

# Impact of STAAR Redesign on Student Performance: A Longitudinal Analysis

Presented By

Rebeca Cooper, Ed.D.  
Assistant Professor of Education  
Education Leadership  
College of Arts, Sciences, and Education  
Texas A&M University Texarkana

1

## History

### HISTORY OF TEXAS TESTING (1980- 2011)

- TABS (Texas Assessment of Basic Skills)
- TEAMS (Texas Educational Assessment of Minimum Skills)
- TAAS (Texas Assessment of Academic Skills)
- TAKS (Texas Assessment of Knowledge and Skills)
- STAAR (State of Texas Assessments of Academic Readiness)

2

2

# History

## Assessment Timeline

Texas has a long history of student assessment dating back to 1979, when its first statewide testing program was required by statute. Over the years, changes in legislation and policy have impacted the size and scope of the Texas Assessment Program. This chapter provides an overview of these changes, including an assessment timeline and a description of changes to the assessment program over time.

3

3

# History



### —1979–1980

The Texas Assessment of Basic Skills (TABS) was administered for the first time in February 1980. TABS included mathematics, reading, and writing assessments in grades 3, 5, and 9. The final administration of TABS was in fall 1985.



### —1986–1987

The Texas Educational Assessment of Minimum Skills (TEAMS) was first administered in fall 1986 and included mathematics, reading, and writing assessments in grades 1, 3, 5, 7, 9, and 11. TEAMS represented the first time that Texas students were required to pass a state assessment to be eligible to receive a high school diploma; students had to pass the TEAMS grade 11 exit-level tests in mathematics and reading to graduate. The final administration of TEAMS was in fall 1989. After that, students who were required to meet TEAMS graduation requirements had to take the Texas Assessment of Academic Skills (TAAS) exit-level assessments with adjusted performance standards.

4

4

## History



### —1990–1991

First administered in fall 1990, TAAS shifted the focus of assessment from minimum skills to academic skills and included mathematics, reading, and writing assessments in grades 3, 5, 7, 9, and 11. Students had to pass the TAAS grade 11 exit-level assessments in mathematics, reading, and writing to receive their high school diploma.

### —1993–1994

Administration of TAAS moved to the spring, and the grades and subjects assessed were reconfigured. From 1994 to 2002, TAAS was administered every spring to students in grades 3–8 and 10 in mathematics and reading; grades 4, 8, and 10 in writing; and grade 8 in science and social studies. Students had to pass the TAAS grade 10 exit-level assessments in mathematics, reading, and writing to be eligible to graduate.

5

5

## History



The final administration of TAAS for grades 3–8 was in spring 2002. Because TAAS remained the graduation requirement for students in grade 9 or above on January 1, 2001, exit-level TAAS tests continued to be administered through July 2009. Subsequently, students who were required to meet TAAS graduation requirements were able to take Texas Assessment of Knowledge and Skills (TAKS) exit-level assessments with adjusted performance standards.

### —1995–1996

Spanish-language TAAS mathematics and reading assessments were incorporated into the testing program for grades 3 and 4.

Algebra I and Biology end-of-course (EOC) assessments were administered for the first time to students who completed these courses.

### —1996–1997

Spanish-language TAAS mathematics and reading assessments were incorporated into the testing program for grades 5 and 6.

### —1998–1999

English II and U.S. History EOC assessments were administered for the first time to students who completed these courses. Through spring 2002, the four EOC assessments—Algebra I, English II, Biology, and U.S. History—were administered as state-mandated assessments and as an option for meeting graduation requirements.

6

6

# History

## —2002–2003



To satisfy legislative requirements, TAKS was designed to be more comprehensive than its predecessors and to measure more of the state-mandated curriculum known as the Texas Essential Knowledge and Skills (TEKS). TAKS was first administered in spring 2003 and included assessments in mathematics in grades 3–11; reading in grades 3–9; writing in grades 4 and 7;

English language arts (ELA) in grades 10 and 11; science in grades 5, 10, and 11; and social studies in grades 8, 10, and 11. Spanish versions of TAKS were administered in grades 3–6. Students had to pass the TAKS grade 11 exit-level tests in mathematics, ELA, science, and social studies to receive a high school diploma.

The final administration of TAKS for grades 3–10 was in spring 2011. Because TAKS remained the graduation requirement for students in grade 9 or above in the 2011–2012 school year, exit-level TAKS tests continued to be administered through June 2017. After that, students who were required to meet TAKS graduation requirements could take the State of Texas Assessments of Academic Readiness (STAAR<sup>®</sup>) EOC assessments with adjusted performance standards.

7

7

# History

## —2011–2012



STAAR replaced TAKS as the state academic assessment program beginning in spring 2012. STAAR included mathematics and reading in grades 3–8, writing in grades 4 and 7, science in grades 5 and 8, and social studies in grade 8. For high school, grade-specific assessments were replaced with 15 STAAR EOC assessments: Algebra I, Geometry, Algebra II, English I reading, English I writing, English II reading, English II writing, English III reading, English III writing, Biology, Chemistry, Physics, World Geography, World History, and U.S. History. STAAR Spanish was administered in grades 3–5.

In compliance with SSI, satisfactory performance on STAAR grades 5 and 8 mathematics and reading were requirements for promotion to the next grade level through spring 2021.

Depending on their graduation program, high school students were required to meet the passing standard (or achieve a predetermined minimum score) on at least 11 of the 15 STAAR EOC assessments. Additionally, students needed to meet a cumulative score requirement in each content area.

8

8

## History

### —2012–2013

Based on legislative changes, spring 2013 was the final administration of STAAR Geometry, Chemistry, Physics, World Geography, and World History EOC assessments. STAAR Algebra II and English III post-secondary readiness assessments became optional, and their administration was suspended until spring 2016.



STAAR Modified EOC assessments in Algebra I, Geometry, English I reading, English I writing, English II reading, English II writing, Biology, World Geography, and World History were added to the testing program.

### —2013–2014

Based on legislative requirements, STAAR high school English assessments were redesigned to combine reading and writing into a single assessment. The redesigned STAAR English I and English II EOC assessments were first administered in spring 2014.

The STAAR Modified U.S. History EOC assessment was added to the testing program.

9

9

## TAKS to STAAR Bridge Study (AYP)

- A bridge study will identify the *Met Standard* performance standard for the previous assessment system, the Texas Assessment of Knowledge and Skills (TAKS), on the STAAR assessments in 2012.
- Students who meet the bridged TAKS *Met Standard* performance standard on STAAR assessments will be counted as proficient for AYP purposes in 2012.
- The bridge study methods, as supported by the Texas Technical Advisory Committee (TTAC), vary by test type and content area (in some cases) due to different testing conditions for the assessments and the availability of student data.
- Content alignment, or overlap, analyses will determine whether there is sufficient shared content between the two assessments so that mapping the TAKS *Met Standard* performance standards onto the STAAR assessments will result in a meaningful interpretation.
- The empirical analyses will statistically map the TAKS *Met Standard* performance standard to the STAAR 2012 assessments using student performance data. The impact data analyses can provide supplemental data to support the results from the empirical analyses.
- The bridge study will only be used for AYP evaluations in spring 2012 while Texas transitions from TAKS to STAAR. In spring 2013, AYP will use the performance standards for STAAR for AYP evaluations.

10

10



## TAKS to STAAR Bridge Study (AYP)

- The empirical analyses will statistically map the TAKS *Met Standard* performance standard to the STAAR 2012 assessments using student performance data. The impact data analyses can provide supplemental data to support the results from [the empirical analyses](#).

### Stage 2. Empirical Analysis

The empirical analysis stage statistically maps the TAKS *Met Standard* performance standard to the STAAR 2012 assessments using student performance data. Different empirical methods, as supported by the Texas Technical Advisory Committee (TTAC), will be conducted based on the availability of student data. For STAAR 3–8, student data were collected in spring 2011 by embedding STAAR field-test items in the TAKS operational assessments (see Appendix 3 for technical details). For STAAR EOC, student data were collected in spring 2011 by administering both TAKS and STAAR assessments to the same students (see Appendix 3 for technical details).

### Stage 3. Impact Data Analysis

The third stage involves evaluating the percent of students attaining the TAKS *Met Standard* on the TAKS 2011 assessments (referred to as impact data) in relation to student performance on STAAR assessments in 2012. The impact data analysis can provide supplemental data to support the results from [the empirical analyses](#). As supported by the TTAC, the impact data analysis will identify the percentage of students at and above the *Met Standard* on each TAKS 2011 assessment and find the raw score on the STAAR assessment that corresponds to the TAKS passing percentage in 2011 (see Appendix 6).

STAAR

11

11

## TAKS to STAAR Bridge Study (AYP)

### Stage 3. Impact Data Analysis

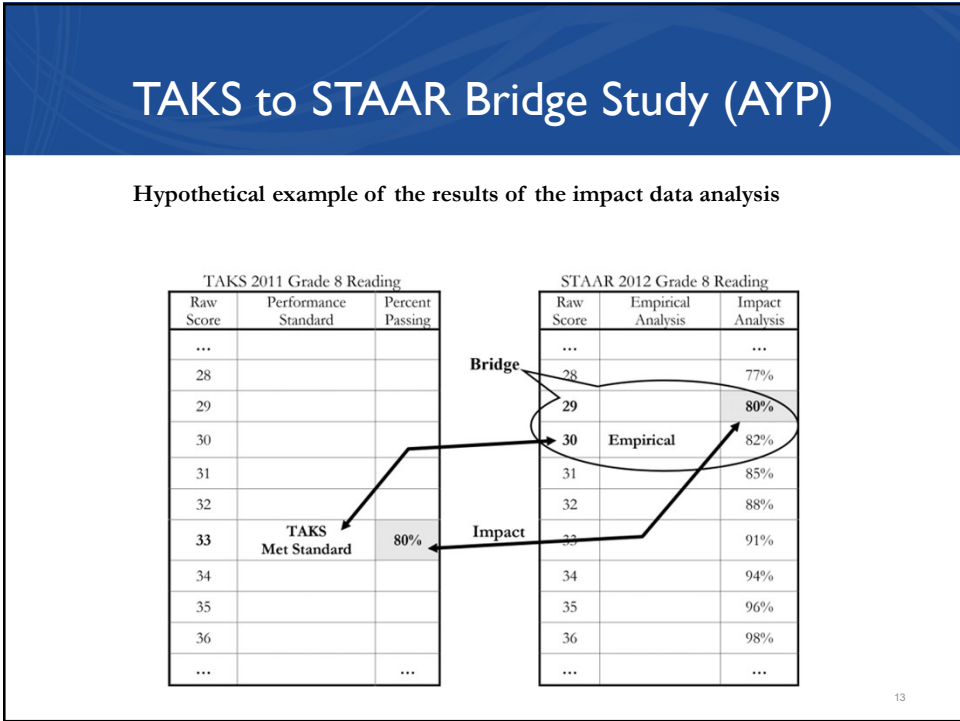
The third stage involves evaluating the percent of students attaining the TAKS *Met Standard* on the TAKS 2011 assessments (referred to as impact data) in relation to student performance on STAAR assessments in 2012. The impact data analysis can provide supplemental data to support the results from [the empirical analyses](#). As supported by the TTAC, the impact data analysis will identify the percentage of students at and above the *Met Standard* on each TAKS 2011 assessment and find the raw score on the STAAR assessment that corresponds to the TAKS passing percentage in 2011 (see Appendix 6).

The purpose of the impact data analysis stage is to validate the empirical method results and, if needed, make an adjustment to the identified TAKS performance standards on the STAAR assessments. The method for the impact data analysis involves identifying the percentage of students at and above the *Met Standard* on the TAKS 2011 assessment and finding the raw score on the STAAR assessment that corresponds to the TAKS passing percentage in 2011 given the percent of students at each raw score on the STAAR 2012 assessment. It is expected that the STAAR raw scores identified by using the same percentages will be equal or close to the TAKS cut points on the STAAR test identified through empirical analyses in the previous stage.

STAAR

12

12



13

## TAKS to STAAR Bridge Study (AYP) Phase-In Performance Standards

**3. Why are STAAR performance standards being phased in?**

A phase-in period has been implemented for STAAR performance standards to provide school districts with time to adjust instruction, provide new professional development, increase teacher effectiveness, and close knowledge gaps. A two-step phase-in for Level II is in place for all general STAAR assessments.

To be eligible to graduate from a Texas public school, a student must achieve the Level II performance standard. The STAAR EOC phase-in performance standard for Level II is based on the performance standard in place when the student takes his or her first EOC assessment. The same standard applies to all five EOC assessments. For example, for students who took STAAR Algebra I in spring 2013, the first phase-in standard for Level II: Satisfactory Performance would apply to STAAR Algebra I, English I, English II, biology, and U.S. history.

The STAAR 3–8 phase-in standards for Level II performance began with the 2012 test administration. Phase-in 1 standards for Level II are in effect for the 2011–2012, 2012–2013, and 2013–2014 school years. Phase-in 2 standards and eventually final recommended Level II standards will take effect in

14

## TAKS to STAAR Bridge Study (AYP) Phase-In Performance Standards

**4. How were the phase-in cut scores determined?**

Phase-in cut scores were determined empirically for each STAAR assessment based on the recommended Level II cut scores. For STAAR EOC, phase-in 1 cut scores for Level II were set at 1.0 standard deviation (SD) below the Level II recommended cut scores for the STAAR mathematics, science, and social studies assessments and at 0.5 SD below the Level II recommended cut scores for the STAAR English assessments. Phase-in 2 cut scores for Level II were set at 0.5 SD below the Level II recommended cut scores for the STAAR mathematics, science, and social studies assessments, and at 0.2 SD below the Level II recommended cut scores for the STAAR English assessments.

For all STAAR 3–8 assessments, phase-in 1 cut scores for Level II were set at 1.0 SD below the Level II recommended cut scores, and phase-in 2 cut scores were set at 0.5 SD below the Level II recommended cut scores. [These phase-in](#) cut scores are all higher than the TAKS “Met” performance standard.

