# California Department of Education Assessment Development \& Administration Division <br> California Assessment of <br> Student Performance and Progress 

# California Assessment of Student Performance and Progress 

## California Science Test 2018-2019 Technical Report

## Chapter 10 Appendix

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## Appendix 10.A: Student Survey Results

Table 10.A. 1 Scale Score Distribution by Responses to Question 1 for Grade Five

| Did you learn about the topics on the <br> test in your science classes? | N | Percent | Scale Score <br> Mean | Scale <br> Score SD | R $^{*}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| My classes taught me about ALL of the topics on the test. | 98,238 | 21.6 | 195 | 22.2 | N/A |
| My classes taught me about MOST of the topics on the test, |  |  |  |  |  |
| but not all of them. | 294,774 | 64.9 | 203 | 21.7 | N/A |
| My classes did NOT teach me most of the topics on the test. | 61,365 | 13.5 | 202 | 22.1 | N/A |
| Total | $\mathbf{4 5 4 , 3 7 7}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{2 0 1}$ | $\mathbf{2 2 . 1}$ | $\mathbf{- 0 . 1 1}$ |

*R is the correlation between survey responses ( $1=\mathrm{NOT}, 2=\mathrm{MOST}$, and $3=\mathrm{ALL}$ ) and the California Science Test (CAST) scale scores.

Table 10.A. 2 Scale Score Distribution by Responses to Question 2 for Grade Five

| Were any questions on the test different from the <br> types of questions you see in science classes? | N | Percent | Scale Score <br> Mean |  | Scale <br> Score SD | $\mathbf{R}^{\star}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Most questions on the test were different. | 155,844 | 34.3 | 199 | 22.1 | N/A |  |
| Some questions on the test were different. | 273,228 | 60.1 | 203 | 21.9 | N/A |  |
| No questions on the test were different. | 25,290 | 5.6 | 194 | 22.4 | N/A |  |
| Total | 454,362 | $\mathbf{1 0 0 . 0}$ | $\mathbf{2 0 1}$ | $\mathbf{2 2 . 1}$ | $\mathbf{0 . 0 3}$ |  |

* $R$ is the correlation between survey responses ( $1=$ Most, $2=$ Some, and $3=$ No) and the CAST scale scores.

Table 10.A. 3 Scale Score Distribution by Responses to Question 3 for Grade Five

| How hard were questions on this test compared <br> to questions you see in science classes? | $\mathbf{N}$ | Percent | Scale Score <br> Mean | Scale <br> Score SD | R* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| They were HARDER than most questions in my science |  |  |  |  |  |
| classes. |  |  |  |  |  |$\quad 146,075$

*R is the correlation between survey responses ( $1=$ HARDER, $2=$ ABOUT AS HARD, and $3=$ EASIER $)$ and the CAST scale scores.

Table 10.A. 4 Scale Score Distribution by Responses to Question 1 for Grade Eight

| Did you learn about the topics on <br> the test in your science classes? | $\mathbf{N}$ | Percent | Scale Score <br> Mean | Scale <br> Score SD | R* |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: |
| My classes taught me about ALL of the topics on the test. | 79,986 | 17.4 | 399 | 23.9 | N/A |
| My classes taught me about MOST of the topics on the test, |  |  |  |  |  |
| but not all of them. | 306,251 | 66.7 | 403 | 22.0 | N/A |
| My classes did NOT teach me most of the topics on the test. | 72,941 | 15.9 | 397 | 21.7 | N/A |
| Total | $\mathbf{4 5 9 , 1 7 8}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{4 0 1}$ | $\mathbf{2 2 . 4}$ | $\mathbf{0 . 0 2}$ |

* $R$ is the correlation between survey responses $(1=$ NOT, $2=$ MOST, and $3=$ ALL $)$ and CAST scale scores.

Table 10.A. 5 Scale Score Distribution by Responses to Question 2 for Grade Eight

| Were any questions on the test different from the <br> types of questions you see in science classes? | $\mathbf{N}$ | Percent | Scale Score <br> Mean | Scale <br> Score SD | $\mathbf{R}^{\star}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Most questions on the test were different. | 151,542 | 33.0 | 398 | 22.2 | $\mathrm{~N} / \mathrm{A}$ |
| Some questions on the test were different. | 281,080 | 61.2 | 404 | 22.1 | $\mathrm{~N} / \mathrm{A}$ |
| No questions on the test were different. | 26,544 | 5.8 | 397 | 24.1 | $\mathrm{~N} / \mathrm{A}$ |
| Total | $\mathbf{4 5 9 , 1 6 6}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{4 0 1}$ | $\mathbf{2 2 . 4}$ | $\mathbf{0 . 0 7}$ |

* $R$ is the correlation between survey responses ( $1=$ Most, $2=$ Some, and $3=$ No) and the CAST scale scores.

