### 2.0 A Parent and Educator Guide to Understanding the Colorado Measures of Academic Success (CMAS) and Colorado Alternate (CoAlt) Assessment Student Performance Reports

### 2.1 Program Overview

CMAS, along with CoAlt for students with the most significant cognitive disabilities, are Colorado's standards-based assessments designed to measure the Colorado Academic Standards (CAS). The CAS contain the concepts and skills students are typically expected to learn in order to be successful in the current grade and to make academic progress from year to year. The purpose of CMAS and CoAlt 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 and CoAlt 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 and CoAlt assessment so parents can understand their student's demonstration of learning of 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) form in place of the ELA form. CSLA forms are parallel and comparable to the CMAS ELA forms 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, and subclaim performance indicators. 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 were too few student scores (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 astudent 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 slightlyfrom 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 750 on the 4th grade ELA assessment in 2023 demonstrated the same level of mastery of concepts and skills as an 4th grade student who scored 750 on the ELA 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., ELA to mathematics).

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

CMAS Science scale scores for the overall test range from 650-850. Science reports also provide separate scale scores for content standards and Science and Engineering Practices (referred to as reporting categories). The content standards scale score ranges from 400-550. .

CoAlt Science scale scores are reported for the overall test and range from 150 to 350.

### 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, or science). Descriptors for each tested 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 and ELA, including CSLA, assessments. There are four cross-grade and content area performance levels for CMAS science.

## CMAS Performance Levels

| CMAS Performance Levels |  |
| :--- | :--- |
| CMAS Mathematics, ELA, and CSLA | CMAS Science |
| 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: 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 for the next grade level in the content areas of language arts, mathematics, or science. Students in the remaining performance levels may need academic support to successfully engage in further studies in the contentarea.

| CoAlt Performance Levels |
| :---: |
| Science |
| 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 $75^{\text {th }}$ percentile performed better than 75 percent of students in the state.

### 2.2.4 Additional Performance Indicators

In addition to scale scores and performance levels, 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.

Note: 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. Participation rates should be taken into consideration when comparing individual student subclaim performance to state or district average performance. 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.

## CMAS Mathematics and ELA (including CSLA)

CMAS mathematics and ELA, including CSLA, student reports provide subclaim performance graphics comparing the performance of the student, their district, and the state. ELA and CSLA student reports include a reading scale score. A single cut score at 150 indicates a level of performance comparable to the Met Expectations cut on the overall ELA assessment. This cut is consistent across years and can be used in trend comparisons.

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.

For the overall writing claim and each subclaim, a marker indicates the average performance on that claim or subclaim of students at the Met Expectations cut score point on the overall test. This indicator
provides criterion referenced context for the subclaims by showing how students who met the content based overall expectations performed.

## CMAS Science

CMAS science reports include a performance indicator for the content standards (Physical, Life, and Earth and Space Science) and Science and Engineering Practices (SEP), which indicates whether a student's scale score is Lower than Average, Average, or Higher than Average. These indicators are based on the state mean and one standard deviation below and above that mean. The average scale score of students at the Met Expectations cut score point is indicated in the same graph.

CMAS science reports include percent earned indicators for Grade Level Expectations (GLEs) in elementary school and Prepared Graduate Statements (PGs)* in middle school and high school.
*PGs and GLEs are described more fully in Appendix C.

CoAlt Science
CoAlt science reports include the percent of points earned for the content standards (Physical, Life, and Earth and Space Science) and Science and Engineering Practices (SEP).

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

Sample CMAS grade 3 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 typeof information included on all mathematics and ELA, including CLSA, 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. Students are identified by first name, middle initial, and last name. If the student has a preferred first name that is different than their legal name, it is listed in parentheses.
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 or ELA, including 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 ) and performance level (Exceeded Expectations, Met Expectations, Approached Expectations, Partially Met Expectations, Did Not Yet Meet Expectations) 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 41st percentile performed better than 41 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 and ELA, including 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. Interpretations of, and comparisons between, scores of the student, school, district, and state levels should be made with caution or completely avoided when participation is low (see H. Percent of Students Tested).