## TAKS to STAAR Equivalents

**State of Texas Assessments of Academic Readiness (STAAR) General Assessments—2012  
Texas Assessment of Knowledge and Skills (TAKS) Equivalent Information\***

Grades 3–8 Reading and Mathematics**	TAKS Cut Score on STAAR		Items Tested		Number of Students Tested		Number Met TAKS Cut Score on STAAR		Percent Met TAKS Cut Score on STAAR	
	Reading	Mathematics	Reading	Mathematics	Reading	Mathematics	Reading	Mathematics	Reading	Mathematics
3 English	14	19***	40	46	327,998	346,008	301,186	297,561	92	86
3 Spanish	13	19	40	46	36,256	19,808	32,164	15,645	89	79
Grade 3 Total					364,254	365,816	333,350	313,206	92	86
4 English	19	20	44	48	334,511	348,285	290,571	309,317	87	89
4 Spanish	17	20	44	48	23,242	10,817	18,773	8,677	81	80
Grade 4 Total					357,753	359,102	309,344	317,994	86	89
5 English	21	22	46	50	348,809	355,101	303,588	306,662	87	86
5 Spanish	21	22	46	50	9,983	3,632	7,480	2,221	75	61
Grade 5 Total					358,792	358,733	311,068	308,883	87	86
6 English	23	19	48	52	354,388	349,035	302,145	286,311	85	82
Grade 6 Total					354,388	349,035	302,145	286,311	85	82
7 English	22	19	50	54	347,911	327,397	303,069	270,058	87	82
Grade 7 Total					347,911	327,397	303,069	270,058	87	82
8 English	22	21	52	56	340,837	316,678	302,909	248,028	89	78
Grade 8 Total					340,837	316,678	302,909	248,028	89	78



## TAKS to STAAR Bridge Study (AYP) Phase-In Performance Standards

3rd Grade Reading
District Data Calculated at 2 SEM or Raw Score = <b>21</b> / STATE Calculation = Raw Score <b>20</b> / TEA AYP Bridge Study = Raw Score <b>14</b>
3rd Grade Math
District Data Calculated at 2 SEM or Raw Score = <b>25</b> / STATE Calculation = Raw Score <b>26</b> / TEA AYP Bridge Study = Raw Score <b>19</b>
4th Grade Reading
District Data Calculated at 2 SEM or Raw Score = <b>23</b> / STATE Calculation = Raw Score <b>23</b> / TEA AYP Bridge Study = Raw Score <b>19</b>
4th Grade Math
District Data Calculated at 2 SEM or Raw Score = <b>26</b> / State Calculation = Raw Score <b>28</b> / TEA AYP Bridge Study = Raw Score <b>19</b>
5th Grade Reading
District Data Calculated at 2 SEM or Raw Score = <b>26</b> / State Calculation = Raw Score / TEA AYP Bridge Study = Raw Score <b>21</b>
5th Grade Math
District Data Calculated at 2 SEM or Raw Score = <b>26</b> / State Calculation = Raw Score / TEA AYP Bridge Study = Raw Score <b>22</b>

17

17

## TAKS to STAAR Bridge Study (AYP) Phase-In Performance Standards

6th Grade Reading
District Data Calculated at 2 SEM or Raw Score = 24 / State Calculation = Raw Score 27 / TEA Bridge Study = Raw Score 23
6th Grade Math
District Data Calculated at 2 SEM or Raw Score = 22 / State Calculation = Raw Score 21 / TEA AYP Bridge Study = Raw Score 19
7th Grade Reading
District Data Calculated at 2 SEM or Raw Score = 25 / State Calculation = Raw Score 27 / TEA Bridge Study = Raw Score 22
7th Grade Math
District Data Calculated at 2 SEM or Raw Score = 23 / State Calculation = Raw Score 23/ TEA AYP Bridge Study = Raw Score 19

18

18

## History

### —2022–2023



STAAR transitioned to a primarily online assessment program beginning with the December 2022 administration.

Spring 2023 marked the launch of the STAAR redesign. New non-multiple-choice question types were present across all grades, subjects, and courses. STAAR reading language arts (RLA) assessments included reading and writing components.

19

19

## STAAR Redesign

- STAAR redesign is a result of House Bill (HB) 3906 passed by the 86<sup>th</sup> Texas Legislature in 2019.
- The redesign will be implemented in the state summative assessments administered in the 2022–2023 school year.




20

20

## STAAR Redesign

- The STAAR redesign includes several components:
  - Online Testing and Accommodations
  - New Question Types
  - Cross-curricular Passages
  - Evidence-based Writing

21



**STAAR Grade 3 Math Blueprint**  
Effective as of School Year 2022–23

Reporting Category	Number of Standards	Number of Questions	Number of Points
1: Numerical Representations and Relationships	Readiness: 4	7-9	10-12
	Supporting: 10		
2: Computations and Algebraic Relationships	Readiness: 5	11-13	13-17
	Supporting: 9		
3: Geometry and Measurement	Readiness: 3	5-7	6-10
	Supporting: 6		
4: Data Analysis and Personal Financial Literacy	Readiness: 1	3-5	3-6
	Supporting: 6		
Item Types by Point	1-point questions (multiple-choice and non-multiple choice)	23	23
	2-point questions (non-multiple choice)	7	14
<b>Total</b>		<b>30</b>	<b>37</b>

All TEKS, whether identified as readiness or supporting, are required to be taught in their entirety for a grade level or course. **Readiness standards** are essential for success in the current grade and important for preparedness for the next grade or course. They address broad and deep ideas and require in-depth instruction. These standards make up approximately 55-70% of the total points on the base test. **Supporting standards** play a role in preparing students for the next grade or course but not one that is central. They may address more narrowly defined ideas or concepts or may be emphasized in grades below or above the current grade or course. Supporting standards make up approximately 30-45% of the total points on the base test.

**Every passage and question on STAAR is created for Texas students with the review and approval of Texas educators.**

STAAR passages and questions go through a [rigorous development and review process](#) to ensure they accurately measure student knowledge.


**Step 1:** Passages and questions are written to align with the TEKS, which describe what students should know and be able to do in each grade and subject.

**Step 2:** Groups of Texas educators review and approve passages and questions for the grade and subject they teach to ensure passages and questions are grade-level appropriate, align with the TEKS, and are unbiased and accessible to all students.

**Step 3:** Questions are tested out by Texas students but do not count towards their scores to confirm that the questions are unbiased and accurate. These are called "field-test questions."

**Step 4:** Passages and questions that pass all previous steps can be selected for an official STAAR test to provide educators and families with information to support teaching and learning.

22



### STAAR Grade 3 Reading Language Arts Blueprint

Effective as of School Year 2022–23

Reporting Category	Number of Standards	Number of Questions	Number of Points
1: Reading	Readiness: 12	24-26	26-28
	Supporting: 19		
2: Writing	Readiness: 13	15-17	24-26
	Supporting: 12		
Item Types by Point	1-point questions (multiple-choice and non-multiple choice)	38	38
	2-point questions (non-multiple choice)	2	4
	Extended Constructed Response	1	10
<b>Total</b>		<b>41</b>	<b>52</b>

All TEKS, whether identified as readiness or supporting, are required to be taught in their entirety for a grade level or course. **Readiness standards** are essential for success in the current grade and important for preparedness for the next grade or course. They address broad and deep ideas and require in-depth instruction. These standards make up approximately 55-75% of the total points on the base test. **Supporting standards** play a role in preparing students for the next grade or course but not one that is central. They may address more narrowly defined ideas or concepts or may be emphasized in grades below or above the current grade or course. Supporting standards make up approximately 25-45% of the total points on the base test.

Every passage and question on STAAR is created for Texas students with the review and approval of Texas educators.

STAAR passages and questions go through a [rigorous development and review process](#) to ensure they accurately measure student knowledge.


**Step 1:** Passages and questions are written to align with the TEKS, which describe what students should know and be able to do in each grade and subject.

**Step 2:** Groups of Texas educators review and approve passages and questions for the grade and subject they teach to ensure passages and questions are grade-level appropriate, align with the TEKS, and are unbiased and accessible to all students.

**Step 3:** Questions are tested out by Texas students but do not count towards their scores to confirm that the questions are unbiased and accurate. These are called “field-test questions.”

**Step 4:** Passages and questions that pass all previous steps can be selected for an official STAAR test to provide educators and families with information to support teaching and learning.

23



### STAAR Grade 4 Math Blueprint

Effective as of School Year 2022–23

Reporting Category	Number of Standards	Number of Questions	Number of Points
1: Numerical Representations and Relationships	Readiness: 3	7-9	8-12
	Supporting: 10		
2: Computations and Algebraic Relationships	Readiness: 5	10-12	12-16
	Supporting: 7		
3: Geometry and Measurement	Readiness: 4	8-10	9-13
	Supporting: 7		
4: Data Analysis and Personal Financial Literacy	Readiness: 1	3-5	3-6
	Supporting: 4		
Item Types by Point	1-point questions (multiple-choice and non-multiple choice)	24	24
	2-point questions (non-multiple choice)	8	16
<b>Total</b>		<b>32</b>	<b>40</b>

All TEKS, whether identified as readiness or supporting, are required to be taught in their entirety for a grade level or course. **Readiness standards** are essential for success in the current grade and important for preparedness for the next grade or course. They address broad and deep ideas and require in-depth instruction. These standards make up approximately 55-70% of the total points on the base test. **Supporting standards** play a role in preparing students for the next grade or course but not one that is central. They may address more narrowly defined ideas or concepts or may be emphasized in grades below or above the current grade or course. Supporting standards make up approximately 30-45% of the total points on the base test.

Every passage and question on STAAR is created for Texas students with the review and approval of Texas educators.

STAAR passages and questions go through a [rigorous development and review process](#) to ensure they accurately measure student knowledge.


**Step 1:** Passages and questions are written to align with the TEKS, which describe what students should know and be able to do in each grade and subject.

**Step 2:** Groups of Texas educators review and approve passages and questions for the grade and subject they teach to ensure passages and questions are grade-level appropriate, align with the TEKS, and are unbiased and accessible to all students.

**Step 3:** Questions are tested out by Texas students but do not count towards their scores to confirm that the questions are unbiased and accurate. These are called “field-test questions.”

**Step 4:** Passages and questions that pass all previous steps can be selected for an official STAAR test to provide educators and families with information to support teaching and learning.

24



### STAAR Grade 4 Reading Language Arts Blueprint

Effective as of School Year 2022–23

Reporting Category	Number of Standards	Number of Questions	Number of Points
1: Reading	Readiness: 13	24-26	26-28
	Supporting: 18		
2: Writing	Readiness: 12	15-17	24-26
	Supporting: 12		
Item Types by Point	1-point questions (multiple-choice and non-multiple choice)	38	38
	2-point questions (non-multiple choice)	2	4
	Extended Constructed Response	1	10
<b>Total</b>		<b>41</b>	<b>52</b>

All TEKS, whether identified as readiness or supporting, are required to be taught in their entirety for a grade level or course. **Readiness standards** are essential for success in the current grade and important for preparedness for the next grade or course. They address broad and deep ideas and require in-depth instruction. These standards make up approximately 55-75% of the total points on the base test. **Supporting standards** play a role in preparing students for the next grade or course but not one that is central. They may address more narrowly defined ideas or concepts or may be emphasized in grades below or above the current grade or course. Supporting standards make up approximately 25-45% of the total points on the base test.

Every passage and question on STAAR is created for Texas students with the review and approval of Texas educators.

STAAR passages and questions go through a [rigorous development and review process](#) to ensure they accurately measure student knowledge.


**Step 1:** Passages and questions are written to align with the TEKS, which describe what students should know and be able to do in each grade and subject.

**Step 2:** Groups of Texas educators review and approve passages and questions for the grade and subject they teach to ensure passages and questions are grade-level appropriate, align with the TEKS, and are unbiased and accessible to all students.

**Step 3:** Questions are tested out by Texas students but do not count towards their scores to confirm that the questions are unbiased and accurate. These are called "field-test questions."

**Step 4:** Passages and questions that pass all previous steps can be selected for an official STAAR test to provide educators and families with information to support teaching and learning.

25



### STAAR Grade 5 Math Blueprint

Effective as of School Year 2022–23

Reporting Category	Number of Standards	Number of Questions	Number of Points
1: Numerical Representations and Relationships	Readiness: 2	5-7	5-9
	Supporting: 4		
2: Computations and Algebraic Relationships	Readiness: 6	15-17	17-21
	Supporting: 9		
3: Geometry and Measurement	Readiness: 3	7-9	8-12
	Supporting: 5		
4: Data Analysis and Personal Financial Literacy	Readiness: 1	3-5	3-7
	Supporting: 6		
Item Types by Point	1-point questions (multiple-choice and non-multiple choice)	26	26
	2-point questions (non-multiple choice)	8	16
<b>Total</b>		<b>34</b>	<b>42</b>

All TEKS, whether identified as readiness or supporting, are required to be taught in their entirety for a grade level or course. **Readiness standards** are essential for success in the current grade and important for preparedness for the next grade or course. They address broad and deep ideas and require in-depth instruction. These standards make up approximately 55-70% of the total points on the base test. **Supporting standards** play a role in preparing students for the next grade or course but not one that is central. They may address more narrowly defined ideas or concepts or may be emphasized in grades below or above the current grade or course. Supporting standards make up approximately 30-45% of the total points on the base test.

Every passage and question on STAAR is created for Texas students with the review and approval of Texas educators.

STAAR passages and questions go through a [rigorous development and review process](#) to ensure they accurately measure student knowledge.

**Step 1:** Passages and questions are written to align with the TEKS, which describe what students should know and be able to do in each grade and subject.

**Step 2:** Groups of Texas educators review and approve passages and questions for the grade and subject they teach to ensure passages and questions are grade-level appropriate, align with the TEKS, and are unbiased and accessible to all students.

**Step 3:** Questions are tested out by Texas students but do not count towards their scores to confirm that the questions are unbiased and accurate. These are called "field-test questions."

**Step 4:** Passages and questions that pass all previous steps can be selected for an official STAAR test to provide educators and families with information to support teaching and learning.


[STAAR Math Resources, Grades 3–8](#)

[STAAR Resources for all Assessments](#)

[STAAR Redesign Resources](#)

26





### STAAR Grade 5 Reading Language Arts Blueprint

Effective as of School Year 2022–23

Reporting Category	Number of Standards	Number of Questions	Number of Points
1: Reading	Readiness: 13	24-26	26-28
	Supporting: 18		
2: Writing	Readiness: 12	15-17	24-26
	Supporting: 12		
Item Types by Point	1-point questions (multiple-choice and non-multiple choice)	38	38
	2-point questions (non-multiple choice)	2	4
	Extended Constructed Response	1	10
<b>Total</b>		<b>41</b>	<b>52</b>

All TEKS, whether identified as readiness or supporting, are required to be taught in their entirety for a grade level or course. **Readiness standards** are essential for success in the current grade and important for preparedness for the next grade or course. They address broad and deep ideas and require in-depth instruction. These standards make up approximately 55-75% of the total points on the base test. **Supporting standards** play a role in preparing students for the next grade or course but not one that is central. They may address more narrowly defined ideas or concepts or may be emphasized in grades below or above the current grade or course. Supporting standards make up approximately 25-45% of the total points on the base test.

Every passage and question on STAAR is created for Texas students with the review and approval of Texas educators.

STAAR passages and questions go through a [rigorous development and review process](#) to ensure they accurately measure student knowledge.

**Step 1:** Passages and questions are written to align with the TEKS, which describe what students should know and be able to do in each grade and subject.

**Step 2:** Groups of Texas educators review and approve passages and questions for the grade and subject they teach to ensure passages and questions are grade-level appropriate, align with the TEKS, and are unbiased and accessible to all students.

**Step 3:** Questions are tested out by Texas students but do not count towards their scores to confirm that the questions are unbiased and accurate. These are called "field-test questions."

**Step 4:** Passages and questions that pass all previous steps can be selected for an official STAAR test to provide educators and families with information to support teaching and learning.

27

STAAR Grades 3–8 Assessments			
Date	Event	Format and Location	Additional Details
05/12/23	End of Spring Testing Windows	—	—
05/22/23	Early Raw Scores and Supporting Guidance	<ul style="list-style-type: none"> <li>Data files sent to district testing coordinators' secure inboxes in the Test Information Distribution Engine (TIDE)</li> <li>Student results available in the Centralized Reporting System (CRS)</li> <li>PDFs of Supporting Guidance posted on STAAR Redesign webpage</li> </ul>	<p>Districts will see raw scores (how many points students earned), student responses to all questions, and whether the student response was correct or incorrect. These scores are considered preliminary until quality control processes are complete.</p> <p>To support accelerated instruction decision-making before performance levels are available on 08/11/23, TEA will provide supporting guidance that indicates whether the total raw score earned is likely passing, likely not passing, or in the zone of uncertainty for each test. (Passing = Approaches or higher.) Images of student responses for each item on the test will be available in CRS to assist in planning accelerated instruction activities</p> <p>See sample guidance at the end of this document.</p>
06/09/23	Preliminary Assessment Reports (raw scores only)	Preliminary assessment reports sent to district coordinator's secure inbox in TIDE	Preliminary assessment reports will show only raw score information and not the performance level achieved. These reports include data files, district and campus summary reports, and confidential campus rosters. Districts may request corrections based on these reports.
08/11/23	Final Assessment Reports (scale scores and performance levels)	<ul style="list-style-type: none"> <li>Standard final assessment reports sent to district coordinator's secure inbox in TIDE</li> <li>Student results available in CRS</li> </ul>	<p>Scale scores and performance levels will be available for the first time on the final assessment reports, which include updated data files and student report cards. Final student-level determinations may be made from these reports.</p> <p>Individual student results will be available in CRS.</p>
08/16/23	Final Assessment Results for Families	Assessment results published in Family and Analytic Portals	Final assessment results are available in the Family and Analytic Portals.

