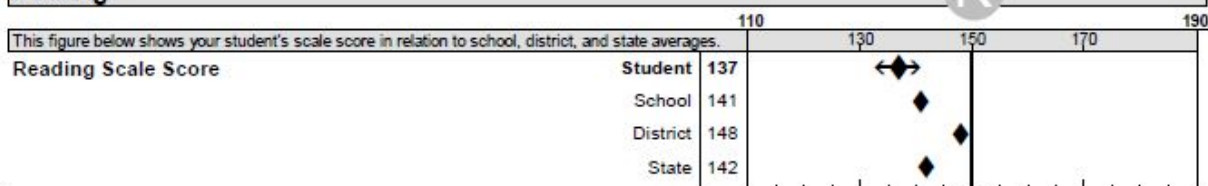
English Language Arts/Literacy

Confidential

Subclaim Performance

- Your student's overall performance in Reading is represented by the top diamond in the figure below.
- The percent of points your student earned for overall Writing and for each of the Reading and Writing subclaims is represented by the top bar in each of the other figures.
- District and state averages are provided for comparison.
- The dark vertical line indicates the average percent of points earned by students who just crossed into the Met Expectations performance level on the overall English Language Arts/Literacy test.

Reading



*Percent of points earned cannot be compared across years because individual items change from year to year. They also cannot be compared across subclaims because the number of items and the difficulty of items may not be the same.


For more information about the standards included in this assessment, please visit the Colorado Department of Education's website at <http://www.cde.state.co.us/coreadingwriting/statestandards>

N



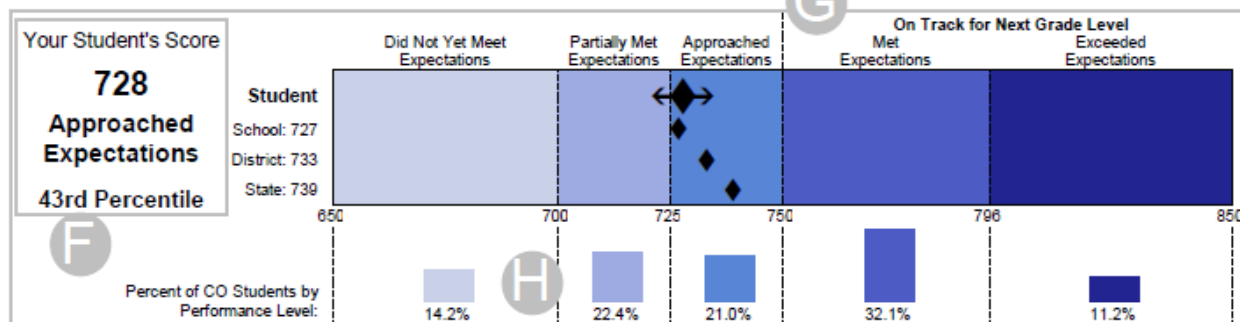
2.5 Sample Individual Student Performance Report – CMAS Mathematics

Page 1

 Confidential Student Performance Report	Colorado Measures of Academic Success	
	Student: FIRSTNAME023 Z. LASTNAME023 SASID: 2019201816 Birthdate: 11/24/2007 School: SAMPLE SCHOOL NAME (4444) District: SAMPLE DISTRICT NAME (5555)	A B Spring 2019
Mathematics C		D Grade 4

This score report provides information about your student's performance on the Colorado Measures of Academic Success (CMAS) Mathematics test.

- Your student's performance is represented by a scale score, a performance level, and a percentile rank. Scores are placed on a scale so that student performance can be compared across years.
- On the graph, scale scores are represented by diamonds. The arrows around your student's diamond show the range of scores your student would likely receive if the assessment was taken multiple times.
- School, district, and state information is provided so that you can compare your student's performance to the performance of others. The percentage of students in each performance level across the state is reported below the graph.
- Dotted lines show where the range of scores is divided into performance levels.
- You are encouraged to discuss this report with your student's teacher.



Performance Level Descriptor* - Approached Expectations

Students who Approached Expectations may benefit from additional support to meet expectations at the next grade level and they typically demonstrate the following:

Major, Additional & Supporting Content

- Solve scaffolded problems involving comparison using multiplication.
- Solve two-step word problems with at least one two- or three-digit number. Generate a pattern from a given rule. With scaffolding, read, write and compare three-digit whole numbers and round to any place. Determine whether a whole number in the range of 1-100 is prime or composite with scaffolding.
- Recognize that decimals and fractions must refer to the same whole in order to compare.
- Given a model, compare fractions using benchmarks. Solve simple fraction comparison word problems. Use decimal notations for fractions. Multiply a fraction by a whole number using models, decompose a fraction into a sum of fractions with like denominators, and record using an equation.
- Convert units from larger to smaller units within the same system. Make a line plot to display data of measurements with like denominators of 2 or 4. Use a protractor to measure angles. Use criteria to classify quadrilaterals and triangles.
- Recognize that a whole number is a multiple of each of its factors, and find factor pairs or determine multiples of whole numbers.