Table 10.A. 6 Scale Score Distribution by Responses to Question 3 for Grade Eight

| How hard were questions on this test compared to questions you see in science classes? | N | Percent | Scale Score Mean | Scale Score SD | R* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| They were HARDER than most questions in my science classes. | 178,186 | 38.8 | 398 | 21.7 | N/A |
| They were ABOUT AS HARD as the questions in my science classes. | 239,777 | 52.2 | 404 | 22.2 | N/A |
| They were EASIER than most questions in my science classes. | 41,199 | 9.0 | 402 | 24.6 | N/A |
| Total | 459,162 | 100.0 | 401 | 22.4 | 0.10 |

*R is the correlation between survey responses ( $1=$ HARDER, $2=$ ABOUT AS HARD, and $3=$ EASIER $)$ and the CAST scale scores.

Table 10.A. 7 Scale Score Distribution by Responses to Question 1 for Grade Ten

| Did you learn about the topics on <br> the test in your science classes? | $\mathbf{N}$ | Percent | Scale Score <br> Mean | Scale <br> Score SD | R* |
| :---: | ---: | ---: | ---: | ---: | ---: |
| My classes taught me about ALL of the topics on the test. | 1,759 | 7.7 | 587 | 20.8 | N/A |
| My classes taught me about MOST of the topics on the test, |  |  |  |  |  |
| but not all of them. | 13,408 | 58.4 | 599 | 21.7 | N/A |
| My classes did NOT teach me most of the topics on the test. | 7,793 | 33.9 | 595 | 20.3 | N/A |
| Total | $\mathbf{2 2 , 9 6 0}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{5 9 7}$ | $\mathbf{2 1 . 4}$ | $\mathbf{- 0 . 0 1}$ |

* $R$ is the correlation between survey responses $(1=$ NOT, $2=$ MOST, and $3=$ ALL) and CAST scale scores.

Table 10.A. 8 Scale Score Distribution by Responses to Question 2 for Grade Ten

| Were any questions on the test different from the <br> types of questions you see in science classes? | $\mathbf{N}$ | Percent | Scale Score <br> Mean | Scale <br> Score SD | $\mathbf{R}^{\star}$ |
| ---: | ---: | ---: | ---: | ---: | ---: |
| Most questions on the test were different. | 10,706 | 46.6 | 595 | 21.0 | $\mathrm{~N} / \mathrm{A}$ |
| Some questions on the test were different. | 10,854 | 47.3 | 599 | 21.6 | $\mathrm{~N} / \mathrm{A}$ |
| No questions on the test were different. | 1,399 | 6.1 | 588 | 20.8 | $\mathrm{~N} / \mathrm{A}$ |
| Total | $\mathbf{2 2 , 9 5 9}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{5 9 7}$ | $\mathbf{2 1 . 4}$ | $\mathbf{0 . 0 1}$ |

[^0]Table 10.A. 9 Scale Score Distribution by Responses to Question 3 for Grade Ten

| How hard were questions on this test compared to questions you see in science classes? | N | Percent | Scale Score Mean | Scale Score SD | R* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| They were HARDER than most questions in my science classes. | 11,751 | 51.2 | 594 | 20.2 | N/A |
| They were ABOUT AS HARD as the questions in my science classes. | 9,580 | 41.7 | 599 | 21.5 | N/A |
| They were EASIER than most questions in my science classes | 1,628 | 7.1 | 602 | 26.7 | N/A |
| Total | 22,959 | 100.0 | 597 | 21.4 | 0.13 |

*R is the correlation between survey responses ( $1=$ HARDER, $2=$ ABOUT AS HARD, and $3=$ EASIER $)$ and the CAST scale scores.

Table 10.A. 10 Scale Score Distribution by Responses to Question 4 for Grade Ten

| Do you think you will be enrolling in any more science classes in high school? |  | N | Percent | Scale Score Mean | Scale Score SD | R* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | 15,823 | 68.9 | 601 | 21.7 | N/A |
|  | No | 7,136 | 31.1 | 588 | 18.0 | N/A |
|  | Total | 22,959 | 100.0 | 597 | 21.4 | 0.27 |

*R is the correlation between survey responses ( $1=$ No and $2=$ Yes $)$ and the CAST scale scores.
Table 10.A. 11 Scale Score Distribution by Responses to Question 1 for Grade Eleven

| Did you learn about the topics on <br> the test in your science classes? | N | Percent | Scale Score <br> Mean | Scale <br> Score SD | $\mathbf{R}^{*}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| My classes taught me about ALL of the topics on the test. | 21,451 | 8.4 | 596 | 24.9 | N/A |
| My classes taught me about MOST of the topics on the test, |  |  |  |  |  |
| but not all of them. | 155,681 | 61.1 | 604 | 22.4 | N/A |
| My classes did NOT teach me most of the topics on the test. | 77,863 | 30.5 | 597 | 20.6 | N/A |
| Total | $\mathbf{2 5 4 , 9 9 5}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{6 0 1}$ | $\mathbf{2 2 . 3}$ | $\mathbf{0 . 0 7}$ |

* $R$ is the correlation between survey responses $(1=$ NOT, $2=$ MOST, and $3=$ ALL $)$ and CAST scale scores.

