



# Colorado Measures of Academic Success

## Understanding Science Score Reports

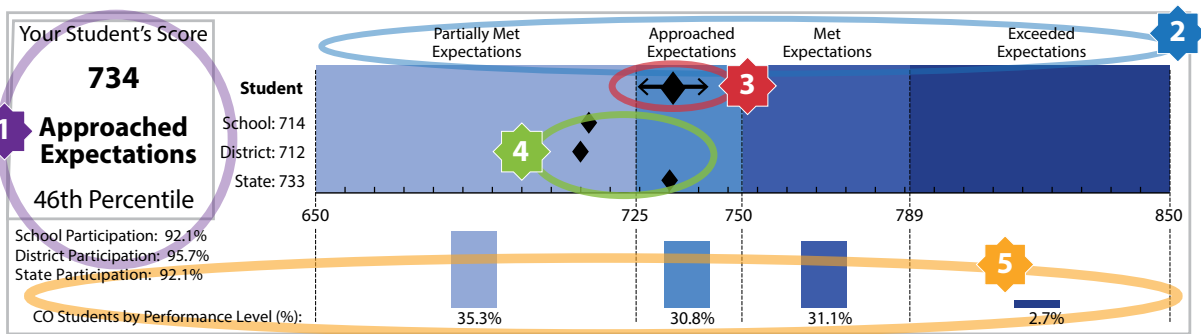


**COLORADO**  
Department of Education

[www.cde.state.co.us](http://www.cde.state.co.us)

Scan the QR code at the bottom of your student's performance report to **see a video** that explains how to read the report and gives information about your student's performance level.

## How to Read Your Student's 2023 Science Score Report - Page 1



- Student Performance Overview** – Students receive an overall number score that falls into one of four performance levels: Partially Met Expectations, Approached Expectations, Met Expectations or Exceeded Expectations. The percentile ranking shows how well your student performed in comparison to other Colorado students. For example, a student in the 46th percentile performed better than 46% of students in the state.
- Performance Levels** – Performance levels describe how well students met the expectations of their grade level. Each performance level is defined by a range of scores. The highest two performance levels indicate that students met or exceeded expectations. The lower two performance levels indicate students did not demonstrate that they fully met grade-level expectations.
- Score Range** – Diamonds represent scale scores on the graph. Arrows around your student's diamond show the range of scores your student would likely receive if the test was taken multiple times. Arrows around the example student's diamond show the student would likely have scored in the same performance level if the test was taken multiple times.
- Overall Score Comparisons** – School, district and state diamonds represent the average scores of students who took the same test as your child, which you can use to see how your child's score compares to other students who took these tests. In this example, the student scored higher than the school, the district and the state. To protect student privacy, scores are not shown for schools and districts with small student populations.
- State Performance** – Participation information is included to help you make sense of school, district and state-level results. Bars beneath the overall performance graphic show the percentage of students who performed at each performance level. Interpretations of school, district and state performance should be made with caution when participation rates are low.

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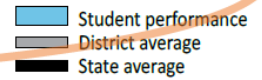
**Subscale Performance**

- The shaded areas below represent about 70% of students scores across the state.
- Diamonds outside of the shaded area indicate a potential weakness or strength compared to the state.

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

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

- PGs and GLEs identify what students need to master to be ready for the next grade level.
- The figure below shows the percent of points your students earned for each grade 5 science GLE.



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Reporting Category Description	Subscale Score	Lower than average			Average	Higher than average
		400				550
<b>Physical Science</b>			441			519
Common properties, forms, and changes in matter and energy	472					
	455					
	459					
	480					

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Standard, PG and GLE	Points Possible	Percent of Points Earned*				
		0%	25%	50%	75%	100%
<b>Physical Science</b>						
<b>PG1: Structure, properties, and interactions of matter</b>						
GLE 1: Matter exists as particles too small to be seen; Properties can be used to identify materials						
GLE 2: Chemical reactions and the Law of Conservation of Mass						
GLE 3: Gravity						

**6 Graph Key** – The key on the middle of Page Two shows which bar represents your student’s performance, district performance and state performance in the score breakdown section of the report. The dark vertical lines represent the Met Expectations performance level starting point.

**7 Performance in Areas of Science** – The right side of the table is divided into three sections showing lower than average, average and higher than average performance for the entire state for each area of science: physical science, life science and Earth and space science. About 70% of student scores across the state fell within the gray shaded section of the scale. The large blue diamond on this scale shows your student’s performance in a particular area of science. Students with scores in the gray section scored similarly to most Colorado students. If your student’s score is to the left of the gray section, your student scored lower than most Colorado students and may benefit from additional focus in this area. If your student’s score is to the right of the gray section, your student scored higher than most Colorado students and this area may be a relative strength. Smaller black diamonds represent average scores for your student’s school and district, as well as the state, in each reporting area.

**8 Score Breakdowns** – This section provides a lower-level breakdown of your student’s performance within each area of science. You can see where your student is excelling or may need improvement. Performance in these areas is reported as the percentage of points your student earned on the assessment for each category. Use the bars identified in the graph key at the top of the page to compare your student’s performance to district and state averages as well as to students at the Met Expectations performance level starting point. In this example, the student outperformed the district on the topic of gravity (Physical Science GLE 3) but did not perform as well as the state. The student did not perform as well as the district, state or students at the Met Expectations performance level starting point in other reporting categories. Note: Percent of points earned cannot be compared across years.

Where can I learn more?

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Colorado Measures of Academic Success (CMAS) tests are the only assessments given to all Colorado students that measure what students should know and be able to do at the end of each grade in math, English language arts, and science. To learn more, visit: [www.cde.state.co.us/communications/resourcesforparents](http://www.cde.state.co.us/communications/resourcesforparents)