28

### Reporting Timelines for Spring 2023 STAAR

#### Sample Supporting Guidance for Raw Scores

To support accelerated instruction and graduation decision-making before performance levels are available (05/31/23 for STAAR EOC assessments and 08/11/23 for STAAR grades 3–8 assessments), supporting guidance will indicate whether the total raw score earned is likely passing, likely not passing, or in the zone of uncertainty for each test. (Passing = Approaches or higher.)

In addition, images of student responses for each item on the test and how many points the student received will be available in CRS to assist in planning accelerated instruction activities

Until the standard-setting process and all quality control processes are completed, performance levels cannot be finalized. Once preliminary or final results with performance levels are available, use of this guidance will no longer be needed, and school systems should use the performance level information to inform decision-making for each student.

Spring 2023 STAAR EOC Assessment	
Raw Score	Preliminary Determination
1	Likely did not pass
2	Likely did not pass
3	Likely did not pass
4	Likely did not pass
5	Likely did not pass
6	Likely did not pass
7	Zone of uncertainty
8	Zone of uncertainty
9	Zone of uncertainty
10	Zone of uncertainty
11	Zone of uncertainty
12	Zone of uncertainty
13	Zone of uncertainty
14	Likely passed
15	Likely passed
16	Likely passed
17	Likely passed
18	Likely passed
19	Likely passed
20	Likely passed

29

To support local educational agencies (LEAs) in making decisions regarding accelerated instruction and graduation before performance levels are available, TEA published Early Results Guidance Tables, which indicate whether the total raw score earned is likely passing, likely not passing, or in the zone of uncertainty for each test. Until the standard-setting process and all quality control processes are completed, performance levels cannot be finalized. Once results with performance levels are available, use of the early results guidance tables will no longer be needed, and LEAs should use the performance level information to inform decision-making for each student.

State of Texas Assessments of Academic Readiness

**Early Results Guidance**  
Grade 3 Mathematics  
Spring 2023

Raw Score	Early Results Guidance
0	Likely did not pass
1	Likely did not pass
2	Likely did not pass
3	Likely did not pass
4	Likely did not pass
5	Likely did not pass
6	Likely did not pass
7	Likely did not pass
8	Likely did not pass
9	Zone of uncertainty
10	Zone of uncertainty
11	Zone of uncertainty
12	Zone of uncertainty
13	Zone of uncertainty
14	Zone of uncertainty
15	Zone of uncertainty
16	Zone of uncertainty
17	Zone of uncertainty
18	Zone of uncertainty
19	Likely passed
20	Likely passed
21	Likely passed
22	Likely passed
23	Likely passed
24	Likely passed
25	Likely passed
26	Likely passed
27	Likely passed
28	Likely passed
29	Likely passed
30	Likely passed
31	Likely passed
32	Likely passed
33	Likely passed
34	Likely passed
35	Likely passed
36	Likely passed
37	Likely passed

State of Texas Assessments of Academic Readiness

**Early Results Guidance**  
Grade 3 Reading Language Arts  
Spring 2023

Raw Score	Early Results Guidance
0	Likely did not pass
1	Likely did not pass
2	Likely did not pass
3	Likely did not pass
4	Likely did not pass
5	Likely did not pass
6	Likely did not pass
7	Likely did not pass
8	Likely did not pass
9	Likely did not pass
10	Likely did not pass
11	Zone of uncertainty
12	Zone of uncertainty
13	Zone of uncertainty
14	Zone of uncertainty
15	Zone of uncertainty
16	Zone of uncertainty
17	Zone of uncertainty
18	Zone of uncertainty
19	Zone of uncertainty
20	Zone of uncertainty
21	Likely passed
22	Likely passed
23	Likely passed
24	Likely passed
25	Likely passed
26	Likely passed
27	Likely passed
28	Likely passed
29	Likely passed
30	Likely passed
31	Likely passed
32	Likely passed
33	Likely passed
34	Likely passed
35	Likely passed
36	Likely passed
37	Likely passed
38	Likely passed
39	Likely passed
40	Likely passed

30

## 2018–2019 STAAR Raw Score Conversion Tables

## 2020–2021 STAAR Raw Score Conversion Tables

## 2021–2022 STAAR Raw Score Conversion Tables

31

31

State of Texas Assessments of Academic Readiness

State of Texas Assessments of Academic Readiness

Raw Score Conversion Table  
Grade 3 Reading  
Spring 2019

Raw Score	Scale Score	Percentile	Lexile
0	769	0	BR
1	910	0	BR
2	993	0	BR
3	1045	0	BR
4	1083	0	25L
5	1113	0	80L
6	1139	1	130L
7	1162	2	170L
8	1183	3	210L
9	1203	4	245L
10	1221	6	280L
11	1238	8	310L
12	1254	10	340L
13	1270	12	370L
14	1285	15	395L
15	1300	17	425L
16	1315	20	450L
17	1330	23	480L
18	1345	27	505L
19	1359	30	530L
20	1374	34	560L
21	1390	39	590L
22	1406	43	615L
23	1422	48	645L
24	1439	53	675L
25	1457	58	710L
26	1468	64	730L
27	1498	70	785L
28	1521	76	825L
29	1555	81	890L
30	1579	87	935L
31	1617	92	1005L
32	1669	96	1100L
33	1754	99	1200L
34	1895	100	1200L

Scale Scores from 769-1895

State of Texas Assessments of Academic Readiness

State of Texas Assessments of Academic Readiness

Raw Score Conversion Table  
Grade 3 Reading  
Spring 2021

Raw Score	Scale Score	Percentile	Lexile
0	754	0	BR
1	895	0	BR
2	981	0	BR
3	1033	0	BR
4	1073	0	10L
5	1105	0	65L
6	1132	1	115L
7	1157	2	160L
8	1179	3	200L
9	1199	4	240L
10	1218	6	275L
11	1236	8	305L
12	1254	10	340L
13	1270	13	370L
14	1286	16	400L
15	1302	19	425L
16	1318	22	455L
17	1334	25	485L
18	1345	28	505L
19	1365	33	540L
20	1381	37	570L
21	1397	41	600L
22	1413	45	630L
23	1431	49	665L
24	1448	54	695L
25	1468	61	730L
26	1487	65	765L
27	1509	69	805L
28	1533	74	850L
29	1555	78	890L
30	1591	86	955L
31	1630	91	1025L
32	1682	96	1120L
33	1766	99	1200L
34	1907	100	1200L

Scale Scores from 754-1907

32

State of Texas Assessments of Academic Readiness

Raw Score	Scale Score	Percentile	Lexile
0	785	0	SR
1	807	0	SR
2	862	0	SR
3	1045	0	SR
4	1084	1	30L
5	1116	1	60L
6	1143	3	135L
7	1167	4	180L
8	1188	6	220L
9	1209	8	255L
10	1227	12	290L
11	1245	14	325L
12	1262	17	365L
13	1278	20	385L
14	1294	24	410L
15	1309	27	440L
16	1324	30	465L
17	1345	36	505L
18	1354	38	520L
19	1369	41	550L
20	1385	45	580L
21	1400	49	605L
22	1418	53	635L
23	1432	57	660L
24	1450	62	700L
25	1468	66	730L
26	1487	71	760L
27	1508	76	805L
28	1531	80	845L
29	1555	86	890L
30	1588	90	950L
31	1626	94	1020L
32	1677	97	1110L
33	1761	99	1200L
34	1891	100	1200L

Raw Score Conversion Table  
Grade 3 Reading  
Spring 2022

Scale Scores from 765-1901

State of Texas Assessments of Academic Readiness

Raw Score	Scale Score	Performance Level	Percentile
0	720	Did Not Meet	0
1	829		0
2	935		0
3	1000		0
4	1047		0
5	1085		0
6	1117		1
7	1145		1
8	1170		2
9	1193		4
10	1213	6	
11	1233	8	
12	1251	10	
13	1269	13	
14	1285	15	
15	1301	18	
16	1316	21	
17	1331	23	
18	1345	25	
19	1359	28	
20	1372	30	
21	1385	33	
22	1397	36	
23	1409	38	
24	1421	41	
25	1433	44	
26	1444	47	
27	1456	49	
28	1467	52	
29	1478	55	
30	1489	58	
31	1502	61	
32	1514	65	
33	1526	68	
34	1539	71	
35	1553	74	
36	1567	77	
37	1581	80	
38	1596	83	
39	1612	85	
40	1628	88	
41	1644	90	
42	1662	92	
43	1680	94	
44	1700	96	
45	1722	97	
46	1748	98	
47	1777	99	
48	1813	99	
49	1859	100	
50	1924	100	
51	2022	100	
52	2120	100	

Raw Score Conversion Table  
Grade 3 Reading Language Arts  
Spring 2023

Scale Scores from 720-2120

Same Subject / Same Grade Level Different Year

Scale Scores from 765-1901

Same Subject / Same Grade Level Different Year

Scale Scores from 720-2120

33

Popular Applications: [AAST](#) [CIS for Educators](#) [Event Opportunities](#) [Search Applications](#) [TSA Login](#) [TSA](#)

**TEA**  
Texas Education Agency

A - 2 Index Contact Employment State Board of Education Sign Up for Updates TSA Compliance

Home TSA News Events Academics Finance & Grants Reports & Data Security

**Search Results**

2752 results.

[Assessment Reports and Studies](#)

[Adopted Attendance Projections for the 2023-2024 and 2024-25](#)

**Technical Digest**

The Technical Digest provides information to Texas testing coordinators, educators, researchers, and interested citizens about the development procedures and technical attributes of the state-mandated assessment program. The most recent technical digests can be found below. Previous digests can be found on the Assessment and Reports Archive webpage.

Expand All

2022-2023

2021-2022

2020-2021

2020

**2022-2023**

- Chapters 1-5 and 8
- Bibliography
- Appendices

**TECHNICAL DIGEST 2022-2023**

**Appendix B**

STAAR Statistical Tables and Figures

STAAR Statistical Tables and Figures

**Spring 2022 STAAR Classification Consistency and Accuracy**

- Table B.1.1. STAAR Grade 3 Mathematics
- Table B.1.2. STAAR Grade 3 Reading Language Arts
- Table B.1.3. STAAR Grade 3 Science
- Table B.1.4. STAAR Grade 3 Social Studies
- Table B.1.5. STAAR Grade 3 English Language Arts
- Table B.1.6. STAAR Grade 3 Mathematics
- Table B.1.7. STAAR Grade 3 Reading Language Arts
- Table B.1.8. STAAR Grade 3 Science
- Table B.1.9. STAAR Grade 3 Social Studies
- Table B.1.10. STAAR Grade 3 English Language Arts
- Table B.1.11. STAAR Grade 3 Mathematics
- Table B.1.12. STAAR Grade 3 Reading Language Arts
- Table B.1.13. STAAR Grade 3 Science
- Table B.1.14. STAAR Grade 3 Social Studies
- Table B.1.15. STAAR Grade 3 English Language Arts
- Table B.1.16. STAAR Grade 3 Mathematics
- Table B.1.17. STAAR Grade 3 Reading Language Arts
- Table B.1.18. STAAR Grade 3 Science
- Table B.1.19. STAAR Grade 3 Social Studies
- Table B.1.20. STAAR Grade 3 English Language Arts
- Table B.1.21. STAAR Grade 3 Mathematics
- Table B.1.22. STAAR Grade 3 Reading Language Arts
- Table B.1.23. STAAR Grade 3 Science
- Table B.1.24. STAAR Grade 3 Social Studies
- Table B.1.25. STAAR Grade 3 English Language Arts
- Table B.1.26. STAAR Grade 3 Mathematics
- Table B.1.27. STAAR Grade 3 Reading Language Arts
- Table B.1.28. STAAR Grade 3 Science
- Table B.1.29. STAAR Grade 3 Social Studies
- Table B.1.30. STAAR Grade 3 English Language Arts
- Table B.1.31. STAAR Grade 3 Mathematics
- Table B.1.32. STAAR Grade 3 Reading Language Arts
- Table B.1.33. STAAR Grade 3 Science
- Table B.1.34. STAAR Grade 3 Social Studies
- Table B.1.35. STAAR Grade 3 English Language Arts
- Table B.1.36. STAAR Grade 3 Mathematics
- Table B.1.37. STAAR Grade 3 Reading Language Arts
- Table B.1.38. STAAR Grade 3 Science
- Table B.1.39. STAAR Grade 3 Social Studies
- Table B.1.40. STAAR Grade 3 English Language Arts
- Table B.1.41. STAAR Grade 3 Mathematics
- Table B.1.42. STAAR Grade 3 Reading Language Arts
- Table B.1.43. STAAR Grade 3 Science
- Table B.1.44. STAAR Grade 3 Social Studies
- Table B.1.45. STAAR Grade 3 English Language Arts
- Table B.1.46. STAAR Grade 3 Mathematics
- Table B.1.47. STAAR Grade 3 Reading Language Arts
- Table B.1.48. STAAR Grade 3 Science
- Table B.1.49. STAAR Grade 3 Social Studies
- Table B.1.50. STAAR Grade 3 English Language Arts
- Table B.1.51. STAAR Grade 3 Mathematics
- Table B.1.52. STAAR Grade 3 Reading Language Arts
- Table B.1.53. STAAR Grade 3 Science
- Table B.1.54. STAAR Grade 3 Social Studies
- Table B.1.55. STAAR Grade 3 English Language Arts
- Table B.1.56. STAAR Grade 3 Mathematics
- Table B.1.57. STAAR Grade 3 Reading Language Arts
- Table B.1.58. STAAR Grade 3 Science
- Table B.1.59. STAAR Grade 3 Social Studies
- Table B.1.60. STAAR Grade 3 English Language Arts
- Table B.1.61. STAAR Grade 3 Mathematics
- Table B.1.62. STAAR Grade 3 Reading Language Arts
- Table B.1.63. STAAR Grade 3 Science
- Table B.1.64. STAAR Grade 3 Social Studies
- Table B.1.65. STAAR Grade 3 English Language Arts
- Table B.1.66. STAAR Grade 3 Mathematics
- Table B.1.67. STAAR Grade 3 Reading Language Arts
- Table B.1.68. STAAR Grade 3 Science
- Table B.1.69. STAAR Grade 3 Social Studies
- Table B.1.70. STAAR Grade 3 English Language Arts
- Table B.1.71. STAAR Grade 3 Mathematics
- Table B.1.72. STAAR Grade 3 Reading Language Arts
- Table B.1.73. STAAR Grade 3 Science
- Table B.1.74. STAAR Grade 3 Social Studies
- Table B.1.75. STAAR Grade 3 English Language Arts
- Table B.1.76. STAAR Grade 3 Mathematics
- Table B.1.77. STAAR Grade 3 Reading Language Arts
- Table B.1.78. STAAR Grade 3 Science
- Table B.1.79. STAAR Grade 3 Social Studies
- Table B.1.80. STAAR Grade 3 English Language Arts
- Table B.1.81. STAAR Grade 3 Mathematics
- Table B.1.82. STAAR Grade 3 Reading Language Arts
- Table B.1.83. STAAR Grade 3 Science
- Table B.1.84. STAAR Grade 3 Social Studies
- Table B.1.85. STAAR Grade 3 English Language Arts
- Table B.1.86. STAAR Grade 3 Mathematics
- Table B.1.87. STAAR Grade 3 Reading Language Arts
- Table B.1.88. STAAR Grade 3 Science
- Table B.1.89. STAAR Grade 3 Social Studies
- Table B.1.90. STAAR Grade 3 English Language Arts
- Table B.1.91. STAAR Grade 3 Mathematics
- Table B.1.92. STAAR Grade 3 Reading Language Arts
- Table B.1.93. STAAR Grade 3 Science
- Table B.1.94. STAAR Grade 3 Social Studies
- Table B.1.95. STAAR Grade 3 English Language Arts
- Table B.1.96. STAAR Grade 3 Mathematics
- Table B.1.97. STAAR Grade 3 Reading Language Arts
- Table B.1.98. STAAR Grade 3 Science
- Table B.1.99. STAAR Grade 3 Social Studies
- Table B.1.100. STAAR Grade 3 English Language Arts

<https://tea.texas.gov/student-assessment/reports-and-studies>

34



**Table B.4.1. Spring 2022 STAAR English Grade 3 Total Group**

Subject	Reporting Category	Score Point <sup>1</sup>	N	Mean	SD	Alpha <sup>2</sup>	SEM	Mean P-Value <sup>3</sup>
MATHEMATICS	OVERALL TEST	32	364,518	19.71	7.20	0.90	2.29	61.58
	Numerical Representations and Relationships	8	364,518	5.95	2.00	0.72	1.07	74.32
	Computations and Algebraic Relationships	13	364,518	7.89	3.31	0.81	1.45	60.72
	Geometry and Measurement	7	364,518	3.70	1.89	0.64	1.14	52.8
	Data Analysis and Personal Financial Literacy	4	364,518	2.17	1.08	0.42	0.82	54.24
READING	OVERALL TEST	34	350,251	23.09	7.59	0.91	2.32	67.9
	Understanding/Analysis Across Genres	5	350,251	4.16	1.22	0.68	0.69	83.21
	Understanding/Analysis of Literary Texts	15	350,251	10.40	3.88	0.86	1.47	69.31
	Understanding/Analysis of Informational Texts	14	350,251	8.53	3.29	0.76	1.63	60.93

*Notes:*

1. Total number of Score Points (may exceed the number of items for tests/reporting categories with essay questions).
2. Stratified Alpha Reliability computed for tests involving essay questions, KR-20 reliability computed for all others.
3. Mean of percent correct (0–100%) for the multiple-choice and gridded items only.