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. Percent of Students Tested

The percent of students tested at the school, district, and state levels provide participation information that should be considered when interpreting aggregated results. Interpretations of, and comparisons of scores between, the student, school, district, and state levels should be made with caution or completely avoided when participation is low.

## I. Percent 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 give a sense of how the student's performance compares to other students' performance in Colorado. Interpretations of, and comparisons between, scores of the student and state levels should be made with caution or completely avoided when participation is low (see H. Percent of Students Tested).

## J. Performance Level Descriptor (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. For students scoring in Level 1: Did Not Yet Meet Expectations, the PLD for Level 2 is provided.

## K. QR Code

Scan the QR code to view a video about student performance displayed on the report. Links to sample questions, the Colorado Academic Standards, and other parent resources (including the full version of the PLD text) are also available through the QR code. Alternatively, access the materials by visiting https://coassessments.com/parentsandguardians.

### 2.3.3 Performance by Sub-Reporting Category

Refer to page 2 of the Student Performance Report.
L. 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.

## M. 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 blue 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/CSLA 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. Interpretations of, and comparisons between, scores of the student, school, district, and state levels should be made with caution or completely avoided when participation is low (see H. Percent of Students Tested).

## N. 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.

## O. 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 at the Met Expectations cut score point on the overall test. Interpretations of, and comparisons between, scores of the student, district, and state levels should be made with caution or completely avoided when participation is low (see H. Percent of Students Tested).

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.

### 2.4 Sample Individual Student Performance Report - CMAS ELA and CSLA

## Page 1



## Colorado Measures of Academic Success

## Student: STUDENTFIRST M. STUDENTLAST

## English Language Arts/Literacy

## C

D Grade 3
CMAS is the only assessment given to all Colorado students that measures what students should know and be able to do at the end of each grade. This report describes your student's understanding of Colorado's grade 3 English Language Arts/Literacy expectations. Scan the QR code at the bottom of this page to see a video that will talk you through your student's report.

## Your student's performance is shown as:

- A scale score: A numerical score based on Colorado's grade 3 English Language Arts/Literacy expectations
- A performance level: Your student's performance level is described at the bottom of this page
- A percentile: How your student performed in comparison to other Colorado students


## Consider as you review this report:

- Arrows around your student's diamond show where your student may have scored if the assessment was taken multiple times
- Make school, district, and state comparisons with caution if participation is low
- Talk with your student's teacher about your student's progress in English Language Arts/Literacy.

G


## Performance Level Description - Met Expectations

STUDENTFIRST Met Expectations and is on track for the next grade level. Students in this level typically demonstrate the following

## Reading

- With very complex text: the ability to be generally accurate when asking and/or answering questions, showing general
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 general 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.
Writing
Written Expression: students typically address the prompts and provide development of ideas, including when drawing evidence from multiple sources, while in the majority of instances demonstrating purposeful and mostly controlled organization. Students typically:
- Develop the topic and/or narrative elements using reasoning, details, text-based evidence, and/or description.
- Develop topic and/or narrative elements in a manner that is mostly appropriate to the task and purpose.
- Demonstrate purposeful organization that is mostly controlled and may include an introduction and/or conclusion.
- Use linking words and phrases, descriptive words, and/or temporal words to express ideas with clarity.

Knowledge and use of Language and Conventions: students typically demonstrate command of the conventions of Standard English consistent with edited writing. There are errors in grammar and usage that may occasionally impede understanding.

To view a video report and the full version of the performance level descriptor, visit https://coassessments.com/parentsandguardians or access the QR code


Information about the Colorado Academic Standards measured by this assessment http://www.cde.state.co.us/coreadingwriting/statestandards

Page 2


STUDENTFIRST M. STUDENTLAST

## English Language Arts/Literacy

## Subclaim Performance

$\xrightarrow{\longrightarrow}$ The top diamond in the figure below shows your student's performance in Reading.
$\square$ The top bar in each of the other graphs shows the percent of points your student earned for writing and specific areas of reading and writing
$\square$ District Averages are provided for comparison.

- State Averages are provided for comparison.

I Average of students at the Met Expectations performance level starting point.