Expressing Mathematical Reasoning

- Communicate reasoning that may include minor calculation errors. Provide a numerically complete response with partial justification, and evaluate the validity of claims made by others.

Modeling & Application

- Draw conclusions by illustrating the relationship between important quantities, modifying a model, or interpreting mathematical results in a simplified context.

Performance level descriptors (PLDs) are organized in a manner that assumes students demonstrating higher levels of command have mastered the concepts and skills within lower levels. To view the full version of the PLDs, visit:

http://www.cde.state.co.us/assessment/grade_4_math_plds

*Adapted from iClassroom in Action's Performance Level Summaries

Purpose This report describes your student's mastery of the Colorado Academic Standards in Mathematics.
For more information on the CMAS assessment program, visit: http://www.cde.state.co.us/assessment/cmas Page 1 of 2
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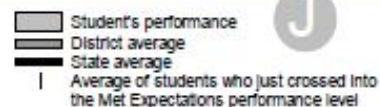
FIRSTNAME023 Z. LASTNAME023

Mathematics

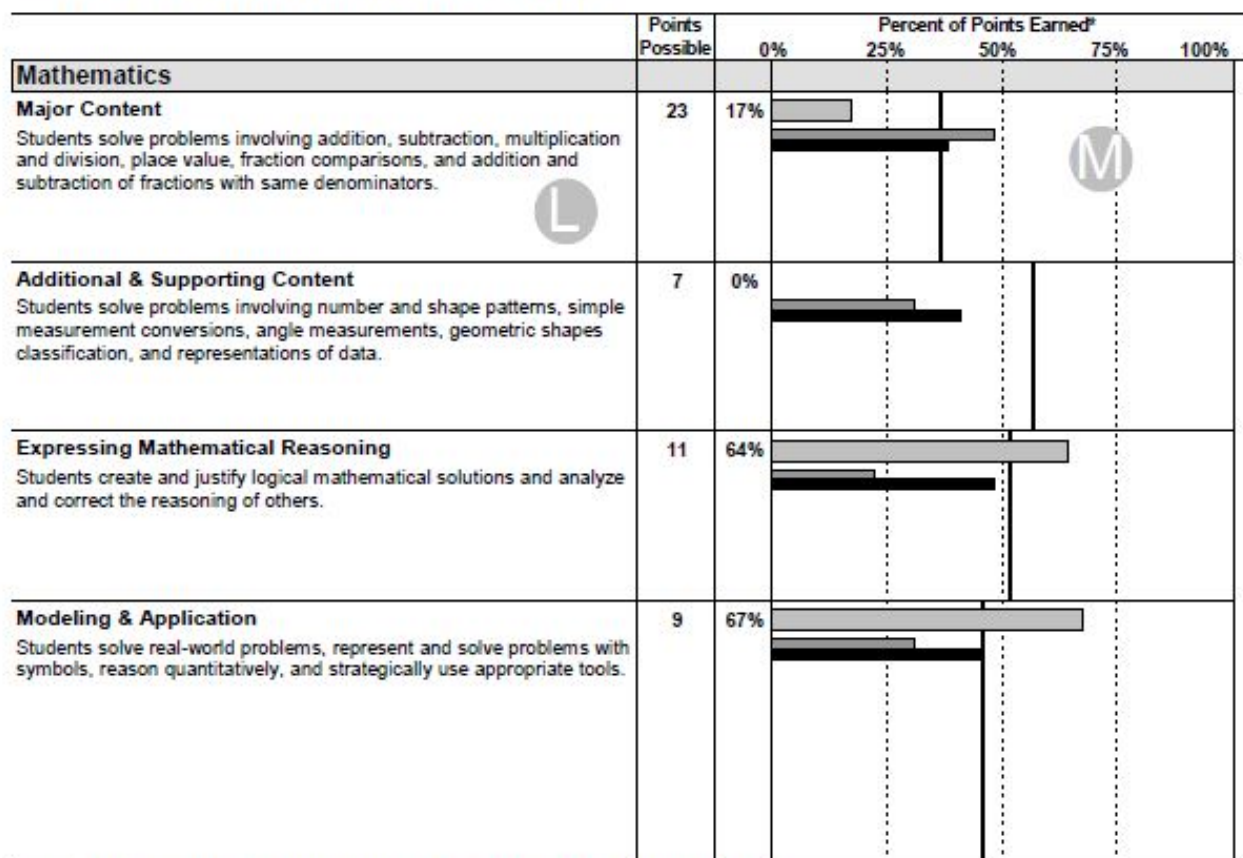
Confidential

Subclaim Performance

- The percent of points your student earned for each of the four mathematics assessment subclaims is represented by the top bar in each of the figures below.
- District and state averages are provided for comparison.
- The dark vertical line indicates the average percent of points earned by students who just crossed into the Met Expectations performance level on the overall math test.