35

**Table B.4.1. Spring 2023 STAAR Grade 3 Total Group**

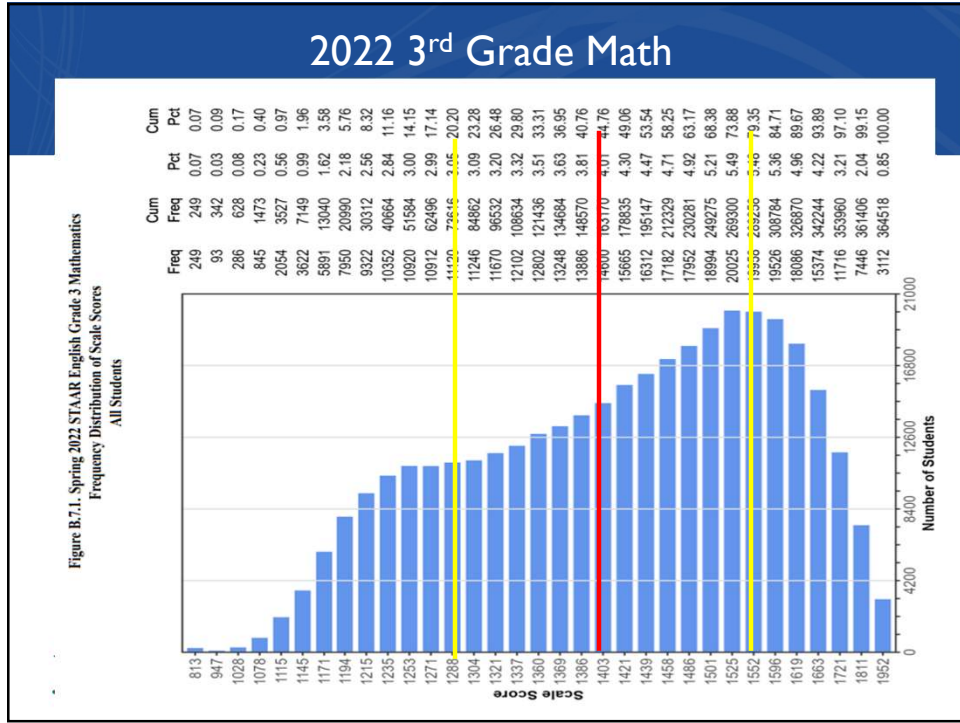
Subject	Reporting Category	Score Point <sup>1</sup>	N	Mean	SD	Alpha <sup>2</sup>	SEM	Mean P-Value <sup>3</sup>
Mathematics	OVERALL TEST	37	369,987	19.40	7.75	0.88	2.68	50.16
	Numerical Representations and Relationships	10	369,987	5.28	2.69	0.73	1.40	53.90
	Computations and Algebraic Relationships	15	369,987	7.28	3.54	0.77	1.71	46.05
	Geometry and Measurement	7	369,987	3.45	1.68	0.52	1.17	46.02
	Data Analysis and Personal Financial Literacy	5	369,987	3.38	1.18	0.31	0.97	63.68
RLA	OVERALL TEST	52	356,509	27.14	10.75	0.92	3.03	57.92
	Reading	26	356,509	15.86	5.39	0.82	2.26	61.37
	Writing	26	356,509	11.29	6.04	0.89	2.00	53.05

*Notes:*

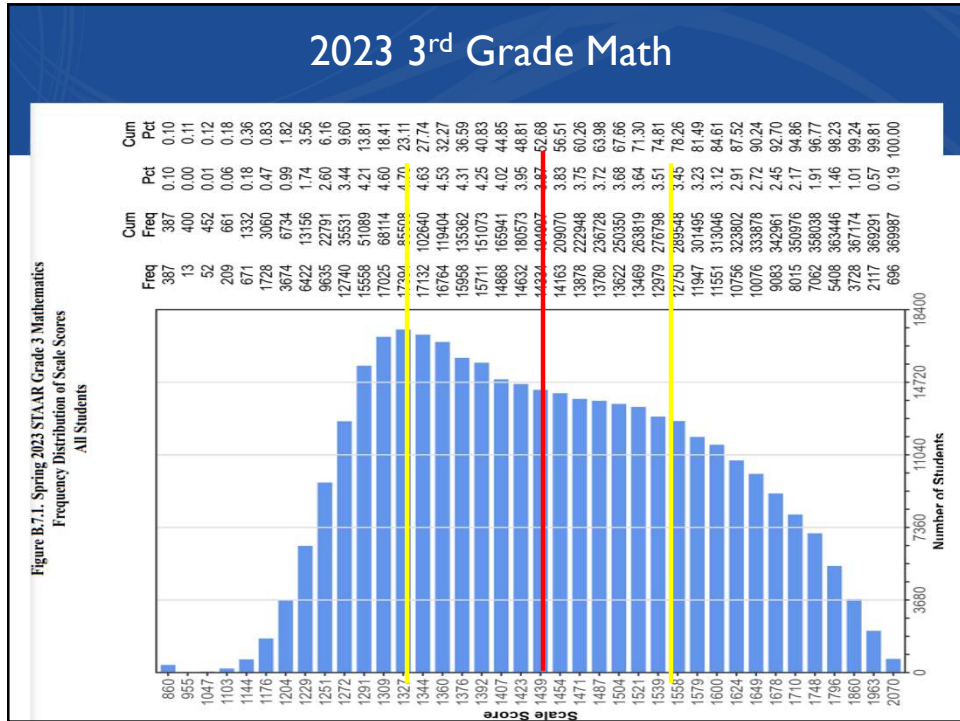
1. Maximum possible score points (may exceed the number of items because of multiple-point items).
2. Stratified alpha computed using item types (binary, two-point non-hand scored, two-point hand scored, essay question conventions domain, essay question ideas domain) as strata. Interrater correlation was used as stratum reliability where applicable for the purpose of computing stratified alpha. If stratified alpha was not viable because a stratum had only one item, KR-20 was computed instead.
3. Mean of percent correct (0–100%) across all items.

36

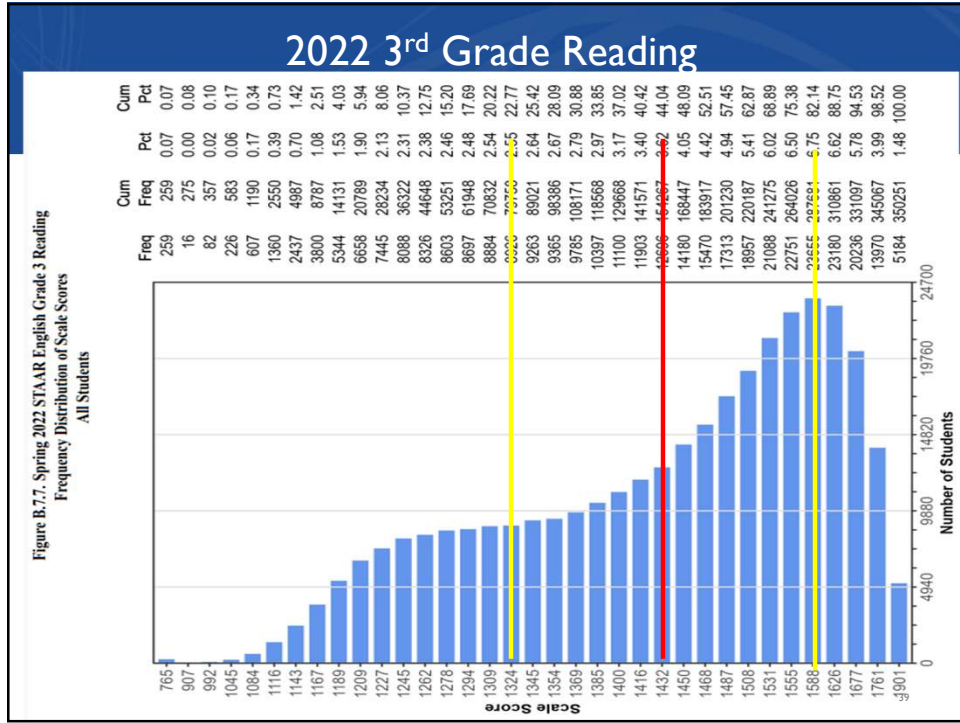




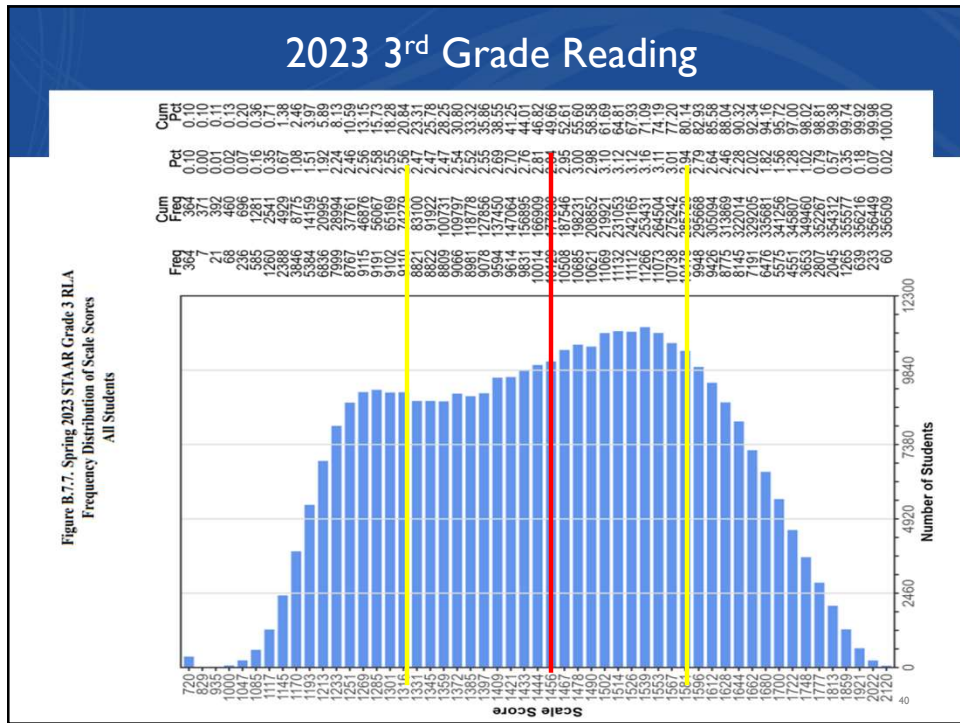
37



38



39



40

Mathematics Grade 3								
YEAR	MATH3 Score Points	MATH3 Mean	MATH3 SD	MATH3 Upper Range	MATH3 Lower Range	MATH3 Range Difference	MATH3 Mean P Value	MATH3 Alpha
2019	32	21.69	6.55	28.24	15.14	13.10	67.77	0.88
2021	32	17.93	7.37	25.30	10.57	14.74	56.20	0.90
2022	32	19.45	7.05	26.51	12.40	14.11	60.63	0.89
2023	37	19.08	7.53	26.61	11.55	15.06	49.29	0.87
	5			-1.63	-3.59			

Reading Language Arts Grade 3								
YEAR	RLA3 Score Points	RLA3 Mean	RLA3 SD	RLA3 Upper Range	RLA3 Lower Range	RLA3 Range Difference	RLA3 Mean P Value	RLA3 Alpha
2019	34	22.73	7.05	29.78	15.68	14.10	66.82	0.89
2021	34	20.90	7.22	28.12	13.68	14.44	61.55	0.89
2022	34	22.83	7.50	30.33	15.32	15.00	67.18	0.90
2023	52	26.82	10.54	37.36	16.28	21.09	57.33	0.92
	18			7.58	0.60			

41

**Table B.4.9. Spring 2022 STAAR English Grade 4 Total Group**

Subject	Reporting Category	Score Point <sup>1</sup>	N	Mean	SD	Alpha <sup>2</sup>	SEM	Mean P-Value <sup>3</sup>
MATHEMATICS	OVERALL TEST	34	370,720	20.67	7.63	0.90	2.38	60.79
	Numerical Representations and Relationships	9	370,720	5.71	2.46	0.77	1.19	63.4
	Computations and Algebraic Relationships	11	370,720	6.47	2.59	0.72	1.37	58.8
	Geometry and Measurement	10	370,720	6.32	2.45	0.73	1.27	63.25
	Data Analysis and Personal Financial Literacy	4	370,720	2.17	1.23	0.50	0.87	54.24
READING	OVERALL TEST	36	359,470	25.17	7.39	0.90	2.37	69.93
	Understanding/Analysis Across Genres	8	359,470	6.19	1.89	0.72	1.01	77.4
	Understanding/Analysis of Literary Texts	15	359,470	10.98	3.34	0.81	1.45	73.22
	Understanding/Analysis of Informational Texts	13	359,470	8.00	2.94	0.71	1.57	61.54

*Notes:*  
 1. Total number of Score Points (may exceed the number of items for tests/reporting categories with essay questions).  
 2. Stratified Alpha Reliability computed for tests involving essay questions, KR-20 reliability computed for all others.  
 3. Mean of percent correct (0–100%) for the multiple-choice and gridded items only.

