



## Colorado Measures of Academic Success (CMAS) 2023 State Achievement Results Science

Based on the 2020 Colorado Academic Standards

### Interpretation Considerations

- Interpretation of school, district, and state results should be made with caution when participation rates are low and/or representativeness\* is limited.
- Cross-state comparisons should consider differences in participation rates and representativeness\* across schools, districts, and student groups.
- Cross-year comparisons should consider differences in participation rates and representativeness\* across years.
- Spring 2023 CMAS science assessments were aligned to the 2020 Colorado Academic Standards. CMAS science assessments from prior years were based on different academic standards and results cannot be compared.

\*Representativeness: how well the demographics of the tested student population mirrored the demographics of the enrolled student population

### Overall Results

Report Category	Participation Information		Score Information		Performance Level Information				
	Number of Valid Scores	Participation Rate	Mean Scale Score	Standard Deviation	Percent Partially Met Expectations	Percent Approached Expectations	Percent Met Expectations	Percent Exceeded Expectations	Percent Met or Exceeded Expectations
<b>Science Overall</b>									
Grade 05	56,427	92.1	733	34	35.3	30.8	31.1	2.7	33.9
Grade 08	50,943	77.8	731	33	38.5	30.2	30.8	0.5	31.3
Grade 11	31,756	49.0	729	29	38.8	36.6	23.8	0.8	24.6

- - The value for this cell is not displayed in order to protect student privacy.



## Colorado Measures of Academic Success (CMAS) 2023 State Achievement Results Science

Based on the 2020 Colorado Academic Standards

### Interpretation Considerations

- Interpretation of school, district, and state results should be made with caution when participation rates are low and/or representativeness\* is limited.
- Cross-state comparisons should consider differences in participation rates and representativeness\* across schools, districts, and student groups.
- Cross-year comparisons should consider differences in participation rates and representativeness\* across years.
- Spring 2023 CMAS science assessments were aligned to the 2020 Colorado Academic Standards. CMAS science assessments from prior years were based on different academic standards and results cannot be compared.

\*Representativeness: how well the demographics of the tested student population mirrored the demographics of the enrolled student population

### Science Results by Gender

Report Category	Participation Information		Score Information		Performance Level Information				
	Number of Valid Scores	Participation Rate	Mean Scale Score	Standard Deviation	Percent Partially Met Expectations	Percent Approached Expectations	Percent Met Expectations	Percent Exceeded Expectations	Percent Met or Exceeded Expectations
<b>Science Grade 05</b>									
Male	28,955	91.9	734	35	34.7	29.7	32.3	3.3	35.6
Female	27,472	92.4	732	33	36.0	32.0	29.9	2.1	32.0
<b>Science Grade 08</b>									
Male	26,775	79.4	730	34	39.6	29.0	30.8	0.6	31.5
Female	24,168	76.2	732	32	37.4	31.5	30.7	0.5	31.1
<b>Science Grade 11</b>									
Male	16,824	51.2	729	31	38.4	34.6	26.0	1.1	27.0
Female	14,932	46.7	729	27	39.2	38.9	21.4	0.4	21.8

-- The value for this cell is not displayed in order to protect student privacy.



## Colorado Measures of Academic Success (CMAS) 2023 State Achievement Results Science

Based on the 2020 Colorado Academic Standards

**Interpretation Considerations**

- Interpretation of school, district, and state results should be made with caution when participation rates are low and/or representativeness\* is limited.
- Cross-state comparisons should consider differences in participation rates and representativeness\* across schools, districts, and student groups.
- Cross-year comparisons should consider differences in participation rates and representativeness\* across years.
- Spring 2023 CMAS science assessments were aligned to the 2020 Colorado Academic Standards. CMAS science assessments from prior years were based on different academic standards and results cannot be compared.

\*Representativeness: how well the demographics of the tested student population mirrored the demographics of the enrolled student population