 Student's performance
 District average
 State average
 Average of students who just crossed into the Met Expectations performance level



*Percent of points earned cannot be compared across years because individual items change from year to year. They also cannot be compared across subclaims because the number of items and the difficulty of items may not be the same.

For more information about the standards included in this assessment, please visit the Colorado Department of Education's website at <http://www.cde.state.co.us/comath/statestandards>

N



2.6 Description of Individual Student Performance Report – CMAS Science and Social Studies

A sample grade 5 science student performance report is displayed in Section 2.7. Each page of the sample report is included individually. The sample report includes the same type of information included on every science and social studies report. To learn more about each part of the student performance report, match the white letters in gray circles from the sample report to the information included with the corresponding letters on the following pages.

2.6.1 General Information

Refer to page 1 of the Student Performance Report.

A. Identification Information

The student's name, state assigned student identification number (SASID), birthdate, school, and district.

B. Test Date

The season and year the student took the assessment.

C. Subject Area

The subject area of the student's assessment (either science or social studies).

D. Grade Level

The grade level of the student's assessment.

2.6.2 Overall Assessment Scores

Refer to page 1 of the Student Performance Report.

E. Explanation of Overall Performance

A brief explanation of the overall assessment results is given to help understand the information provided in the box below the explanation.

F. Student's Overall Scale Score, Performance Level and Percentile Rank

The student's overall scale score (the number between 300 and 900), performance level (Exceeded Expectations, Met Expectations, Approached Expectations, Partially Met Expectations), and percentile ranking are provided. The scale score and performance level included in this part of the report represent the student's overall performance on the assessment in the content area (science or social studies). The percentile ranking shows how well the student performed in comparison to other students in the state. For example, a student in the 75th percentile performed better than 75 percent of students in the state. Grade level and content area specific performance level descriptors providing the concepts and skills students are typically able to demonstrate at each level are found on the last page of the report.

G. Graphical Representation of Overall Performance: Scale Score and Performance Level by Student, School, District, and State

The student's scale score is indicated by a large diamond on the graph. The arrows to the left and right of the diamond indicate the range of scores the student would likely receive if the assessment were taken multiple times.

The average scale scores at the school, district, and state levels are identified to the left of the graph and are indicated by smaller diamonds on the graph. The location of the diamonds can be compared

to see how the student performed in comparison to the average student in their school, district, or the state. If the student's score diamond is to the right of the school, district, or state average diamond, then the student performed better than that group's average. If the student's diamond is to the left of the school, district, or state diamond, then on average, that group performed better than the student.

The dotted lines on the graph show the lowest scores needed to achieve Approached Expectations, Met Expectations, and Exceeded Expectations performance levels. The scale scores representing each of those scores are indicated on the bottom of the graph.

H. Percentage of Students at Each Performance Level

The bars beneath the overall performance graphic show the percentage of students within Colorado who performed at each of the four performance levels and gives a sense of how the student's performance compares to other students' performance in Colorado.

2.6.3 Subscale Performance

Refer to page 1 of the Student Performance Report.

I. Explanation of Subscale Performance

In this part of the report, the student's performance is presented by individual reporting categories. Information to help understand the graphical representation in this section is included.

J. Subscale Scores

Subscale scores indicate how the student performed in each reporting category. Like the overall science and social studies scale scores, subscale scores range from 300 to 900 and can be compared across school years. Average subscale scores are also provided for the student's school and district

K. Reporting Category Descriptions

Reporting categories include the standards for social studies (history, geography, economics, and civics) and science (physical science, life science, and earth systems science). Science also includes Scientific Investigation and the Nature of Science as a reporting category. Descriptions of the reporting categories from the CAS are included in this section of the report.

L. Graphical Representation of Subscale Performance by Student, School, and District

The graphical representation of subscale performance shows how the student performed in each reporting category. The student's performance is represented by a large diamond on the graph. The arrows around the student's diamond show the range of scores that the student would likely receive if the assessment was taken multiple times.

The graphical representation also shows how the student performed in comparison to other students in the student's school or district. Smaller diamonds represent performance of students in the school and district. If the student's score diamond is to the right of the school or district average diamond, the student's subscale score was higher than the school or district average scale score. If the student's diamond is to the left, then the student's subscale score was lower than the school or district average.

The shaded areas of the graph represent the performance of about 70% of students in the state. If the student's score diamond is to the right of the shaded area, the student's performance is considered relatively strong in that area in comparison to other students in the state. If the student's score diamond is to the left of the shaded area, the student's performance is considered relatively weak in that area in comparison to other students in the state. These categories are based on the state performance for the current year and can change from year to year.

2.6.4 Performance by Prepared Graduate Competencies (PGCs) and Grade Level Expectations (GLEs)

Refer to page 2 of the Student Performance Report.

M. Explanation of PGCs and GLEs

PGCs and GLEs are important parts of the CAS. PGCs represent the concepts and skills students need to master in order to be college and career ready by the time of graduation. GLEs are grade-specific expectations that indicate that students are making progress toward the PGCs. This section of the report describes performance with percent earned indicators for PGCs and GLEs at the elementary and middle school levels and for PGCs at the high school level.