42

**Table B.4.9. Spring 2023 STAAR Grade 4 Total Group**

Subject	Reporting Category	Score Point <sup>1</sup>	N	Mean	SD	Alpha <sup>2</sup>	SEM	Mean P-Value <sup>3</sup>
Mathematics	OVERALL TEST	40	373,970	21.82	9.15	0.91	2.80	52.60
	Numerical Representations and Relationships	12	373,970	6.90	3.18	0.78	1.50	54.79
	Computations and Algebraic Relationships	13	373,970	6.60	3.43	0.77	1.65	48.52
	Geometry and Measurement	11	373,970	5.69	2.66	0.70	1.47	49.92
	Data Analysis and Personal Financial Literacy	4	373,970	2.62	1.11	0.48	0.80	65.52
RLA	OVERALL TEST	52	365,003	26.01	11.12	0.92	3.10	54.93
	Reading	26	365,003	14.27	5.58	0.83	2.28	55.04
	Writing	26	365,003	11.74	6.21	0.89	2.09	54.78

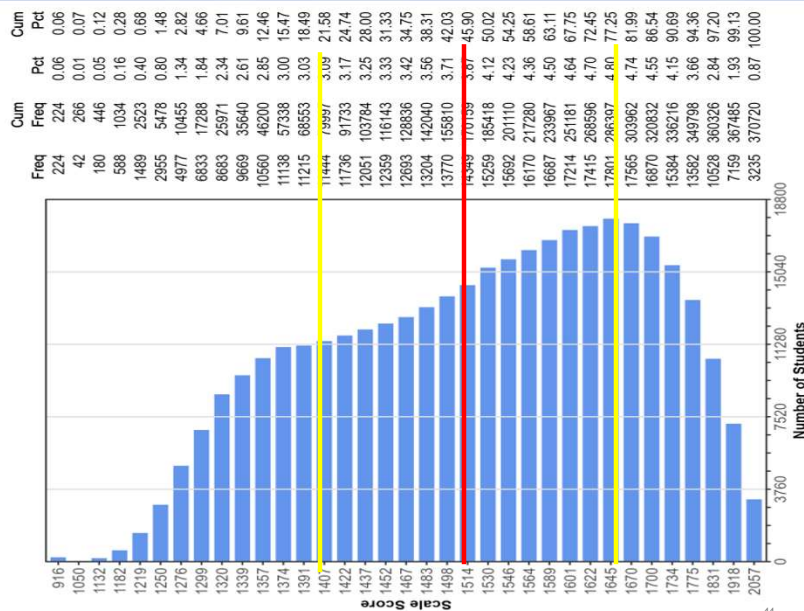
**Notes:**

1. Maximum possible score points (may exceed the number of items because of multiple-point items).
2. Stratified alpha computed using item types (binary, two-point non-handscored, two-point handscored, essay question conventions domain, essay question ideas domain) as strata. Interrater correlation was used as stratum reliability where applicable for the purpose of computing stratified alpha. If stratified alpha was not viable because a stratum had only one item, KR-20 was computed instead.

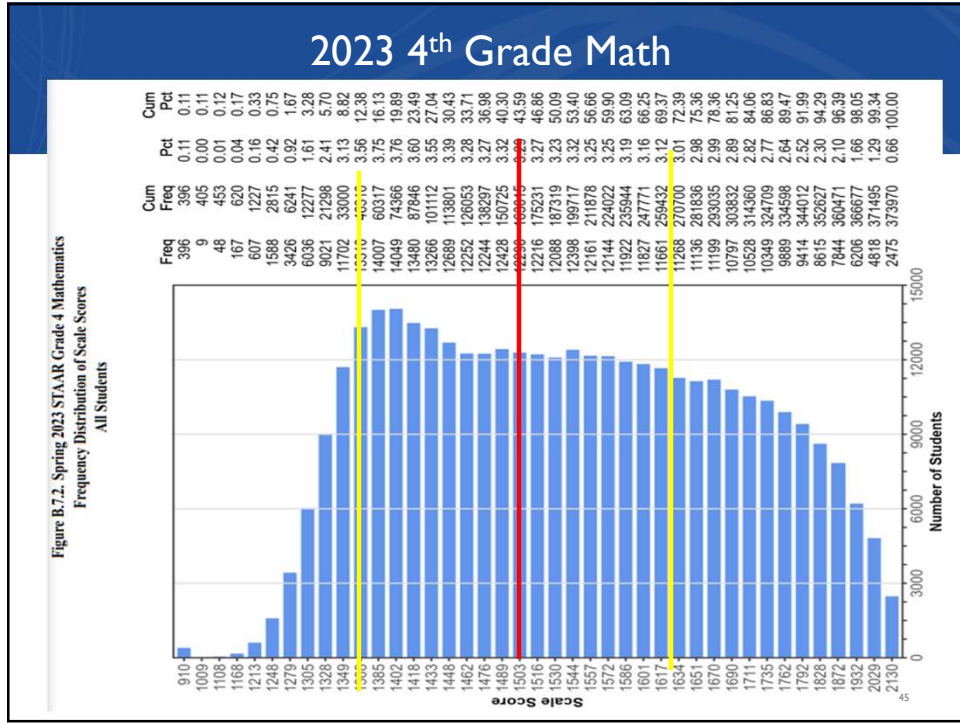
43

**2022 4<sup>th</sup> Grade Math**

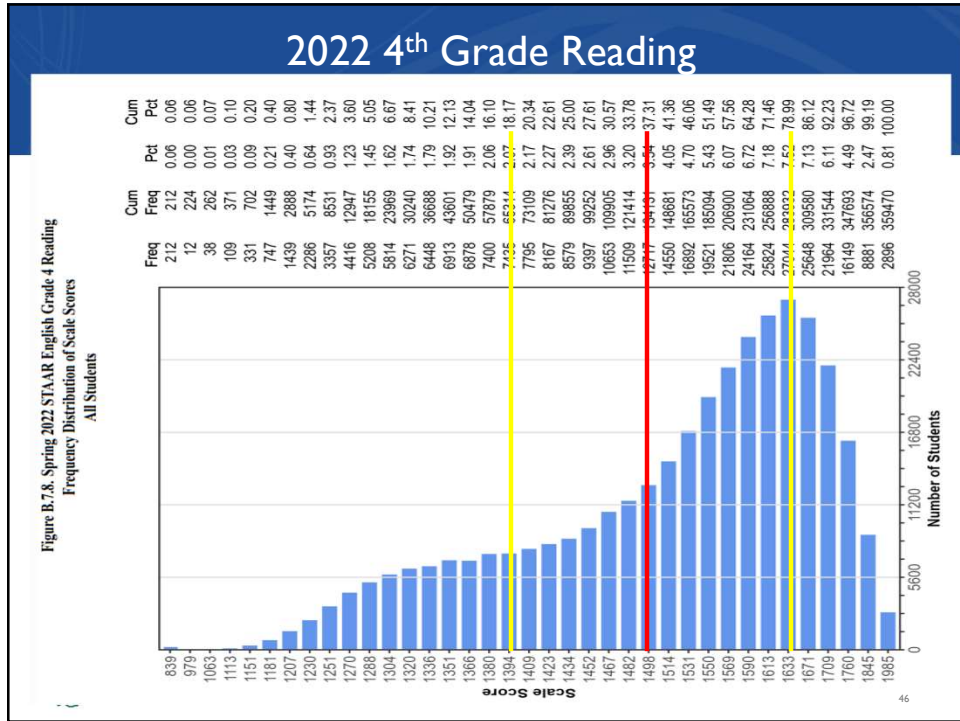
**Figure B.7.2. Spring 2022 STAAR English Grade 4 Mathematics Frequency Distribution of Scale Scores All Students**



44

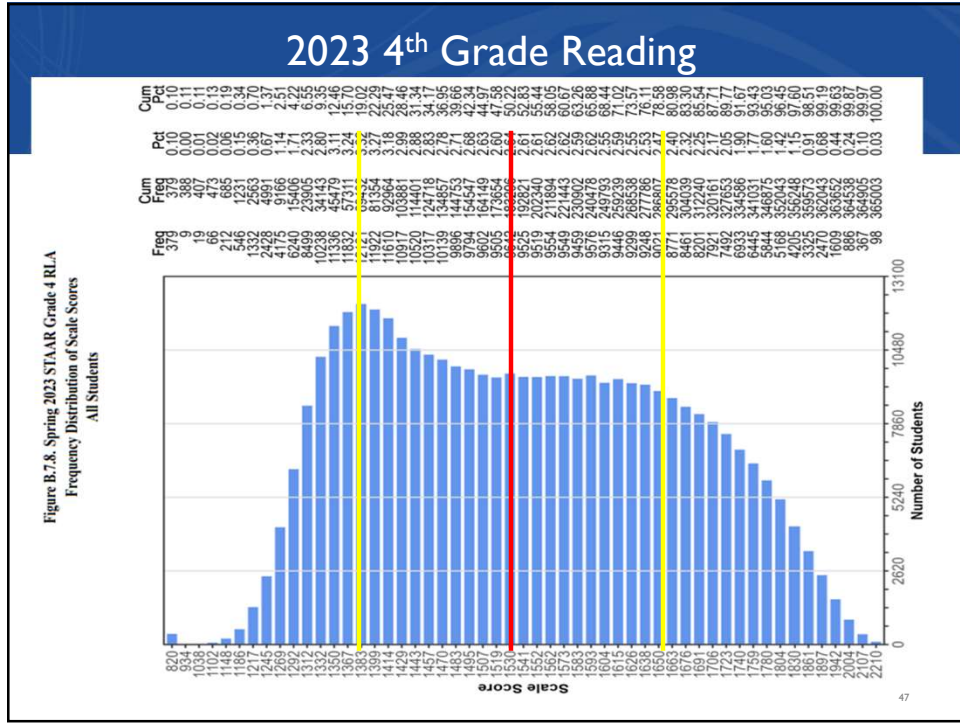


45



46





**Table B.4.17. Spring 2022 STAAR English Grade 5 Total Group**

Subject	Reporting Category	Score Point <sup>1</sup>	N	Mean	SD	Alpha <sup>2</sup>	SEM	Mean P-Value <sup>3</sup>
MATHEMATICS	OVERALL TEST	36	376,641	22.85	7.81	0.90	2.46	63.47
	Numerical Representations and Relationships	6	376,641	4.10	1.55	0.61	0.97	68.26
	Computations and Algebraic Relationships	17	376,641	10.58	3.93	0.82	1.69	62.21
	Geometry and Measurement	9	376,641	5.87	2.28	0.69	1.26	65.26
	Data Analysis and Personal Financial Literacy	4	376,641	2.30	1.12	0.46	0.82	57.57
READING	OVERALL TEST	38	369,356	27.87	7.86	0.91	2.35	73.34
	Understanding/Analysis Across Genres	8	369,356	5.82	2.01	0.71	1.08	72.7
	Understanding/Analysis of Literary Texts	16	369,356	11.68	3.41	0.80	1.52	72.99
	Understanding/Analysis of Informational Texts	14	369,356	10.37	3.15	0.80	1.42	74.1
SCIENCE	OVERALL TEST	36	376,142	23.61	7.53	0.89	2.52	65.57
	Matter and Energy	6	376,142	4.06	1.63	0.63	0.99	67.59
	Force, Motion, and Energy	8	376,142	5.23	1.80	0.55	1.20	65.34
	Earth and Space	10	376,142	6.17	2.41	0.68	1.37	61.67
	Organisms and Environments	12	376,142	8.16	2.98	0.78	1.40	67.97

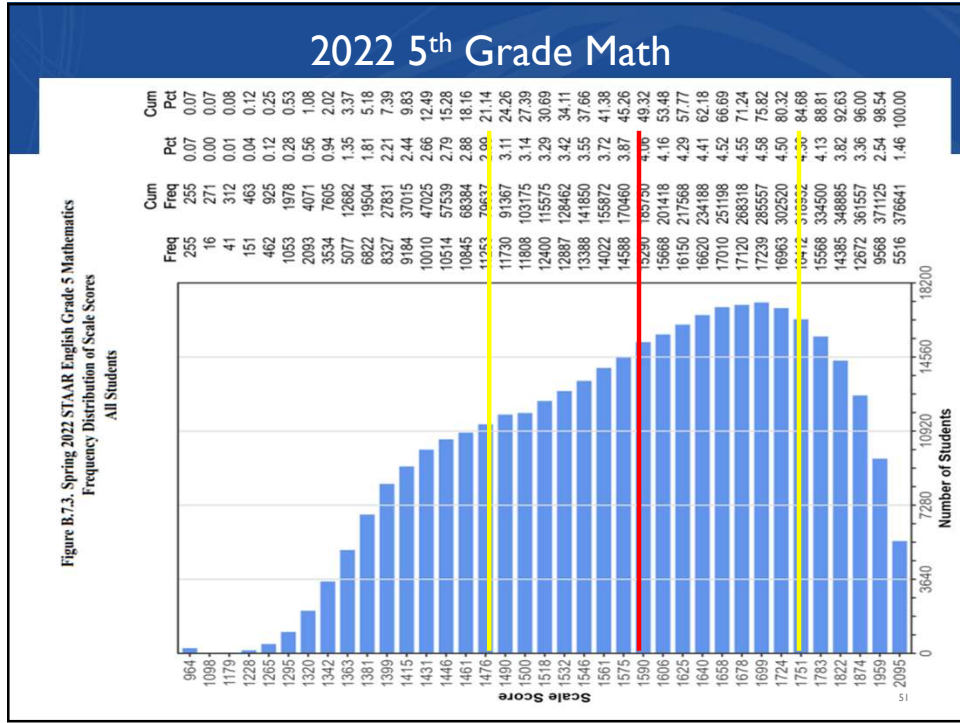
1. Total number of Score Points (may exceed the number of items for tests/reporting categories with essay questions).