[^0]
### 2.5 Sample Individual Student Performance Report - CMAS Mathematics

Page 1


## Colorado Measures of Academic Success <br> Student: STUDENTFIRST M. (PREFERRED) STUDENTLAST <br> SASID: 1111111111 Birthdate: MM/DD/YYYY <br> School: ELEMENTARY SCHOOL (0000) <br> District DISTRICT (0000) <br> Spring 2023

## Mathematics C

CMAS is the only assessment given to all Colorado students that measures what students should know and be able to do at the end of each grade. This report describes your student's understanding of Colorado's grade 3 Mathematics expectations. Scan the QR code at the bottom of this page to see a video that will talk you through your student's report.

Your student's performance is shown as: $E$

- A scale score: A numerical score based on Colorado's grade 3 Mathematics expectations
- A performance level: Your student's performance level is described at the bottom of this page
- A percentile: How your student performed in comparison to other Colorado students

Consider as you review this report:

- Arrows around your student's diamond show where your student may have scored if the assessment was taken multiple times.
- Make school, district, and state comparisons with caution if participation is low.
- Talk with your student's teacher about your student's progress in Mathematics.



## Performance Level Description* - Met Expectations

STUDENT Met Expectations and is on track for the next grade level. Students in this level typically demonstrate the following:
Major, Additional \& Supporting Content

- Determine unknown numbers in problems with one factor greater than or equal to 5 .
- Justify comparisons of two fractions with the same numerator or denominator with a visual model. Demonstrate understanding of the quantity $a / b$ on a number line and its relationship to $1 / b$
- Solve one-step and two-step word problems involving addition or subtraction of time intervals. Measure and estimate liquid volumes and masses using any of the four operations. Solve one-step word problems using estimated measurements. Represent data on a scaled picture graph, a scaled bar graph, or a line plot with appropriate units.
- Represent area of a plane figure as square units. Solve mathematical problems with unknown side lengths in perimeters of polygons. Understand properties of quadrilaterals and subcategories and draw examples of quadrilaterals with stated attributes
Expressing Mathematical Reasoning
- Communicate reasoning with no calculation errors. Interpret and critique the reasoning of others. Use precision in grade-appropriate communication.
Modeling \& Application
- Use approximations to apply mathematics to a real-world situation. Analyze relationships between values to draw conclusions. Create a model by selecting appropriate tools, then improve the model based upon results.

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 a video report and the full version of the performance level descriptor, visit https://coassessments.com/parentsandguardians or access the


## Sample Individual Student Performance Report - CMAS Mathematics

## Page 2



[^1] difficulty of items may not be the same.

### 2.6 Description of Individual Student Performance Report - CMAS Science

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 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. Students are identified by first name, middle initial, and last name. If the student has a preferred first name that is different than their legal name it is listed in parentheses.

## B. Test Date

The season and year the student took the assessment.
C. Subject Area

The subject area of the student's assessment (science).
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.

### 2.6.2 Overall Assessment Scores

Refer to page 1 of the Student Performance Report.
F. Student's Overall Scale Score, Performance Level and Percentile Rank

The student's overall scale score (the number between 650 and 850) and performance level (Exceeded Expectations, Met Expectations, Approached Expectations, Partially Met Expectations) and percentile ranking are provided. Students receive an overall scale score and based on that score, are placed in one of four performance levels with Level 4 indicating the student exceeded expectations and Level 1 indicating the student partially met 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 $37^{\text {th }}$ percentile performed better than 37 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 four 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 science students cross into Approached Expectations (performance level 2) when they achieve a scale score of 725, Met Expectations (performance level 3) when they achieve a scale score of 750 . The scale score needed to reach Exceeded Expectations (performance level 4) 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 indicated by smaller black 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. Interpretations of, and comparisons between, scores of the student, school, district, and state levels should be made with caution or completely avoided when participation is low (see H. Percent of Students Tested).

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. Percent of Students Tested

The percent of students tested at the school, district, and state levels provide participation information that should be considered when interpreting aggregated results. Interpretations of, and comparisons of scores between, the student, school, district, and state levels should be made with caution or completely avoided when participation is low.
I. Percent 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. Interpretations of, and comparisons between, scores of the student and state levels should be made with caution or completely avoided when participation is low (see H. Percent of Students Tested).