**Science Results by Race/Ethnicity**

Report Category	Participation Information		Score Information		Performance Level Information				
	Number of Valid Scores	Participation Rate	Mean Scale Score	Standard Deviation	Percent Partially Met Expectations	Percent Approached Expectations	Percent Met Expectations	Percent Exceeded Expectations	Percent Met or Exceeded Expectations
<b>Science Grade 05</b>									
American Indian or Alaska Native	359	92.8	718	35	57.1	25.6	--	--	17.3
Asian	1,967	95.3	743	32	23.4	31.3	40.1	5.2	45.3
Black	2,481	90.4	716	33	55.0	29.4	15.3	0.2	15.6
Hispanic	19,509	92.7	718	33	54.5	29.5	15.4	0.6	16.0
White	29,002	91.8	744	30	21.8	31.8	42.3	4.1	46.4
Hawaiian/Pacific Islander	201	96.2	713	34	60.2	24.9	--	--	14.9
Two or More Races	2,905	91.0	738	33	28.6	31.4	36.7	3.3	40.0
Not Reported	< 16	75.0	--	--	--	--	--	--	--
<b>Science Grade 08</b>									
American Indian or Alaska Native	352	81.3	722	30	48.3	34.9	--	--	16.8
Asian	1,671	82.8	745	32	21.6	27.4	--	--	51.0
Black	2,197	72.9	717	32	55.1	29.7	--	--	15.2
Hispanic	19,163	80.5	716	32	57.2	28.1	14.6	0.1	14.7
White	25,116	76.4	741	29	24.4	31.9	42.9	0.8	43.7
Hawaiian/Pacific Islander	153	80.1	720	33	51.6	27.5	--	--	20.9
Two or More Races	2,286	73.5	736	32	31.3	30.6	37.4	0.7	38.1
Not Reported	< 16	83.3	--	--	--	--	--	--	--
<b>Science Grade 11</b>									
American Indian or Alaska Native	223	55.5	721	26	50.2	37.2	--	--	12.6
Asian	968	44.4	736	30	26.4	38.3	33.5	1.8	35.2
Black	1,398	51.3	716	30	58.4	30.8	--	--	10.8
Hispanic	13,086	58.5	718	28	54.9	34.7	10.2	0.1	10.3
White	14,674	43.1	739	26	24.0	38.5	36.3	1.2	37.5
Hawaiian/Pacific Islander	93	53.8	718	33	51.6	35.5	--	--	12.9
Two or More Races	1,307	45.4	735	29	28.6	39.3	30.7	1.4	32.1
Not Reported	< 16	70.0	--	--	--	--	--	--	--

-- The value for this cell is not displayed in order to protect student privacy.



## Colorado Measures of Academic Success (CMAS) 2023 State Achievement Results Science Based on the 2020 Colorado Academic Standards

### Interpretation Considerations

- Interpretation of school, district, and state results should be made with caution when participation rates are low and/or representativeness\* is limited.
- Cross-state comparisons should consider differences in participation rates and representativeness\* across schools, districts, and student groups.
- Cross-year comparisons should consider differences in participation rates and representativeness\* across years.
- Spring 2023 CMAS science assessments were aligned to the 2020 Colorado Academic Standards. CMAS science assessments from prior years were based on different academic standards and results cannot be compared.

\*Representativeness: how well the demographics of the tested student population mirrored the demographics of the enrolled student population

### Science Results by Free/Reduced Lunch Status

Report Category	Participation Information		Score Information		Performance Level Information				
	Number of Valid Scores	Participation Rate	Mean Scale Score	Standard Deviation	Percent Partially Met Expectations	Percent Approached Expectations	Percent Met Expectations	Percent Exceeded Expectations	Percent Met or Exceeded Expectations
<b>Science Grade 05</b>									
Free/Reduced Lunch Eligible	23,115	91.8	717	33	55.4	29.5	14.6	0.4	15.0
Not Free/Reduced Lunch Eligible	33,312	92.4	745	30	21.4	31.7	42.6	4.3	47.0
<b>Science Grade 08</b>									
Free/Reduced Lunch Eligible	20,708	79.0	716	32	58.0	27.7	14.3	0.1	14.3
Not Free/Reduced Lunch Eligible	30,235	77.1	741	30	25.2	31.9	42.1	0.8	42.9
<b>Science Grade 11</b>									
Free/Reduced Lunch Eligible	12,411	58.5	718	28	54.0	35.1	10.7	0.1	10.9
Not Free/Reduced Lunch Eligible	19,345	44.4	736	28	29.0	37.6	32.2	1.1	33.4

-- The value for this cell is not displayed in order to protect student privacy.

Note: Free and Reduced Lunch data collection and reporting were less precise for spring 2021 and 2022 assessments due to free meals for all students initiatives. These prior years' data should be used with caution.