49

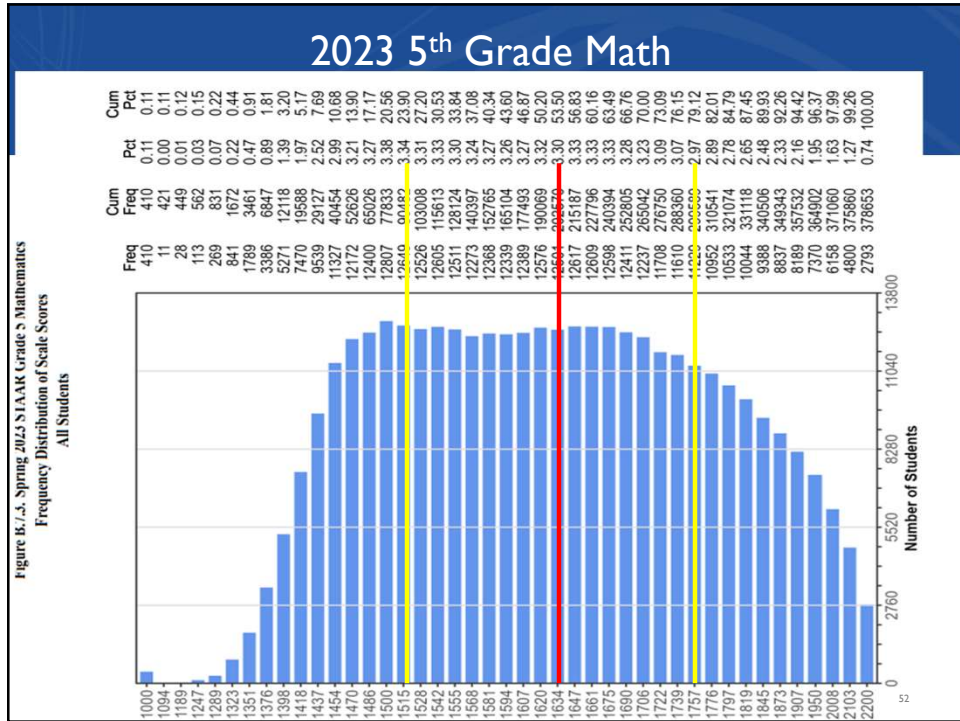
**Table B.4.17. Spring 2023 STAAR Grade 5 Total Group**

Subject	Reporting Category	Score Point <sup>1</sup>	N	Mean	SD	Alpha <sup>2</sup>	SEM	Mean P-Value <sup>3</sup>
Mathematics	OVERALL TEST	42	378,653	23.61	9.29	0.90	2.88	56.18
	Numerical Representations and Relationships	9	378,653	5.62	2.11	0.64	1.26	58.74
	Computations and Algebraic Relationships	20	378,653	11.18	4.93	0.84	2.00	58.04
	Geometry and Measurement	9	378,653	4.40	2.35	0.63	1.43	48.48
	Data Analysis and Personal Financial Literacy	4	378,653	2.40	1.15	0.45	0.85	60.11
RLA	OVERALL TEST	52	372,636	30.96	10.49	0.92	2.98	64.39
	Reading	26	372,636	16.77	5.01	0.82	2.11	65.57
	Writing	26	372,636	14.19	6.14	0.89	2.08	62.71
Science	OVERALL TEST	39	378,696	20.93	7.48	0.87	2.74	52.98
	Matter and Energy	6	378,696	3.16	1.46	0.48	1.05	51.28
	Force, Motion, and Energy	9	378,696	4.64	2.32	0.68	1.32	53.34
	Earth and Space	11	378,696	4.88	2.39	0.56	1.59	45.89
	Organisms and Environments	13	378,696	8.25	2.80	0.73	1.47	59.34

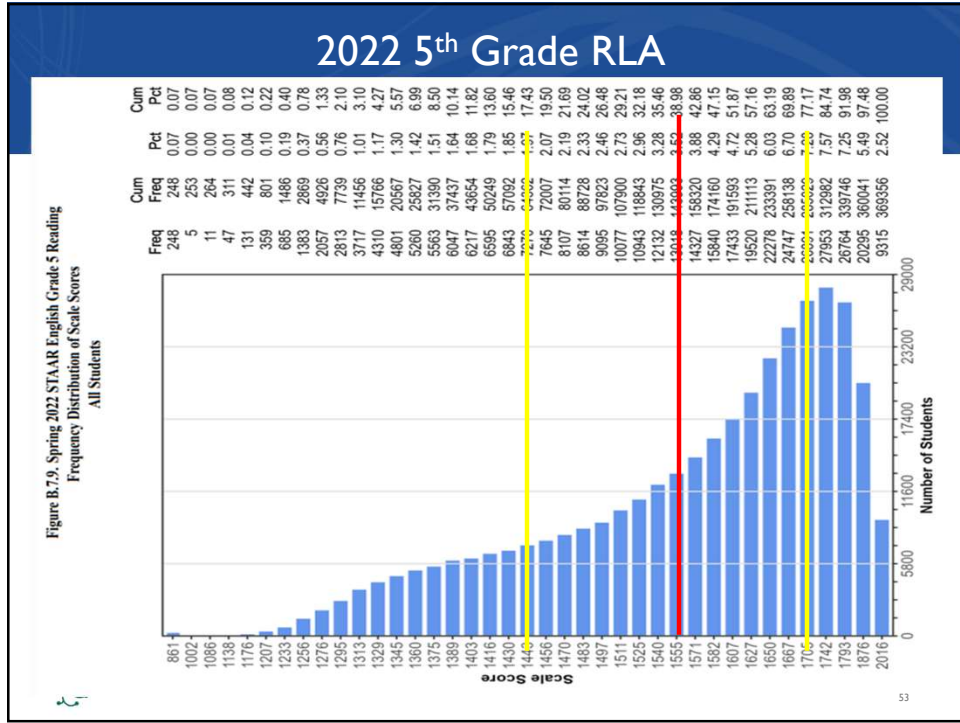
50



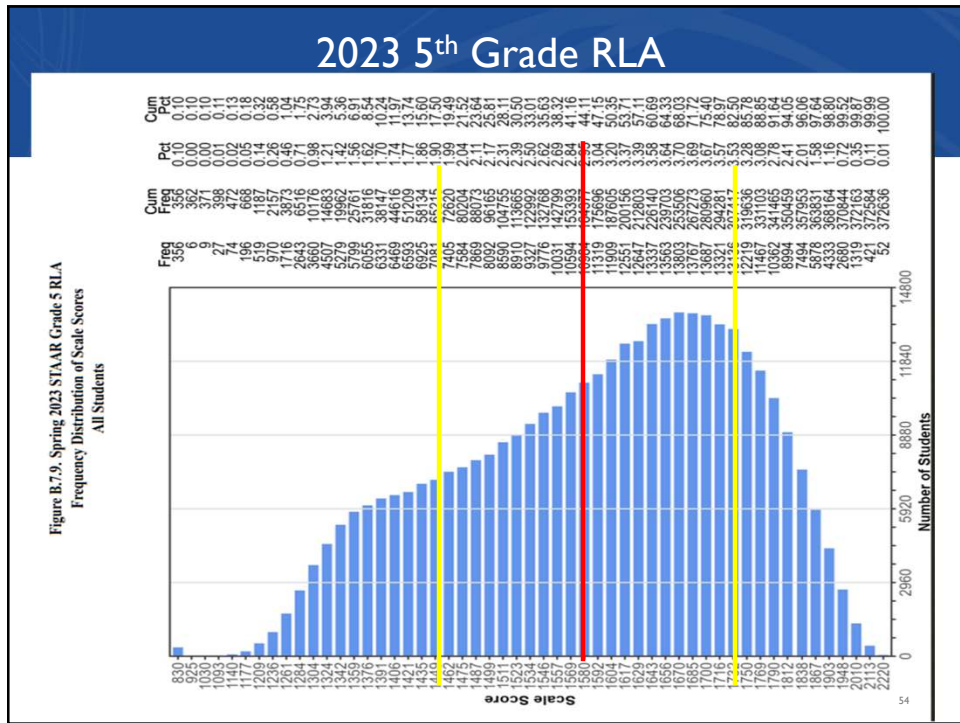
51



52



53



54

Mathematics Grade 5									
YEAR	Math5 Score Points	Math5 Mean	Math5 SD	MATH5 Upper Range	MATH5 Lower Range	MATH5 Range Difference	Math5 Mean P Value	Math5 Alpha	
2019	35	24.93	7.43	32.36	17.50	14.86	69.39	0.90	
2021	36	21.55	8.37	29.92	13.18	16.75	59.81	0.91	
2022	36	22.54	7.66	30.20	14.87	15.33	62.53	0.90	
2023	42	23.17	9.03	32.20	14.14	18.06	55.17	0.90	
	7			-0.16	-3.36				

Reading Language Arts Grade 5									
YEAR	RLA5 Score Points	RLA5 Mean	RLA5 SD	RLA5 Upper Range	RLA5 Lower Range	RLA5 Range Difference	RLA5 Mean P Value	RLA5 Alpha	
2019	37	26.88	7.36	34.23	19.52	14.72	70.75	0.89	
2021	38	25.16	8.16	33.31	17.00	16.31	66.41	0.90	
2022	38	27.68	7.78	35.46	19.91	15.55	72.79	0.91	
2023	52	30.63	10.30	40.93	20.33	20.61	63.81	0.92	
	15			6.70	0.81				

55

**Table B.4.25. Spring 2022 STAAR English Grade 6 Total Group**

Subject	Reporting Category	Score Point <sup>1</sup>	N	Mean	SD	Alpha <sup>2</sup>	SEM	Mean P-Value <sup>3</sup>
MATHEMATICS	OVERALL TEST	38	386,604	19.66	8.25	0.90	2.66	51.74
	Numerical Representations and Relationships	10	386,604	4.70	2.37	0.67	1.36	47.04
	Computations and Algebraic Relationships	15	386,604	8.21	3.50	0.77	1.69	54.72
	Geometry and Measurement	6	386,604	3.21	1.63	0.62	1.01	53.54
	Data Analysis and Personal Financial Literacy	7	386,604	3.54	1.94	0.64	1.16	50.5
READING	OVERALL TEST	40	393,377	25.74	8.75	0.91	2.61	64.36
	Understanding/Analysis Across Genres	8	393,377	5.02	2.02	0.67	1.16	62.77
	Understanding/Analysis of Literary Texts	17	393,377	10.85	4.11	0.83	1.70	63.85
	Understanding/Analysis of Informational Texts	15	393,377	9.87	3.42	0.78	1.59	65.78

*Notes:*  
 1. Total number of Score Points (may exceed the number of items for tests/reporting categories with essay questions).  
 2. Stratified Alpha Reliability computed for tests involving essay questions, KR-20 reliability computed for all others.  
 3. Mean of percent correct (0–100%) for the multiple-choice and gridded items only.

56

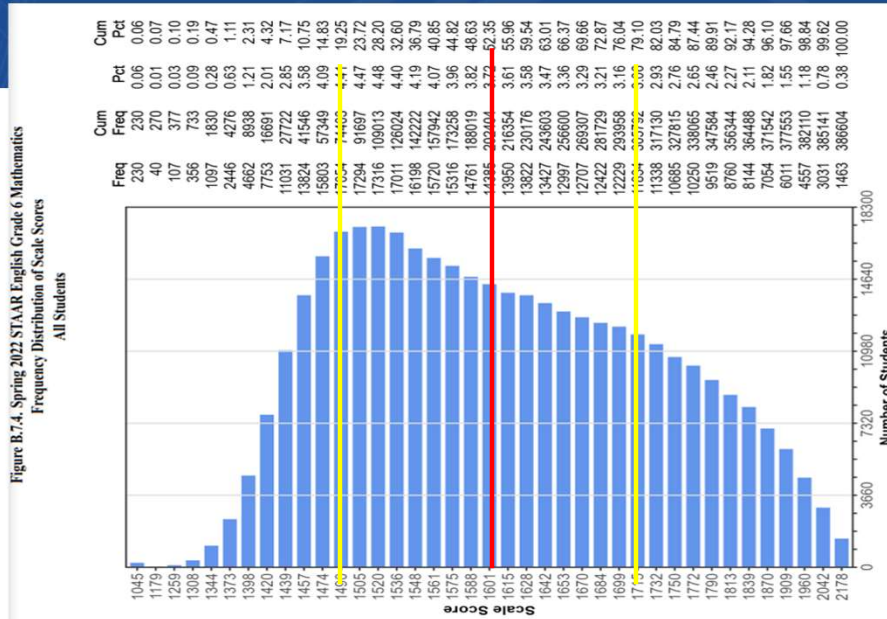


Table B.4.25. Spring 2023 STAAR Grade 6 Total Group

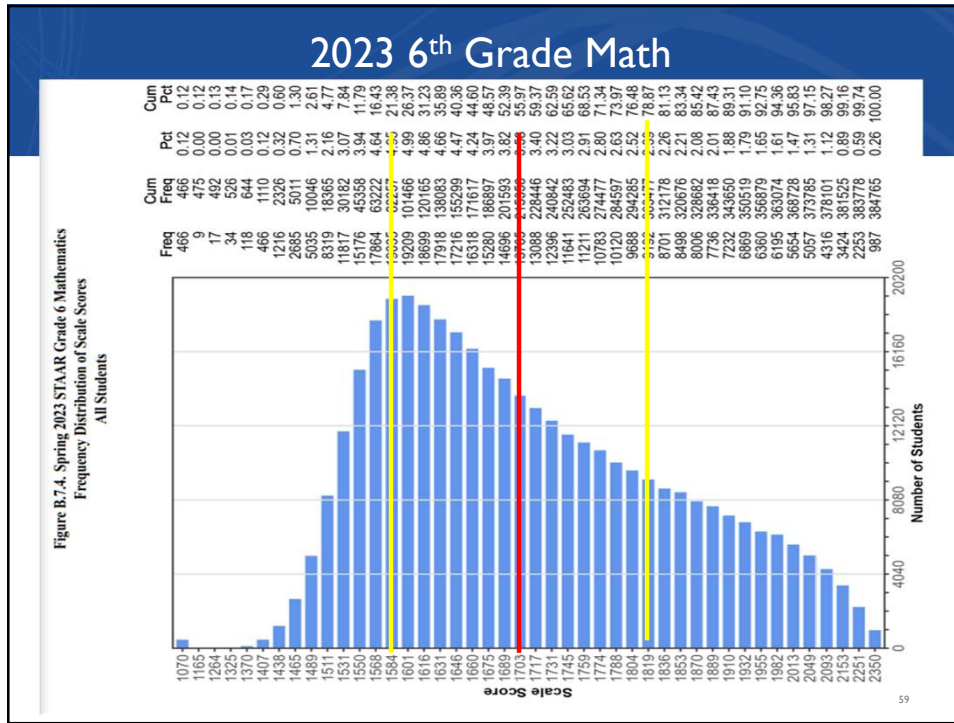
Subject	Reporting Category	Score Point <sup>1</sup>	N	Mean	SD	Alpha <sup>2</sup>	SEM	Mean P-Value <sup>3</sup>
Mathematics	OVERALL TEST	43	384,765	21.45	8.87	0.90	2.86	49.39
	Numerical Representations and Relationships	10	384,765	5.21	2.51	0.75	1.27	48.98
	Computations and Algebraic Relationships	17	384,765	8.07	3.78	0.77	1.81	47.45
	Geometry and Measurement	7	384,765	3.06	1.62	0.50	1.14	44.34
	Data Analysis and Personal Financial Literacy	9	384,765	5.11	2.30	0.63	1.40	58.38
RLA	OVERALL TEST	56	391,376	29.57	11.80	0.92	3.25	54.11
	Reading	28	391,376	15.47	5.64	0.83	2.34	54.50
	Writing	28	391,376	14.10	6.83	0.89	2.24	53.57