Table 10.A. 12 Scale Score Distribution by Responses to Question 2 for Grade Eleven

| Were any questions on the test different from the <br> types of questions you see in science classes? |  | $\mathbf{N}$ | Percent | Scale Score <br> Mean |  | Scale <br> Score SD |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Most questions on the test were different. | 111,662 | 43.8 | 598 | 21.6 | $\mathrm{~N} / \mathrm{A}$ |  |
| Some questions on the test were different. | 127,913 | 50.2 | 604 | 22.3 | $\mathrm{~N} / \mathrm{A}$ |  |
| No questions on the test were different. | 15,412 | 6.0 | 594 | 23.5 | $\mathrm{~N} / \mathrm{A}$ |  |
| Total | $\mathbf{2 5 4 , 9 8 7}$ | $\mathbf{1 0 0 . 0}$ | $\mathbf{6 0 1}$ | $\mathbf{2 2 . 3}$ | $\mathbf{0 . 0 7}$ |  |

* $R$ is the correlation between survey responses ( $1=$ Most, $2=$ Some, and $3=$ No) and the CAST scale scores.

Table 10.A. 13 Scale Score Distribution by Responses to Question 3 for Grade Eleven

| How hard were questions on this test compared <br> to questions you see in science classes? | $\mathbf{N}$ | Percent | Scale Score <br> Mean | Scale <br> Score SD | $\mathbf{R}^{*}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |

*R is the correlation between survey responses ( $1=$ HARDER, $2=$ ABOUT AS HARD, and $3=$ EASIER $)$ and the CAST scale scores.

Table 10.A. 14 Scale Score Distribution by Responses to Question 4 for Grade Eleven

| Do you think you will be enrolling in any more science classes in high school? |  | N | Percent | Scale Score Mean | Scale Score SD | R* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | 138,825 | 54.4 | 606 | 22.7 | N/A |
|  | No | 116,153 | 45.6 | 595 | 20.4 | N/A |
|  | Total | 254,978 | 100.0 | 601 | 22.3 | 0.24 |

[^1]Table 10.A. 15 Scale Score Distribution by Responses to Question 1 for Grade Twelve

| Did you learn about the topics on <br> the test in your science classes? | N | Percent | Scale Score <br> Mean |  | Scale <br> Score SD | R* |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| My classes taught me about ALL of the topics on the test. | 29,834 | 10.9 | 596 | 25.2 | N/A |  |
| My classes taught me about MOST of the topics on the test, |  |  |  |  |  |  |
| but not all of them. | 161,709 | 59.1 | 601 | 22.9 | N/A |  |
| My classes did NOT teach me most of the topics on the test. | 81,889 | 29.9 | 591 | 19.8 | N/A |  |
| Total | $\mathbf{2 7 3 , 4 3 2}$ | $\mathbf{1 0 0 . 0}$ | 598 | $\mathbf{2 2 . 7}$ | $\mathbf{0 . 1 2}$ |  |

* $R$ is the correlation between survey responses $(1=$ NOT, $2=$ MOST, and $3=$ ALL) and CAST scale scores.

Table 10.A. 16 Scale Score Distribution by Responses to Question 2 for Grade Twelve

| Were any questions on the test different from the <br> types of questions you see in science classes? | $\mathbf{N}$ | Percent | Scale Score <br> Mean | Scale <br> Score SD | $\mathbf{R}^{\star}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Most questions on the test were different. | 112,703 | 41.2 | 593 | 21.3 | $\mathrm{~N} / \mathrm{A}$ |
| Some questions on the test were different. | 139,718 | 51.1 | 602 | 22.8 | $\mathrm{~N} / \mathrm{A}$ |
| No questions on the test were different. | 21,006 | 7.7 | 593 | 23.9 | $\mathrm{~N} / \mathrm{A}$ |
| Total | 273,427 | $\mathbf{1 0 0 . 0}$ | $\mathbf{5 9 8}$ | $\mathbf{2 2 . 7}$ | $\mathbf{0 . 1 0}$ |

* $R$ is the correlation between survey responses ( $1=$ Most, $2=$ Some, and $3=$ No) and the CAST scale scores.