# Colorado Measures of Academic Success (CMAS) 2023 State Achievement Results Science

Based on the 2020 Colorado Academic Standards

### Interpretation Considerations

- Interpretation of school, district, and state results should be made with caution when participation rates are low and/or representativeness\* is limited.
- Cross-state comparisons should consider differences in participation rates and representativeness\* across schools, districts, and student groups.
- Cross-year comparisons should consider differences in participation rates and representativeness\* across years.
- Spring 2023 CMAS science assessments were aligned to the 2020 Colorado Academic Standards. CMAS science assessments from prior years were based on different academic standards and results cannot be compared.

\*Representativeness: how well the demographics of the tested student population mirrored the demographics of the enrolled student population

### Science Results by Special Programs Status

Report Category	Participation Information		Score Information		Performance Level Information				
	Number of Valid Scores	Participation Rate	Mean Scale Score	Standard Deviation	Percent Partially Met Expectations	Percent Approached Expectations	Percent Met Expectations	Percent Exceeded Expectations	Percent Met or Exceeded Expectations
<b>Science Grade 05</b>									
IEP	6,986	83.1	703	35	71.4	19.4	8.7	0.5	9.2
No IEP	49,441	93.6	737	31	30.2	32.4	34.3	3.0	37.4
Title I	21,160	92.9	719	33	53.1	29.4	16.8	0.7	17.5
Not Title I	35,267	91.7	742	31	24.7	31.6	39.8	4.0	43.7
<b>Science Grade 08</b>									
IEP	5,456	72.2	701	31	77.2	16.8	--	--	6.0
No IEP	45,487	78.6	734	31	33.9	31.8	--	--	34.3
Title I	11,799	86.0	715	32	58.6	27.0	14.3	0.1	14.4
Not Title I	39,144	75.7	735	32	32.5	31.1	35.7	0.7	36.4
<b>Science Grade 11</b>									
IEP	2,791	47.8	705	30	74.2	20.9	4.8	0.1	4.9
No IEP	28,965	49.1	731	28	35.4	38.1	25.7	0.8	26.5
Title I	5,348	76.8	717	28	56.4	33.4	10.0	0.2	10.2
Not Title I	26,408	45.6	731	29	35.2	37.3	26.6	0.9	27.5

-- The value for this cell is not displayed in order to protect student privacy.



## Colorado Measures of Academic Success (CMAS) 2023 State Achievement Results Science Based on the 2020 Colorado Academic Standards

### Interpretation Considerations

- Interpretation of school, district, and state results should be made with caution when participation rates are low and/or representativeness\* is limited.
- Cross-state comparisons should consider differences in participation rates and representativeness\* across schools, districts, and student groups.
- Cross-year comparisons should consider differences in participation rates and representativeness\* across years.
- Spring 2023 CMAS science assessments were aligned to the 2020 Colorado Academic Standards. CMAS science assessments from prior years were based on different academic standards and results cannot be compared.

\*Representativeness: how well the demographics of the tested student population mirrored the demographics of the enrolled student population

### Science Results by Language Proficiency

Report Category	Participation Information		Score Information		Performance Level Information				
	Number of Valid Scores	Participation Rate	Mean Scale Score	Standard Deviation	Percent Partially Met Expectations	Percent Approached Expectations	Percent Met Expectations	Percent Exceeded Expectations	Percent Met or Exceeded Expectations
<b>Science Grade 05</b>									
English Language Proficiency: (NEP/LEP)	6,584	92.5	699	30	79.9	17.3	2.7	0.1	2.8
NEP (Not English Proficient)	1,433	85.3	683	30	89.7	8.9	--	--	1.5
LEP (Limited English Proficient)	5,151	94.7	703	28	77.2	19.7	--	--	3.2
English Language Proficiency: (Not NEP/LEP)	49,843	92.1	738	32	29.4	32.6	34.9	3.1	38.0
FEP (Fluent English Proficient), FELL (Former English Language Learner)	4,045	96.3	734	26	32.5	40.5	25.9	1.2	27.0
PHLOTE, NA, Not Reported	45,798	91.7	738	32	29.2	31.9	35.7	3.3	39.0
<b>Science Grade 08</b>									
English Language Proficiency: (NEP/LEP)	4,965	83.7	696	28	84.8	13.4	--	--	1.8
NEP (Not English Proficient)	1,397	84.0	683	27	92.9	5.7	--	--	1.4
LEP (Limited English Proficient)	3,568	83.7	701	26	81.6	16.4	--	--	2.0
English Language Proficiency: (Not NEP/LEP)	45,978	77.3	734	31	33.5	32.0	--	--	34.5
FEP (Fluent English Proficient), FELL (Former English Language Learner)	6,085	85.5	727	29	43.2	35.6	20.9	0.3	21.2
PHLOTE, NA, Not Reported	39,893	76.1	736	31	32.1	31.4	--	--	36.5
<b>Science Grade 11</b>									
English Language Proficiency: (NEP/LEP)	2,798	64.5	695	27	88.7	10.9	--	--	0.4
NEP (Not English Proficient)	814	65.0	684	27	95.1	--	--	--	--
LEP (Limited English Proficient)	1,984	64.3	699	25	86.1	--	--	--	--
English Language Proficiency: (Not NEP/LEP)	28,958	47.9	732	28	34.0	39.1	--	--	26.9
FEP (Fluent English Proficient), FELL (Former English Language Learner)	5,221	60.9	726	24	43.1	43.6	13.1	0.3	13.3
PHLOTE, NA, Not Reported	23,737	45.7	734	28	31.9	38.1	--	--	29.9