N. Graph Key

The graph key includes the explanatory text for the bars in the percent earned graph: student's performance, district average, and state average.

O. Standard, PGC, and GLE

Descriptions of the PGCs and GLEs that were included on the assessment are listed under each standard. **Note:** The high school science report does not include GLE-level information.

P. Points Possible

This number shows the total points possible for each PGC and GLE on the assessment. **Note:** Information is not reported at the GLE level on the high school science report.

Q. Graphical Representation of Percent Earned

The graph shows the percentage of items that were answered correctly out of the total number of items for each PGC and GLE. When looking at the shaded bars in the graph, the student's performance can be compared to the average district and state performance. The dark vertical line indicates the average percent of points earned by students who just crossed into the Met Expectations performance level on the overall test.

Note: There are relatively few points associated with each PGC or GLE. A student's bar can look much longer or much shorter based on a single correct or incorrect item response. Remember that percent earned score information cannot be compared across PGCs, GLEs, or years. Information is not reported at the GLE level on the high school science report. On elementary and middle school reports, the graph for the PGCs is blank when a PGC has only one associated GLE.

2.6.5 Performance by Item Type

Refer to page 3 of the Student Performance Report.

CMAS assessments include selected-response and constructed-response items. Selected-response items require students to choose the correct answer(s) from provided options. Sometimes these are referred to as multiple choice, multiple select, and matching items. Constructed-response items require students to develop their own answers to questions.

R. Selected-Response Scale Score

The student's selected-response scale score can be compared to the average scale scores for selected-response items for the student's school, district, and the state. The student's school and district can compare next year's groups of students to this year's students by looking at selected-response scale scores. This information can be used to support school and district program and instructional improvement decisions.

S. Constructed-Response Scale Score

The student's constructed-response scale score can be compared to the average scale scores for constructed-response items for the student's school, district, and the state. The student's school and district can look at next year's groups of students and compare them to this year on the constructed-response scale score. This information can be used to support school and district program and instructional improvement decisions.

T. Graphical Representation of Selected-Response and Constructed-Response Scale Scores

The large diamond on the graph represents the student's scale score. The arrows around the student's score diamond show the range of scores that the student would likely receive if the assessment was taken multiple times. The smaller diamonds represent the average scale scores of the student's school, district, and the state. If the student's score diamond is to the right of the school, district, or state average diamond, then the student performed better than that group's average. If the student's diamond is to the left of the school, district, or state diamond, then that group performed better than the student on average.

2.6.6 Performance Level Descriptions

Refer to page 4 of the Student Performance Report.

U. Performance Level Descriptions (PLDs)

PLDs are provided for each of the four performance levels:

- Exceeded Expectations
- Met Expectations
- Approached Expectations
- Partially Met Expectations

The student's report reflects the PLDs specific to the assessed grade and content area. PLDs discuss the specific concepts and skills students in each performance level typically demonstrate for the student's assessed grade level and content area. PLDs are included in **Appendix B** of this document.