## J. Performance Level Descriptor (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.

## K. QR Code

Scan the QR code to view a video about student performance displayed on the report. Links to sample questions, the Colorado Academic Standards, and other parent resources (including the full version of the PLD text) are also available through the QR code. Alternatively, access the materials by visiting https://coassessments.com/parentsandguardians.

### 2.6.3 Subscale Performance

Refer to page 2 of the Student Performance Report.
L. 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.

## M. Subscale Scores

Subscale scores indicate how the student performed in each reporting category. Subscale scores range from 400 to 550 and can be compared across school years. Average subscale scores are also provided for the state and the student's school and district.

## N. Reporting Category Descriptions

Reporting categories include the standards for science (physical science, life science, and earth and space science) and Science and Engineering Practices. Descriptions of the reporting categories from the CAS are included in this section of the report.
O. Graphical Representation of Subscale Performance by Student, School, District, and State The graphical representation of subscale performance shows how the student performed in each reporting category. The student's performance is represented by a blue diamond on the graph

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

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.

The average scale score of students at the Met Expectations cut score point is represented by a dark vertical line.

### 2.6.4 Performance by Prepared Graduate Statements (PGs) and Grade Level Expectations (GLEs)

Refer to page 2 of the Student Performance Report.

## P. Explanation of PGs and GLEs

PGs and GLEs are important parts of the CAS. PGs 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 PGs. This section of the report describes performance with percent earned indicators for GLEs at the elementary level and for PGs at the middle school and high school levels.
Q. 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.
R. Standard, PG, and GLE

Descriptions of the PGs and/or GLEs that were included on the assessment are listed under each standard. Some GLEs or PGs are combined to ensure enough points for reporting. Note: Grade 8 and grade 11 science reports do not include GLE-level information.

## S. Points Possible

This number shows the total points possible for each PG and GLE on the assessment. Note: Information is not reported at the GLE level on the grade 8 and grade 11 science reports.

## T. Graphical Representation of Percent Earned

The graph shows the percentage of points earned out of the total number of points available for each PG 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 at the Met Expectations cut score point on the overall test.

Note: There are relatively few points associated with each PG 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 PGs, GLEs, or years.

### 2.7 Sample Individual Student Performance Report - CMAS Science

## Page 1

## Confidential Student Performance Report

## Colorado Measures of Academic Success <br> Based on the 2020 Colorado Academic Standards <br> Student: STUDENTFIRST M. STUDENTLAST <br> SASID: 9999999999 Birthdate: MM/DD/YYYY <br> School: ELEMENTARY SCHOOL (0000) <br> District: DISTRICT NAME (0000)

B Spring 2023

## Science

D Grade 5
CMAS is the only assessment given to all Colorado students that measures what students should know and be able to do at the end of each grade. This report describes your student's understanding of Colorado's grade 5 science expectations. Scan the QR code at the bottom of this page to see a video that will talk you through your student's report.

Your student's performance is shown as:

- A scale score: A numerical score based on Colorado's grade 5 science expectations
- A performance level: Your student's performance level is described at the bottom of this page
- A percentile: How your student performed in comparison to other Colorado students

Consider as you review this report:

- Arrows around your student's diamond show where your student may have scored if the assessment was taken multiple times.
- Make school, district, and state comparisons with caution if participation is low.
- Talk with your student's teacher about your student's progress in science.



## Performance Level Description - Approached Expectations

STUDENT showed a moderate understanding of the Colorado Academic Standards' grade 5 science expectations and will likely need additional academic support in the next grade level. Students in the Approached Expectations level typically:

- Describe matter (particles too small to be seen) as always conserved, and mixing can result in new substances.
- Observe the properties of an object to identify it.
- Describe evidence that demonstrates Earth's gravity as the cause of objects being pulled toward its center.
- Show the transfer of energy from the Sun to things animals use as food.
- Describe matter and energy cycles in an ecosystem and explain that plants get materials to grow from air and water.
- Relate the distance between a star and Earth to the star's apparent brightness.
- Demonstrate Earth's patterns using shadows, day and night, and the seasonal appearance of some stars.
- Describe Earth's major systems and how they interact.
- Identify the proportions of salt water and fresh water in different reservoirs on Earth.
- Summarize ways that communities protect Earth's environment and resources.