-- The value for this cell is not displayed in order to protect student privacy.



## Colorado Measures of Academic Success (CMAS) 2023 State Achievement Results Science

Based on the 2020 Colorado Academic Standards

### Interpretation Considerations

- Interpretation of school, district, and state results should be made with caution when participation rates are low and/or representativeness\* is limited.
- Cross-state comparisons should consider differences in participation rates and representativeness\* across schools, districts, and student groups.
- Cross-year comparisons should consider differences in participation rates and representativeness\* across years.
- Spring 2023 CMAS science assessments were aligned to the 2020 Colorado Academic Standards. CMAS science assessments from prior years were based on different academic standards and results cannot be compared.

\*Representativeness: how well the demographics of the tested student population mirrored the demographics of the enrolled student population

### Science Results by Migrant Status

Report Category	Participation Information		Score Information		Performance Level Information				
	Number of Valid Scores	Participation Rate	Mean Scale Score	Standard Deviation	Percent Partially Met Expectations	Percent Approached Expectations	Percent Met Expectations	Percent Exceeded Expectations	Percent Met or Exceeded Expectations
<b>Science Grade 05</b>									
Migrant	196	92.5	703	32	71.4	23.5	--	--	5.1
Not Migrant	56,231	92.1	733	34	35.2	30.8	--	--	34.0
<b>Science Grade 08</b>									
Migrant	170	82.5	703	31	77.1	15.9	--	--	7.1
Not Migrant	50,773	77.8	731	33	38.4	30.2	--	--	31.4
<b>Science Grade 11</b>									
Migrant	93	68.9	713	29	63.4	29.0	--	--	7.5
Not Migrant	31,663	48.9	729	29	38.7	36.7	--	--	24.6

-- The value for this cell is not displayed in order to protect student privacy.



## Colorado Measures of Academic Success (CMAS) 2023 State Achievement Results Science

Based on the 2020 Colorado Academic Standards

### Interpretation Considerations

- Interpretation of school, district, and state results should be made with caution when participation rates are low and/or representativeness\* is limited.
- Cross-state comparisons should consider differences in participation rates and representativeness\* across schools, districts, and student groups.
- Cross-year comparisons should consider differences in participation rates and representativeness\* across years.
- Spring 2023 CMAS science assessments were aligned to the 2020 Colorado Academic Standards. CMAS science assessments from prior years were based on different academic standards and results cannot be compared.

\*Representativeness: how well the demographics of the tested student population mirrored the demographics of the enrolled student population

### Science Results by Gifted and Talented Status

Report Category	Participation Information		Score Information		Performance Level Information				
	Number of Valid Scores	Participation Rate	Mean Scale Score	Standard Deviation	Percent Partially Met Expectations	Percent Approached Expectations	Percent Met Expectations	Percent Exceeded Expectations	Percent Met or Exceeded Expectations
<b>Science Grade 05</b>									
Gifted and Talented	5,872	95.8	771	22	2.5	11.7	67.5	18.4	85.9
Not Gifted and Talented	50,555	91.7	729	32	39.1	33.0	26.9	0.9	27.8
<b>Science Grade 08</b>									
Gifted and Talented	6,246	84.5	766	21	3.9	14.3	78.1	3.7	81.8
Not Gifted and Talented	44,697	77.0	726	31	43.4	32.4	24.1	0.1	24.2
<b>Science Grade 11</b>									
Gifted and Talented	3,245	46.2	759	21	4.4	21.2	69.4	5.0	74.4
Not Gifted and Talented	28,511	49.3	726	28	42.7	38.4	18.7	0.3	18.9

- - The value for this cell is not displayed in order to protect student privacy.