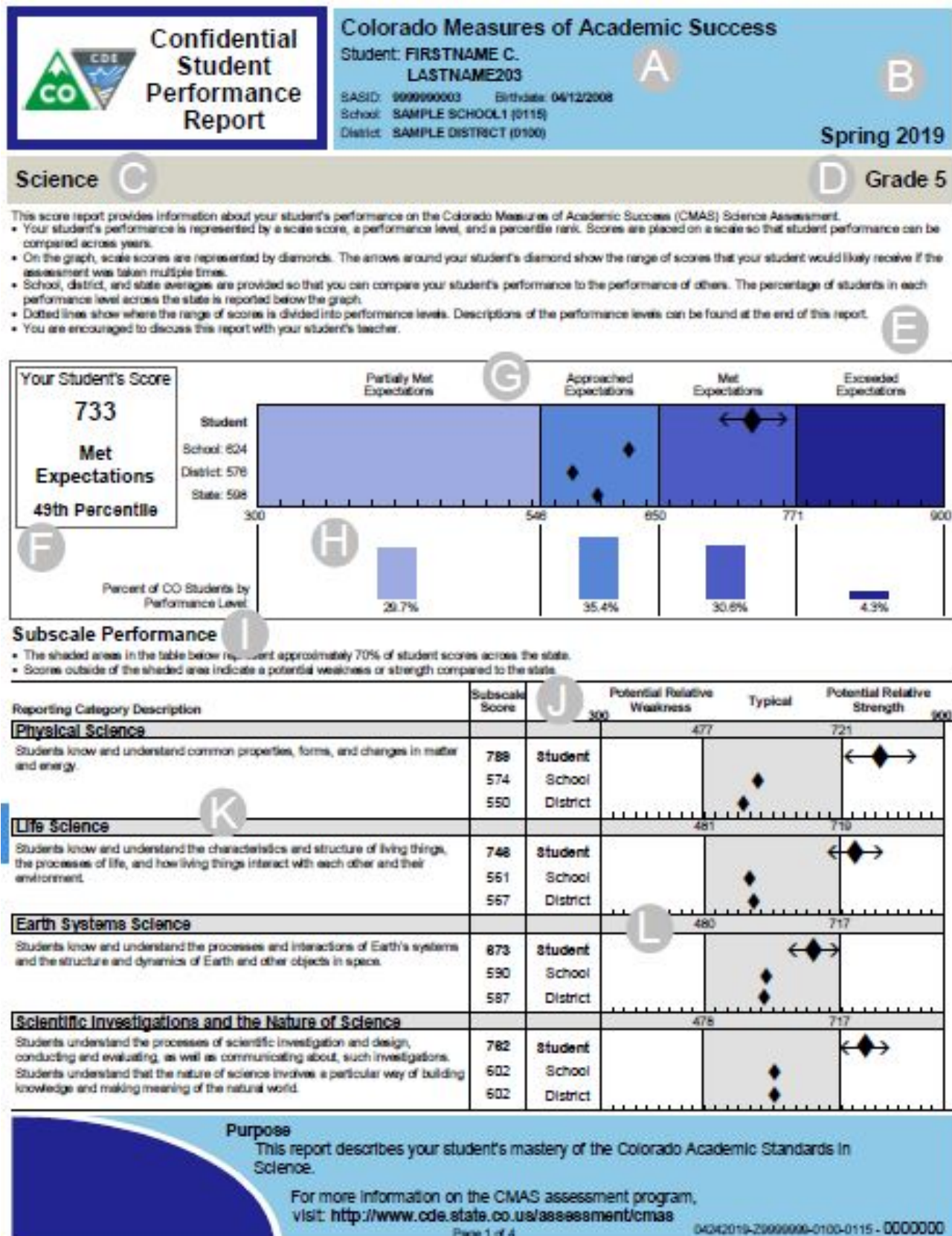
Elementary and middle school students in the top two performance levels, Exceeded Expectations and Met Expectations, are considered on track to being college and career ready in science or social studies; high school students in the top two performance levels are considered ready.

V. QR Code

The Colorado Academic Standards website can be accessed via the QR Code on the report.

2.7 Sample Individual Student Performance Report – CMAS Science and Social Studies

Page 1



Colorado Measures of Academic Success

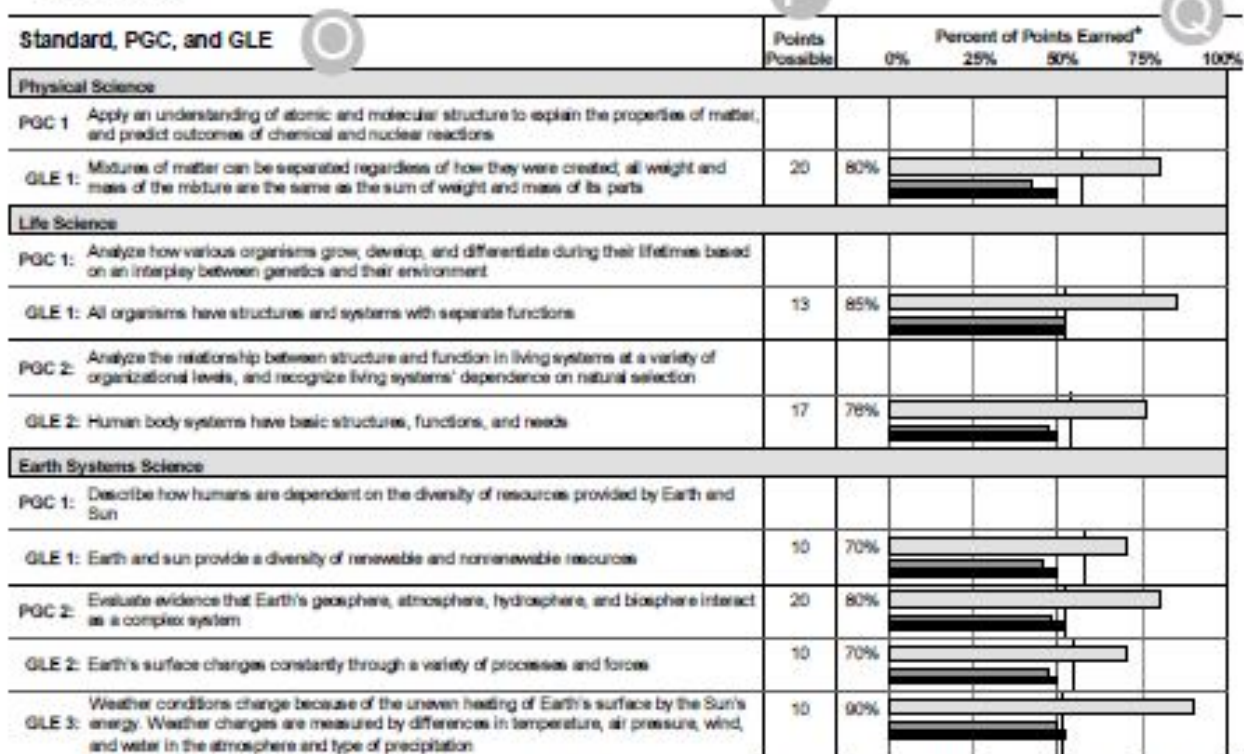
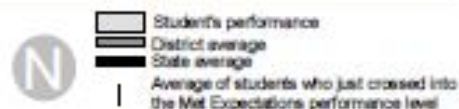
Science