Page 2


STUDENTFIRST M. STUDENTLAST

| Science Confidential |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Subscale Performance <br> - The shaded areas below represent about $70 \%$ of student scores across the state. <br> - Diamonds outside of the shaded area indicate a potential weakness or strength compared tothe state. |  |  | \| Average of students at the Met Expectations performance level starting point. |  |  |  |
| Reporting Category Description | Subscale Score | 40 | Lower than Average | Average | Higher than Average |  |
| Physical Science |  |  | 450 |  |  |  |
| Common properties, forms, and changes in matter and energy | $\begin{aligned} & 509 \\ & 460 \\ & 463 \\ & 464 \end{aligned}$ | Studen School Distric State |  | * | $\Delta$ |  |
| Physical/Life Science |  |  |  | $\square^{498}$ |  |  |
| Characteristics of living things, processes of life, and how living things interact with each other and their environment | $\begin{aligned} & 466 \\ & 457 \\ & 461 \\ & 461 \end{aligned}$ | Studen Schoo Distric State State |  |  |  |  |
| Earth and Space Science |  |  | $452-500$ |  |  |  |
| Processes and interactions of Earth's systems, and the structure and dynamics of Earth and other objects in space | $\begin{aligned} & 482 \\ & 458 \\ & 461 \\ & 463 \end{aligned}$ | Studen Schoo Distric State State |  |  |  |  |
| Science and Engineering Practices |  |  | 453 |  | 502 |  |
| Making sense of the natural world through investigation and problem solving | $\begin{aligned} & 494 \\ & 459 \\ & 463 \\ & 464 \end{aligned}$ | Studen <br> Schoo Distric State |  |  |  |  |

Performance by Prepared Graduate Statements (PGs) and Grade Level Expectations (GLEs)

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

### 2.8 Description of Individual Student Performance Report - CoAlt Science

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. Students are identified by first name, middle initial, and last name. If the student has a preferred first name that is different than their legal name it is listed in parentheses.
B. Test Date

The season and year the student took the assessment.

## C. Subject Area

The subject area of the student's assessment (science).
D. Grade Level

The grade level of the student's assessment.
E. Explanation of Overall Performance

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

### 2.8.2 Student Performance Information

Refer to page 1 of the Student Performance Report.

## F. Student's Overall Scale Score and Performance Level

The student's overall scale score (the number between 150 and 350) and performance level (Emerging, Approaching Target, At Target, or Advanced) are provided. The scale score and performance level included in this part of the report represent the student's overall performance on the assessment.
G. Graphical Representation of the Overall Scale Score and Performance Level 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 by a smaller black 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, the student performed below the state average.

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. Percent of Students Tested

The percent of students tested at the state level provides participation information that should be considered when interpreting aggregated results. Interpretations of, and comparisons of scores between, the student and district and state levels should be made with caution or completely avoided when participation is low.
I. Percent 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.
J. Performance Level Descriptor (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.

## K. QR Code

Scan the QR code to view a video about student performance displayed on the report. Links to sample questions, the Colorado Academic Standards, and other parent resources (including the full version of the PLD text) are also available through the QR code. Alternatively, access the materials by visiting https://coassessments.com/parentsandguardians.

### 2.8.3 Content Standard Performance

Refer to page 2 of the Student Performance Report.
L. Content Standard Descriptions

Descriptions for Science standards (physical science, life science, and earth and space science) and Science and Engineering Practices.
M. Points Earned

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

## N. Points Possible

Points possible indicated the total number of points possible for each content standard.
O. 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 compared to the state average percent of points earned. 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. If the student's bar ends to the right of the state average bar, 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, the student's percent of points earned was lower than the state average. Interpretations of, and comparisons of scores between, the student and state levels should be made with caution or completely avoided when participation is low.
P. Graph Key Indicates the student's percent of points earned and the state average percent of points earned.