Table 10.A. 17 Scale Score Distribution by Responses to Question 3 for Grade Twelve

| How hard were questions on this test compared to questions you see in science classes? | N | Percent | Scale Score Mean | Scale Score SD | R* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| They were HARDER than most questions in my science classes. | 120,709 | 44.1 | 592 | 19.7 | N/A |
| They were ABOUT AS HARD as the questions in my science classes. | 125,174 | 45.8 | 601 | 22.5 | N/A |
| They were EASIER than most questions in my science classes. | 27,540 | 10.1 | 609 | 27.9 | N/A |
| Total | 273,423 | 100.0 | 598 | 22.7 | 0.25 |

[^2] scores.

Table 10.A. 18 Scale Score Distribution by Responses to Question 1 for High School

| Did you learn about the topics on <br> the test in your science classes? | N | Percent | Scale Score <br> Mean | Scale <br> Score SD | R* |
| ---: | ---: | ---: | ---: | ---: | ---: |
| My classes taught me about ALL of the topics on the test. | 53,044 | 9.6 | 596 | 25.0 | N/A |
| My classes taught me about MOST of the topics on the test, |  |  |  |  |  |
| but not all of them. | 330,798 | 60.0 | 602 | 22.6 | N/A |
| My classes did NOT teach me most of the topics on the test. | 167,545 | 30.4 | 594 | 20.3 | N/A |
| Total | 551,387 | $\mathbf{1 0 0 . 0}$ | 599 | $\mathbf{2 2 . 5}$ | $\mathbf{0 . 0 9}$ |

* $R$ is the correlation between survey responses $(1=$ NOT, $2=$ MOST, and $3=$ ALL $)$ and CAST scale scores.

Table 10.A. 19 Scale Score Distribution by Responses to Question 2 for High School

| Were any questions on the test different from the <br> types of questions you see in science classes? | N | Percent | Scale Score <br> Mean |  | Scale <br> Score SD | $\mathbf{R}^{\star}$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Most questions on the test were different. | 235,071 | 42.6 | 596 | 21.5 | N/A |  |
| Some questions on the test were different. | 278,485 | 50.5 | 603 | 22.6 | N/A |  |
| No questions on the test were different. | 37,817 | 6.9 | 593 | 23.7 | N/A |  |
| Total | 551,373 | $\mathbf{1 0 0 . 0}$ | $\mathbf{5 9 9}$ | $\mathbf{2 2 . 5}$ | $\mathbf{0 . 0 8}$ |  |

* $R$ is the correlation between survey responses ( $1=$ Most, $2=$ Some, and $3=$ No) and the CAST scale scores.

Table 10.A. 20 Scale Score Distribution by Responses to Question 3 for High School

| How hard were questions on this test compared to questions you see in science classes? | N | Percent | Scale Score Mean | Scale Score SD | R* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| They were HARDER than most questions in my science classes. | 252,647 | 45.8 | 594 | 20.1 | N/A |
| They were ABOUT AS HARD as the questions in my science classes. | 246,738 | 44.8 | 602 | 22.4 | N/A |
| They were EASIER than most questions in my science classes. | 51,980 | 9.4 | 610 | 27.5 | N/A |
| Total | 551,365 | 100.0 | 599 | 22.5 | 0.23 |

[^3] scores.

Chapter 10 Appendix | Appendix 10.A: Student Survey Results
Table 10.A. 21 Scale Score Distribution by Responses to Question 4 for Grades Ten and Eleven

| Do you think you will be enrolling in any more science classes in high school? |  | N | Percent | Scale Score Mean | Scale Score SD | R* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | 154,648 | 55.6 | 605 | 22.6 | N/A |
|  | No | 123,289 | 44.4 | 595 | 20.4 | N/A |
|  | Total | 277,937 | 100.0 | 601 | 22.3 | 0.24 |

*R is the correlation between survey responses ( $1=$ No and $2=$ Yes $)$ and the CAST scale scores.


[^0]:    * $R$ is the correlation between survey responses ( $1=$ Most, $2=$ Some, and $3=$ No) and the CAST scale scores.

[^1]:    *R is the correlation between survey responses ( $1=$ No and $2=$ Yes) and the CAST scale scores.

[^2]:    *R is the correlation between survey responses ( $1=$ HARDER, $2=$ ABOUT AS HARD, and $3=$ EASIER $)$ and the CAST scale

[^3]:    *R is the correlation between survey responses ( $1=$ HARDER, $2=$ ABOUT AS HARD, and $3=$ EASIER $)$ and the CAST scale