M

Confidential

Performance by Prepared Graduate Competencies (PGCs) and Grade Level Expectations (GLEs)

- Within each standard, PGCs are identified. PGCs represent the concepts and skills that students need to master in order to be college and career ready.
- GLEs are grade-specific expectations that indicate a student is making progress toward the PGCs.
- The figure below shows the percent of points that your student earned for each GLE represented in the grade. If there is more than one GLE for a PGC, the PGC is also provided.



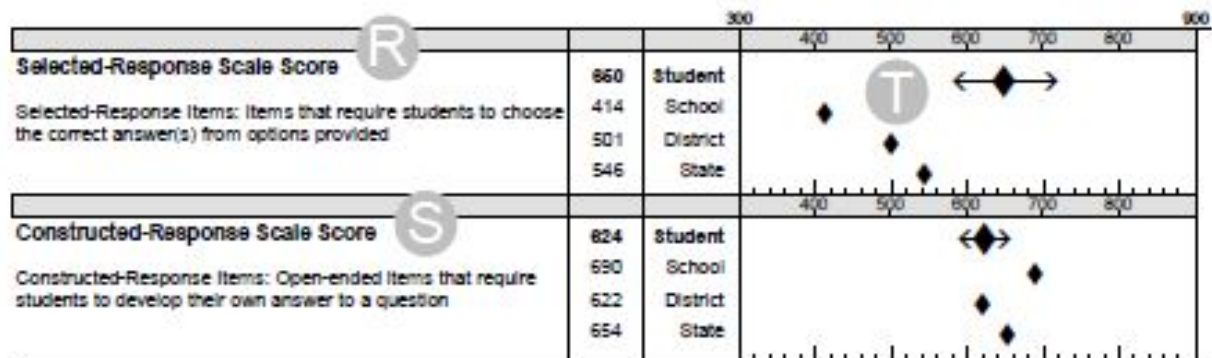
*Percent of points earned cannot be compared across years because individual items change from year to year. They also cannot be compared across GLEs and PGCs because the number of items and the difficulty of items may not be the same.

FIRSTNAME C. LASTNAME203

Grade 5

Performance by Item Type

CMAS assessments include selected-response and constructed-response items. The figure below shows your student's scale score for each item type in relation to school, district, and state averages.



Science Performance Level Descriptions



Students demonstrate mastery of science concepts and 21st century skills aligned to the Colorado Academic Standards at various performance levels. The performance level descriptors are organized in a manner that assumes students demonstrating higher levels of command have mastered the concepts and skills within the lower levels. For example, a student who approached expectations has also mastered the concepts and skills included in the partially met expectations performance level.

Students who Exceeded Expectations demonstrated distinguished command of the Colorado Academic Standards and can typically

- Evaluate and provide feedback on scientific evidence and reasoning about the separation of mixtures and how separation affects the total weight/mass
- Develop hypotheses about why similarities and differences exist between the body systems and parts of humans, plants, and animals
- Evaluate scientific claims about natural resources, in terms of reasonability and validity
- Assess and provide feedback, through reasoning based on evidence, on scientific explanations about weather and factors that change Earth's surface

Students who Met Expectations demonstrated strong command of the Colorado Academic Standards and can typically

- Explain why certain procedures that are used to separate simple mixtures work and discuss any unexpected results
- Evaluate evidence and models of the structure and functions of human, plant, and animal organs and organ systems
- Investigate and generate evidence that human systems are interdependent
- Analyze and interpret data to explore concerns associated with natural resources
- Formulate testable questions and scientific explanations around weather and factors that change Earth's surface

Students who Approached Expectations demonstrated moderate command of the Colorado Academic Standards and can typically

- Discuss how the mass/weight of a mixture is a sum of its parts and design a procedure to separate simple mixtures based on physical properties
- Create models of human, plant, and animal organ systems, and compare and contrast similarities and differences between the organisms
- Explore and describe the origins and usage of natural resources in Colorado
- Interpret data about Earth, including weather and changes to Earth's surface

Students who Partially Met Expectations demonstrated limited command of the Colorado Academic Standards and can typically

- Select appropriate tools and follow procedures to separate simple mixtures
- Identify how humans, plants, and animals address basic survival needs
- Identify the functions of human body systems
- Distinguish between renewable and nonrenewable resources
- Use appropriate tools and resources to gather data regarding weather conditions and Earth processes



For more information about the standards included in this assessment, please visit the Colorado Department of Education's website at <http://www.cde.state.co.us/colscience/statestandards>



2.8 Description of Individual Student Performance Report – CoAlt Science and Social Studies

A Student Performance Report is created for each student who takes a CoAlt assessment. This section of the guide explains the elements of the Student Performance Report. A sample CoAlt Student Performance Report is displayed in Section 2.9.