57

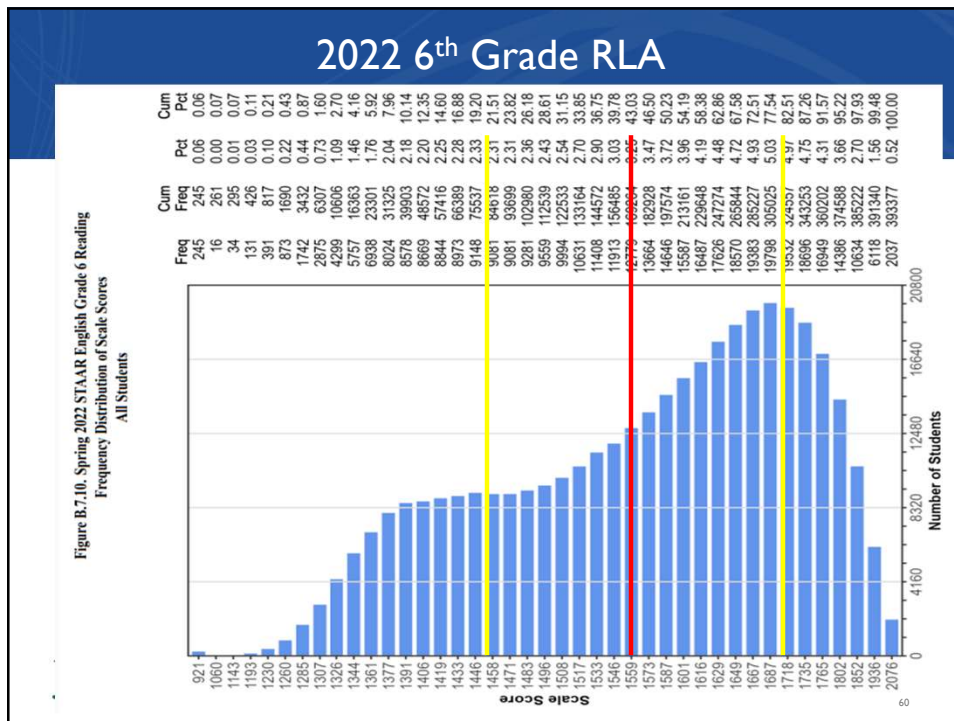
### 2022 6<sup>th</sup> Grade Math



58



59



60



**Table B.4.33. Spring 2022 STAAR English Grade 7 Total Group**

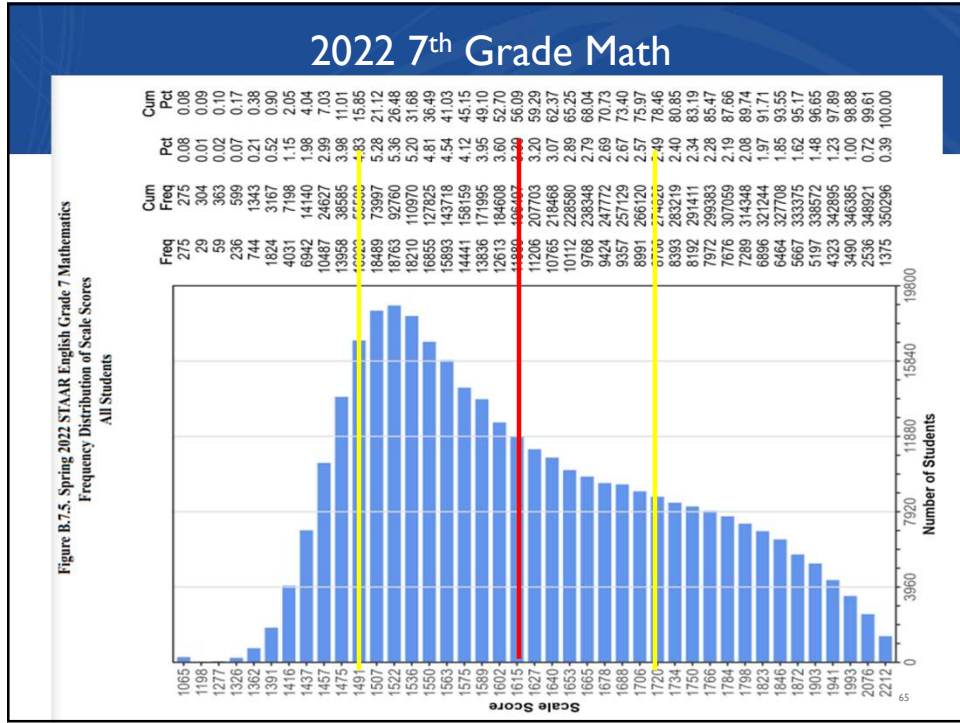
Subject	Reporting Category	Score Point <sup>1</sup>	N	Mean	SD	Alpha <sup>2</sup>	SEM	Mean P-Value <sup>3</sup>
MATHEMATICS	OVERALL TEST	40	350,296	19.45	8.73	0.90	2.70	48.61
	Numerical Representations and Relationships	6	350,296	2.95	1.59	0.63	0.97	49.13
	Computations and Algebraic Relationships	15	350,296	7.27	3.66	0.79	1.66	48.46
	Geometry and Measurement	12	350,296	5.64	2.82	0.72	1.50	47.01
	Data Analysis and Personal Financial Literacy	7	350,296	3.59	1.84	0.60	1.16	51.27
READING	OVERALL TEST	42	410,261	29.28	8.97	0.92	2.56	69.72
	Understanding/Analysis Across Genres	8	410,261	5.78	1.88	0.66	1.10	72.29
	Understanding/Analysis of Literary Texts	18	410,261	12.04	4.21	0.83	1.73	66.9
	Understanding/Analysis of Informational Texts	16	410,261	11.46	3.61	0.82	1.53	71.62

63

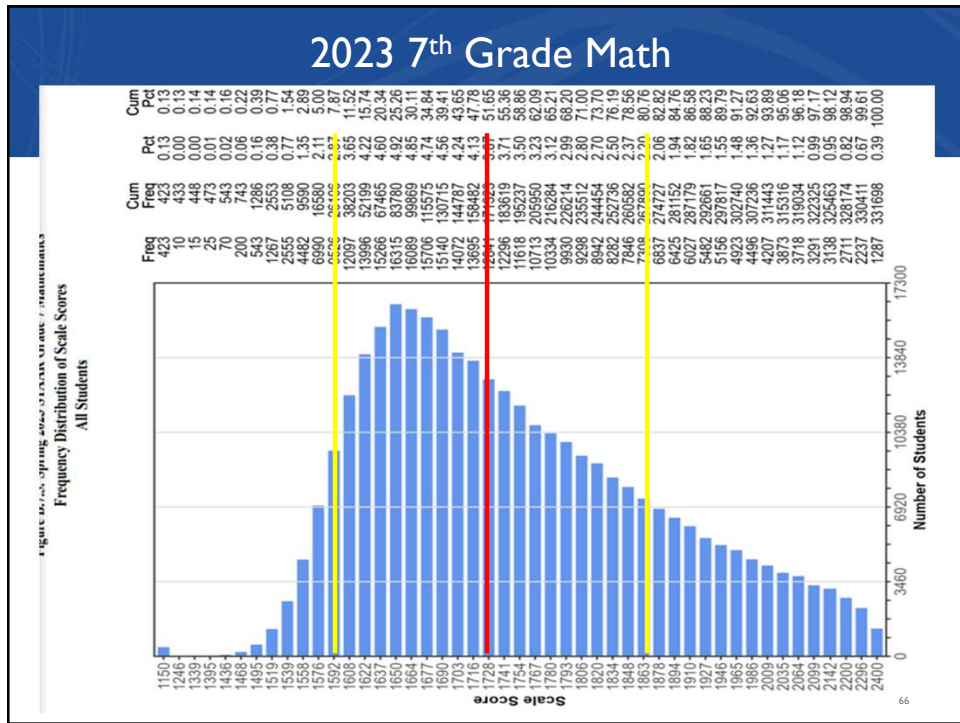
**Table B.4.33. Spring 2023 STAAR Grade 7 Total Group**

Subject	Reporting Category	Score Point <sup>1</sup>	N	Mean	SD	Alpha <sup>2</sup>	SEM	Mean P-Value <sup>3</sup>
Mathematics	OVERALL TEST	46	331,698	22.75	9.21	0.89	3.03	47.96
	Probability and Numerical Representations	8	331,698	4.75	2.13	0.63	1.29	55.93
	Computations and Algebraic Relationships	17	331,698	8.09	3.72	0.76	1.83	47.83
	Geometry and Measurement	12	331,698	4.97	2.60	0.67	1.48	41.63
	Data Analysis and Personal Financial Literacy	9	331,698	4.94	2.20	0.60	1.39	51.93
RLA	OVERALL TEST	56	400,416	32.40	11.74	0.93	3.17	60.57
	Reading	28	400,416	16.90	5.49	0.82	2.34	60.77
	Writing	28	400,416	15.49	6.93	0.91	2.13	60.31

64

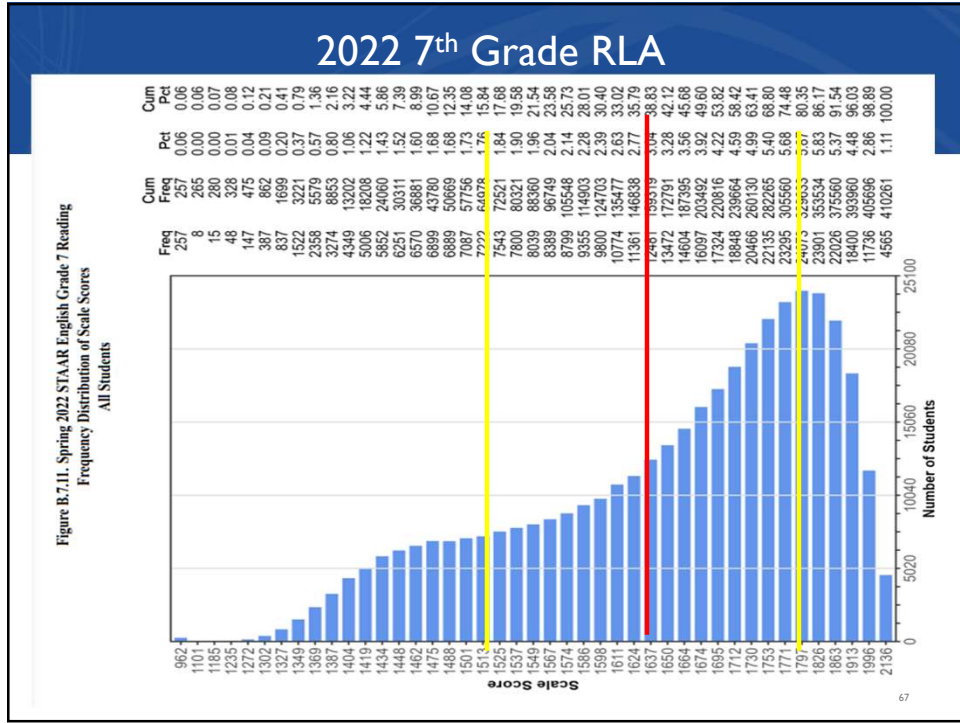


65

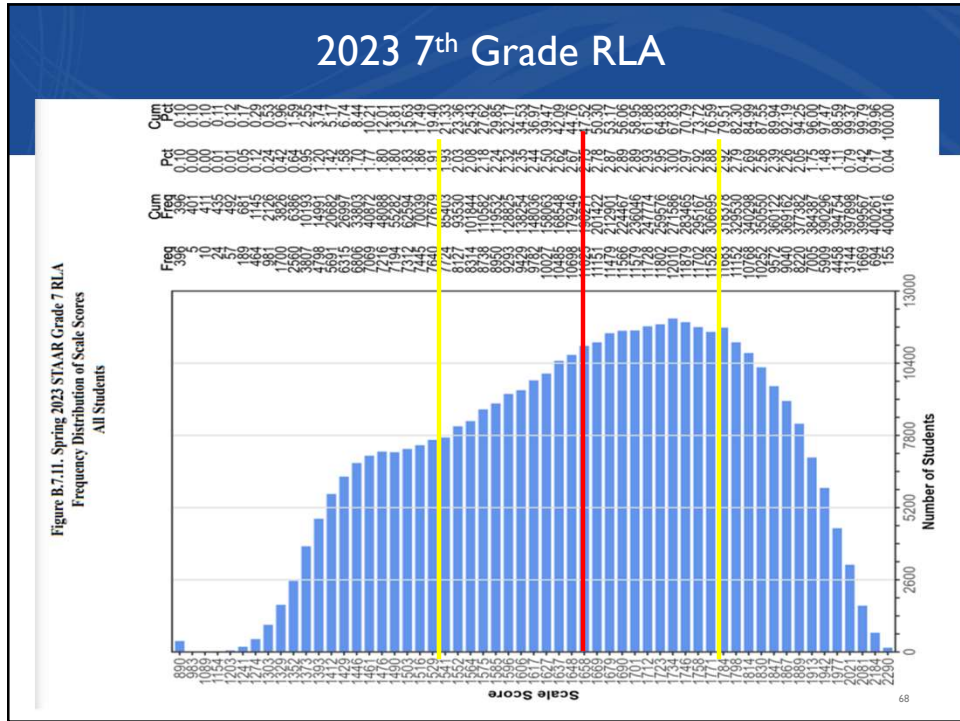


66





67



68

Mathematics Grade 7									
YEAR	Math7 Score Points	Math7 Mean	Math7 SD	MATH7 Upper Range	MATH7 Lower Range	MATH7 Range Difference	Math7 Mean P Value	Math7 Alpha	
2019	40	21.90	8.57	30.46	13.33	17.13	54.82	0.90	
2021	40	18.16	8.36	26.51	9.80	16.71	45.54	0.89	
2022	40	19.15	8.41	27.56	10.74	16.81	48.06	0.90	
2023	46	22.54	8.84	31.38	13.70	17.68	47.45	0.88	
	6			0.91	0.37				

Reading Language Arts Grade 7									
YEAR	RLA7 Score Points	RLA7 Mean	RLA7 SD	RLA7 Upper Range	RLA7 Lower Range	RLA7 Range Difference	RLA7 Mean P Value	RLA7 Alpha	
2019	42	27.91	8.58	36.49	19.33	17.16	66.50	0.90	
2021	42	27.49	9.20	36.69	18.29	18.40	65.31	0.91	
2022	42	29.13	8.77	37.90	20.35	17.55	69.46	0.91	
2023	56	32.19	11.40	43.59	20.78	22.80	60.27	0.92	
	14			7.09	1.46				

69

Mathematics Grade 8									
YEAR	Math8 Score Points	Math8 Mean	Math8 SD	MATH8 Upper Range	MATH8 Lower Range	MATH8 Range Difference	Math8 Mean P Value	Math8 Alpha	
2019	42	26.49	8.31	34.80	18.19	16.61	62.95	0.90	
2021	42	21.96	9.04	31.00	12.92	18.08	52.37	0.90	
2022	42	23.90	8.78	32.68	15.12	17.57	56.98	0.91	
2023	48	24.42	9.92	34.33	14.50	19.83	49.33	0.90	
	6			-0.47	-3.69				

Reading Language Arts Grade 8									
YEAR	RLA8 Score Points	RLA8 Mean	RLA8 SD	RLA8 Upper Range	RLA8 Lower Range	RLA8 Range Difference	RLA8 Mean P Value	RLA8 Alpha	
2019	44	30.70	8.68	39.38	22.01	17.36	69.71	0.91	
2021	44	29.14	8.83	37.98	20.31	17.67	66.38	0.90	
2022	44	31.12	8.86	39.98	22.26	17.72	70.85	0.91	
2023	56	30.64	11.29	41.92	19.35	22.57	55.32	0.92	
	12			2.55	-2.66				

70

Science Grade 5									
YEAR	Science5 Score Points	Science5 Mean	Science5 SD	Science5 Upper Range	Science5 Lower Range	Science5 Range Difference	Science5 Mean P Value	Science5 Alpha	
2019	36	25.47	6.81	32.28	18.65	13.62	70.59	0.88	
2021	36	22.44	7.03	29.47	15.40	14.07	62.14	0.87	
2022	36	23.41	7.35	30.76	16.07	14.69	64.85	0.88	
2023	39	20.65	7.23	27.88	13.42	14.46	52.23	0.86	
	3			-4.39	-5.23				

Science Grade 8									
YEAR	Science8 Score Points	Science8 Mean	Science8 SD	Science8 Upper Range	Science8 Lower Range	Science8 Range Difference	Science8 Mean P Value	Science8 Alpha	
2019	42	27.93	7.70	35.63	20.24	15.39	66.59	0.88	
2021	42	25.56	8.53	34.09	17.04	17.05	60.77	0.90	
2022	42	26.78	8.25	35.03	18.53	16.50	63.76	0.89	
2023	46	23.41	9.29	32.70	14.12	18.58	51.40	0.88	
	4			-2.94	-6.12				

71

Social Studies Grade 8									
Social Studies Grade 8									
YEAR	SOCSTD8 Score Points	SOCSTD8 Mean	SOCSTD8 SD	SOCSTD8 Upper Range	SOCSTD8 Lower Range	SOCSTD8 Range Difference	SOCSTD8 Mean P Value	SOCSTD8 Alpha	
2019	44	25.85	8.61	34.46	17.24	17.22	58.75	0.89	
2021	44	23.72	8.69	32.41	15.03	17.38	53.91	0.88	
2022	44	24.23	8.81	33.05	15.42	17.63	55.26	0.89	
2023	49	23.92	9.60	33.51	14.32	19.19	49.44	0.89	