### 2.9 Sample Individual Student Performance Report - CoAlt Science

## Page 1



```
Colorado Alternate Assessment
Based on the 2020 Colorado Academic Standards
Student: FIRSTNAME
        LASTNAME
SASID: 9999999999 Birthdate: MM/DD/YYYY
School: MIDDLE SCHOOL (0000)
District: SAMPLE DISTRICT (0000)

\section*{Science C}

This Colorado Alternate Assessment (CoAlt) report provides information about your student's understanding of the Extended Evidence Outcomes (EEOs) of Colorado's middle school science standards. Scan the QR code at the bottom of this page to see a video that will talk you through your student's report.

\section*{Your student's performance is shown as:}
- A scale score: A numerical score based on Colorado's middle school science expectations
- A performance level: Your student's performance level is described at the bottom of this page

\section*{Consider as you review this report:}
- Arrows around your student's diamond show where your student may have scored if the assessment was taken multiple times.
- Make state comparisons with caution if participation is low.
- Talk with your student's teacher about your student's progress in science.


\section*{Performance Level Description - Approaching Target}

FIRSTNAME showed a limited understanding of the EEOs of Colorado's middle school science standards and will likely need moderate academic support to successfully engage in the next grade level. Students in the Approaching Target level typically:
- Identify that the amount of or the mass of atoms does not change in a chemical reaction.
- Identify simple molecules, such as water or oxygen gas.
- Identify a device that releases or absorbs heat energy by chemical processes and a device that either minimizes or maximizesheat energy transfer.
- Identify the relative amounts of kinetic and poential energy in a system.
- Identify that different materials can affect the reflection, absorption, or transmission of a light or sound wave.
- Identify how characteristic animal behaviors and specialized plant structures help the plants and animals survive, and identify examples of competitive, predatory, and mutually beneficial relationships between organisms.
- Identify an example of the cycling of matter and energy among living and nonliving parts of an ecosystem.
- Identify that variations of traits in populations increase some individuals' probability of surviving and reproducing and that natural selection works over many generations.
- Identify two locations of similar or different climates.
- Identify that regional climate is based on the region's landforms and latitude.
- Identify that Earth's resources are limited and unevenly distributed.
- Identify gravity as what keeps Earth and the Moon in their orbits and as what draws and holds together the matter making up Earth and the Moon.

To view a video report and the full version of the performance level descriptor, visit https://coassessments.com/parentsandguardians/ or accese the QR code.


\section*{Sample Individual Student Performance Report - CoAlt Science}

\section*{Page 2}

\section*{FIRSTNAME LASTNAME}

\section*{Content Standard Performance}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Content Standard Performance & M & N & & & & & \\
\hline & Points & Points & & & oints Ea & & \\
\hline Reporting Category Description & Earned & Possible & & 25\% & 50\% & 75\% & 100\% \\
\hline Physical Science & & & & & & & \\
\hline Common properties, forms, and changes in matter and energy & 9 & 18 & \[
\begin{gathered}
50 \% \\
61 \%
\end{gathered}
\] & & & & \\
\hline Life Science & & & & & & & \\
\hline Characteristics and structure of living things, the processes of life, and how living things interact with each other and their environment & 15 & 15 & \[
\begin{array}{r}
100 \% \\
73 \%
\end{array}
\] & & & & \\
\hline Earth and Space Science & & & & & & & \\
\hline Processes and interactions of Earth's systems and the structure and dynamics of Earth and other objects in space & 5 & 15 & \[
\begin{aligned}
& 33 \% \\
& 30 \%
\end{aligned}
\] & & & & \\
\hline Science and Engineering Practices & & & & & & & \\
\hline Making sense of the natural world through investigation and problem solving & 14 & 30 & \[
\begin{aligned}
& 47 \% \\
& 54 \%
\end{aligned}
\] & & & & \\
\hline \multicolumn{8}{|l|}{'The percent of points earned cannot be compared across years because individual items change from year to
year. They also cannot be compared across Standards because the number of items and the difficiulty of tems
may not be the same.} \\
\hline
\end{tabular}```


[^0]:    *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.

[^1]:    *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