2.8.1 General Information

Refer to page 1 of the Student Performance Report.

A. Identification Information

The student's name, state assigned student identifier (SASID), birthdate, school, and district.

B. Test Date

The season and year the student took the assessment.

C. Subject Area

The subject area of the student's assessment (either science or social studies).

D. Grade Level

The grade level of the student's assessment.

2.8.2 Overall Assessment Scores

Refer to page 1 of the Student Performance Report.

E. Explanation of Overall Performance

A brief explanation of the overall assessment results to help understand the reported information.

F. Student's Overall Scale Score and Performance Level

The student's overall scale score (the number between 0 and 250) and performance level (Emerging, Approaching Target, At Target, or Advanced) are provided. An inconclusive designation is given to students who did not respond to any items on the assessment. The scale score and performance level included in this part of the report represent the student's overall performance on the assessment in the content area (science or social studies). Grade level and content area-specific performance level descriptors providing the concepts and skills students are typically able to demonstrate at each level are found on page 2 of the report.

G. Graphical Representation of Overall Performance by Student and State

The student's scale score is indicated by a large diamond on the graph. The arrows to the left and right of the diamond indicate the range of scores the student would likely receive if the assessment were taken multiple times.

The average scale score at the state level is identified to the left of the graph and is indicated by a smaller diamond on the graph. The location of the diamonds can be compared to see how the student performed in comparison to the average student at the state level. If the student's score diamond is to the right of the state average diamond, the student performed better than the state average. If the student's diamond is to the left of the state diamond, on average, the state performed better than the student.

The dotted lines on the graph show the lowest scores needed to achieve Approaching Target, At Target, and Advanced performance levels. The scale scores representing each of those scores are

indicated on the bottom of the graph.

H. Percentage of Students at Each Performance Level

The bars beneath the overall performance graphic show the percentage of students within Colorado who performed at each of the four performance levels and gives a sense of how the student's performance compares to other students' performance in Colorado.

2.8.3 Content Standard Performance

Refer to page 1 of the Student Performance Report.

I. Content Standard Descriptions

Descriptions for social studies standards (history, geography, economics, and civics) and science standards (physical science, life science, and earth systems science).

J. Points Earned

Points earned indicates how many points the student earned for each content standard.

K. Points Possible

Points possible indicates the total number of points possible for each content standard.

L. Graphical Representation of Content Standard Performance by Student and State

The graphical representation of content standard performance shows how the student performed in each standard. The student's performance is represented by a bar graph. The average percent of points earned for each content standard at the state level is identified by a second bar graph. The bar graphs show the student's percent of points earned as compared to the state average percent of points earned. If the student's bar ends to the right of the state average bar, then the student's percent of points earned was higher than the state average. If the student's bar ends to the left of the state average bar, then the student's percent of points earned was lower than the state average.

M. Graph Key

Indicates the student's percent of points earned and the state average percent of points earned.

2.8.4 Performance Level Descriptions

Refer to page 2 of the Student Performance Report.

N. Performance Level Descriptions

Specific grade level and content area descriptions are available for each of the four CoAlt performance levels:

- Advanced
- At Target
- Approaching Target
- Emerging

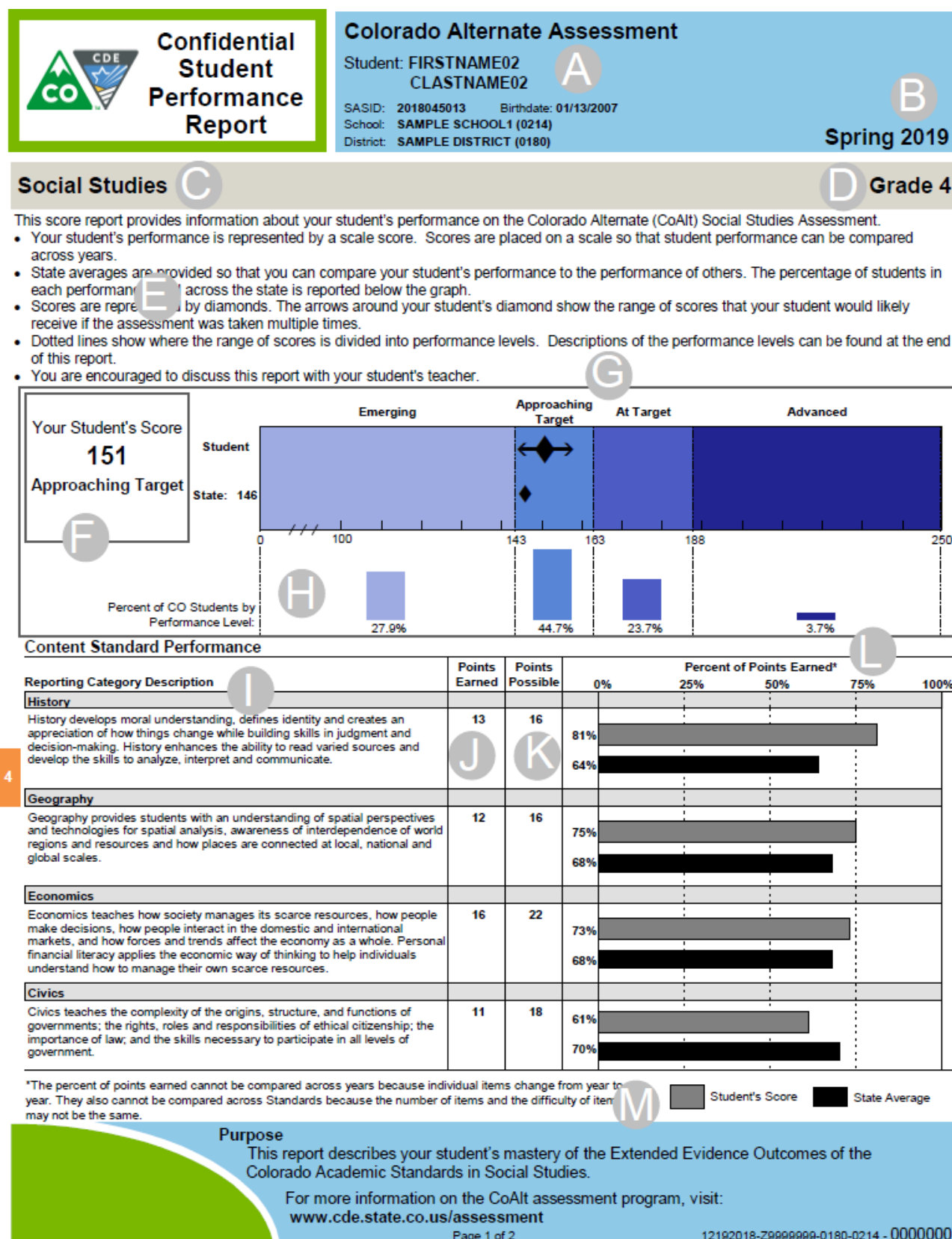
The student's report reflects the performance level descriptions specific to the assessed grade level and content area. These performance level descriptions discuss the specific concepts and skills that students in each performance level typically demonstrate in the assessed grade level and content area. Performance level descriptions for each grade level and content area are located in **Appendix B**.

O. QR Code

The Colorado Academic Standards website can be accessed via the QR Code on the report.

2.9 Sample Individual Student Performance Report – CoAlt Science and Social Studies

Page 1



Social Studies Performance Level Descriptions**N**

Students demonstrate social studies concepts and skills aligned to the Grade Level Expectations and Extended Evidence Outcomes contained in the Colorado Academic Standards.

With appropriate support, Advanced students can typically:

- Identify historical eras, groups (e.g., miners, settlers and farmers), ideas, and themes in Colorado history
- Identify the cause and effect of growth in Colorado during various key events in U.S. history
- Integrate historical knowledge with geographical skills
- Recognize that particular dwellings, tools, and modes of transportation are specific to certain geographic areas and cultures in Colorado's history
- Identify regions and activities of Colorado based on specific physical features and label a map
- Identify choice and opportunity cost and compare the difference between the two
- Identify a specific perspective on an issue
- Identify the origins and structures of government

With appropriate support, At Target students can typically:

- Sequence Colorado historical events
- Identify the locations of specific activities or events in Colorado's history
- Identify specific factors that affected the growth of Colorado
- Match tools, modes of transportation, and products to natural resources or locations in Colorado
- Label a map using given map symbols
- Identify ways in which Colorado communities and markets were (and are) connected
- Identify the approximate value of goods
- Identify the functions of different levels of government
- Identify how people respond to positive and negative consequences

With appropriate support, Approaching Target students can typically:

- Match historical Colorado cultures with related artifacts, modes of transportation, and resources
- Match physical, natural, and geographic features on a map to their appropriate symbols
- Identify types of goods, services and resources native to Colorado
- Recognize that items vary in their value
- Recognize that there are different levels of governance

With appropriate support, Emerging students can typically:

- Identify artifacts (e.g., tools, housing, modes of transportation and clothing) related to Colorado history
- Identify features on a map of Colorado
- Recognize that items have value
- Recognize emergency situations and appropriate responses that affect members of the Colorado community
- Recognize that there are laws and rules

An Inconclusive designation is given to students who did not respond to any items on the assessment.

For more information about the standards included in this assessment, please visit the Colorado Department of Education's website at <http://www.cde.state.co.us/coextendedeo>