72

Algebra 1									
YEAR	EOCALG 1 Score Points	EOCALG 1 Mean	EOCALG 1 SD	EOCALG 1 Upper Range	EOCALG 1 Lower Range	EOCALG 1 Range Difference	EOCALG 1 Mean P Value	EOCALG 1 Alpha	
2019	54	34.61	11.99	46.59	22.62	23.97	64.09	0.94	
2021	54	28.95	12.05	41.00	16.90	24.10	53.61	0.93	
2022	54	31.06	12.53	43.60	18.53	25.07	57.53	0.94	
2023	59	29.72	11.85	41.57	17.86	23.71	50.05	0.92	
	5	-4.89		-5.02	-4.76		-14.03		

Biology									
YEAR	EOCBIO Score Points	EOCBIO Mean	EOCBIO SD	EOCBIO Upper Range	EOCBIO Lower Range	EOCBIO Range Difference	EOCBIO Mean P Value	EOCBIO Alpha	
2019	50	32.27	9.94	42.21	22.32	19.89	64.54	0.91	
2021	50	30.93	10.62	41.55	20.31	21.24	61.85	0.93	
2022	50	30.70	10.41	41.10	20.29	20.81	61.40	0.92	
2023	53	27.24	10.71	37.95	16.53	21.42	52.36	0.91	
	3			-4.26	-5.79				

73

English 1									
YEAR	EOCENG1 Score Points	EOCENG1 Mean	EOCENG1 SD	EOCENG1 Upper Range	EOCENG1 Lower Range	EOCENG1 Range Difference	EOCENG1 Mean P Value	EOCENG1 Alpha	
2019	68	44.99	12.13	57.13	32.86	24.26		0.91	
2021	68	40.57	13.46	54.03	27.11	26.93		0.93	
2022	68	40.97	13.51	54.48	27.46	27.02		0.94	
2023	64	36.48	14.05	50.53	22.44	28.09	59.01	0.94	
	-4			-6.60	-10.43				

English II									
YEAR	EOCENG2 Score Points	EOCENG2 Mean	EOCENG2 SD	EOCENG2 Upper Range	EOCENG2 Lower Range	EOCENG2 Range Difference	EOCENG2 Mean P Value	EOCENG2 Alpha	
2019	68	46.96	10.97	57.93	36.00	21.93		0.90	
2021	68	42.55	13.43	55.98	29.12	26.86		0.93	
2022	68	43.34	12.84	56.18	30.51	25.67		0.93	
2023	64	36.95	13.41	50.35	23.54	26.82	59.03	0.93	
	-4			-7.57	-12.46				

74

### QUESTION DIFFICULTY

p-value = The probability of the correct response to the question.

Grade		2019	2021	2022	2023
3	Math	68.68	57.19	61.58	48.34
	Reading	67.53	62.22	67.90	59.79
4	Math	64.44	56.44	60.79	52.60
	Reading	66.13	61.70	69.93	54.93
5	Math	70.34	60.82	63.47	56.18
	Reading	71.27	67.05	73.34	64.39
	Science	71.36	62.81	65.57	52.98
6	Math	56.19	50.87	51.74	49.39
	Reading	64.50	62.27	64.36	54.11

Notes:

1. Total number of Score Points (may exceed the number of items for tests/reporting categories with essay questions).
2. Stratified Alpha Reliability computed for tests involving essay questions, KR-20 reliability computed for all others.
3. Mean of percent correct (0-100%) for the multiple-choice and gridded items only.

75

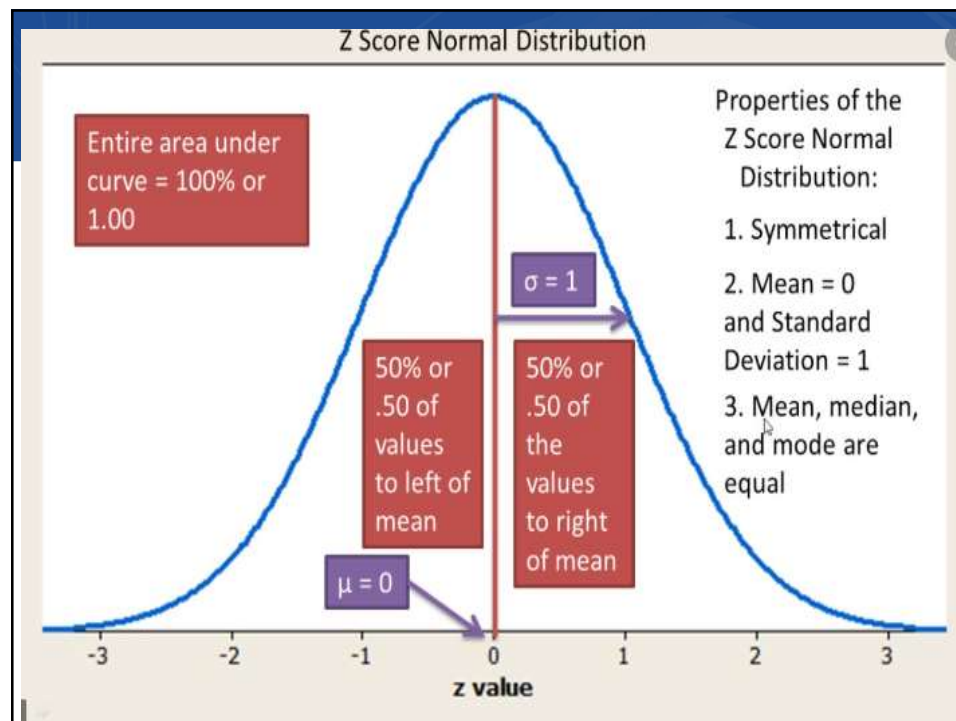
Grade		2019	2021	2022	2023
7	Math	53.53	46.19	48.61	47.96
	Reading	66.91	65.78	69.72	60.57
8	Math	63.54	52.85	57.61	49.96
	Reading	70.15	66.80	71.18	55.64
	Science	67.13	61.31	64.29	51.92
	Social Studies	59.23	54.31	55.62	49.91
EOC	Algebra I	64.96	54.31	59.21	52.10
	ENG I	NA			58.98
	ENG II	NA			59.02
	BIO	64.98	62.31	61.72	52.70
	US History	72.33	69.61	70.08	57.44

76

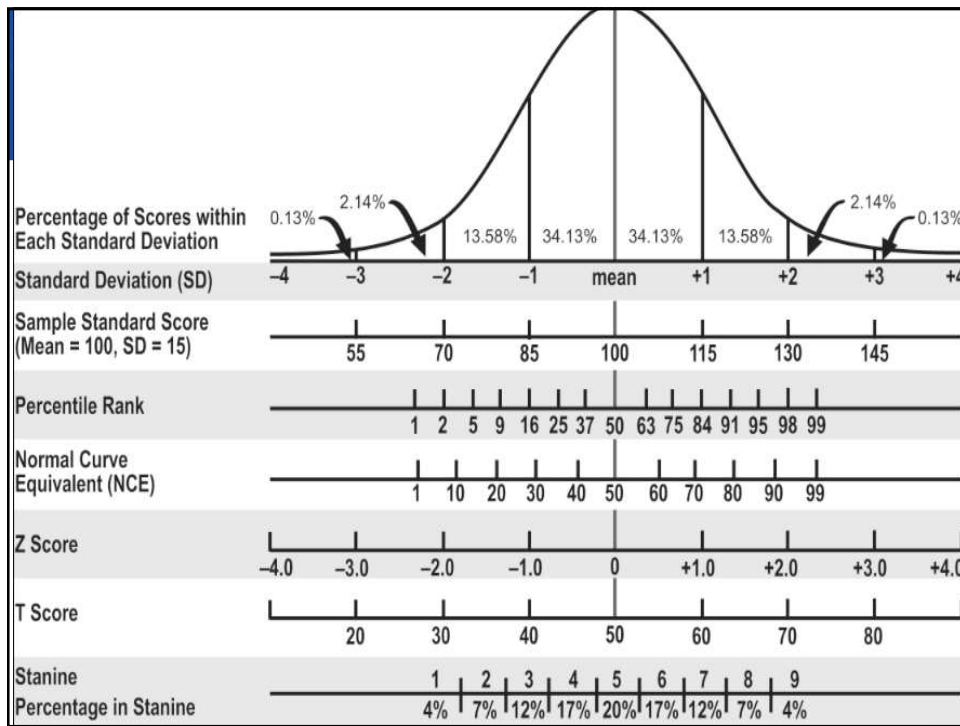


*z scores standardize scores. They transform scores to a common unit of measurement, the standard deviation. This allows researchers to compare variables that are measuring different things on different scales.*

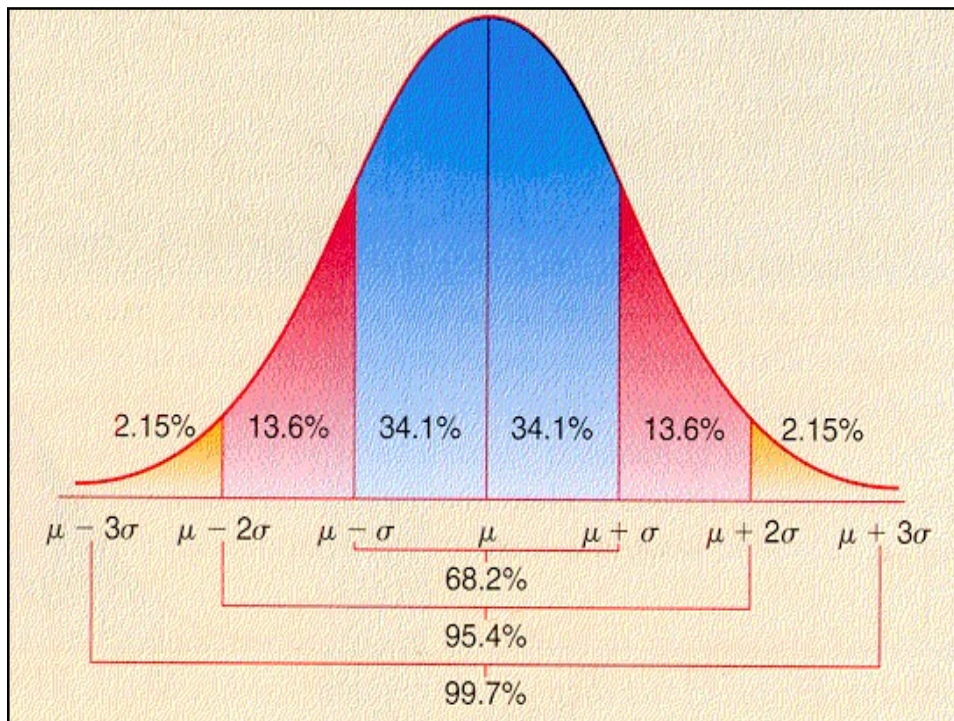
77



78



79



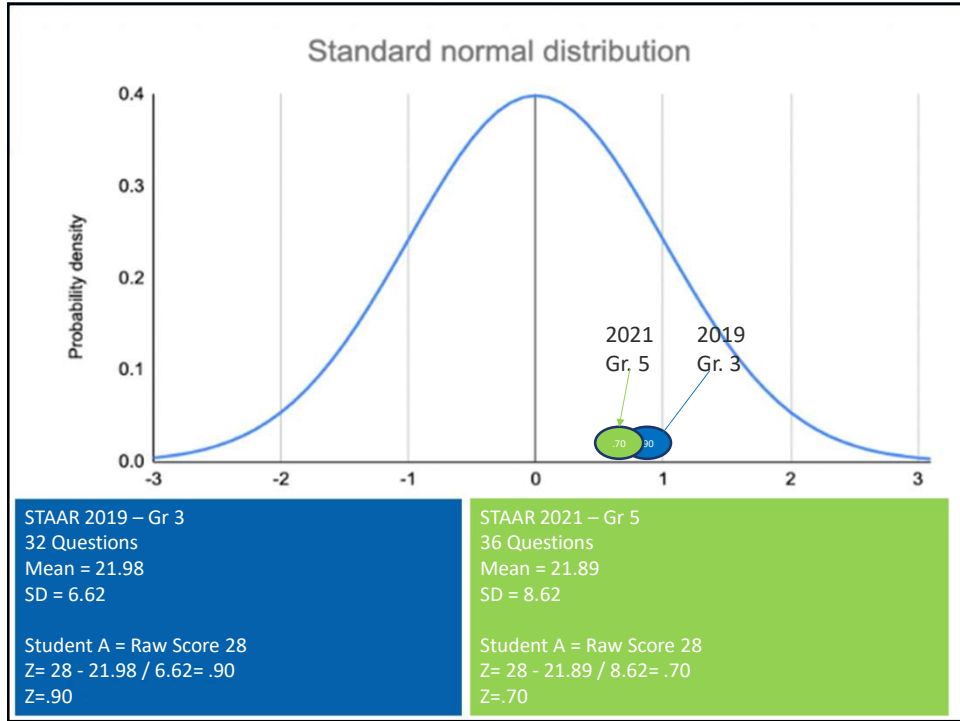
80

STAAR 2019	STAAR 2021
36 Questions	36 Questions
Mean = 26.01	Mean = 21.89
SD = 7.13	SD = 8.62
$26.01 + 7.13 = 33.14$	$21.89 + 8.62 = 30.51$
$26.01 - 7.13 = 18.88$	$21.89 - 8.62 = 13.27$
$z = \frac{x - M}{s}$	

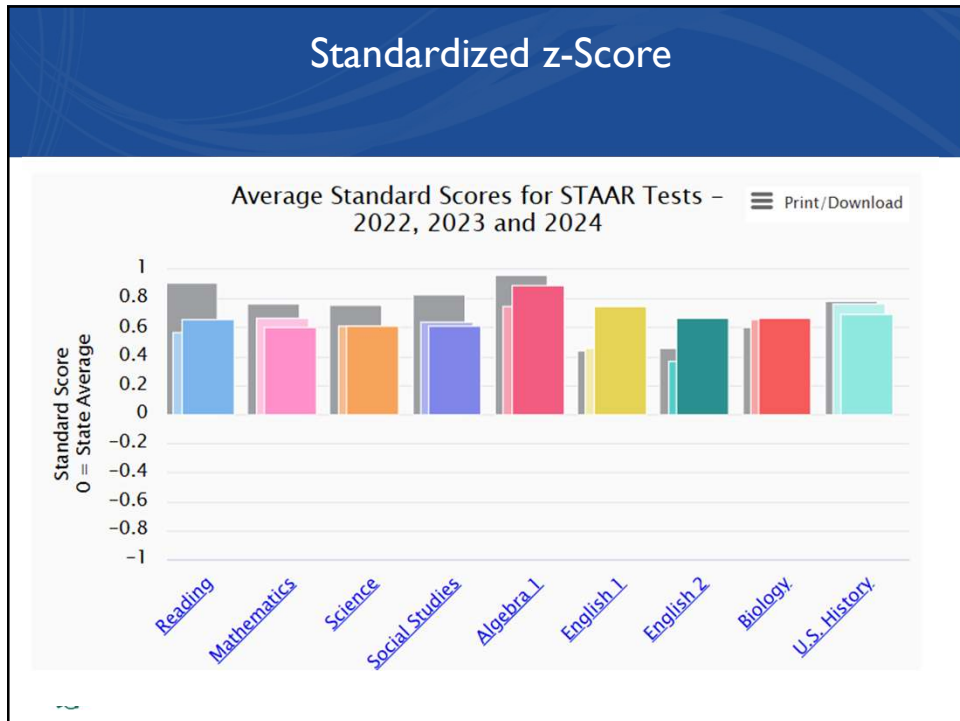
81

$z = \frac{x - M}{s}$	
STAAR 2019 – Gr 3	STAAR 2021 – Gr 5
32 Questions	36 Questions
Mean = 21.98	Mean = 21.89
SD = 6.62	SD = 8.62
Student A = Raw Score 28	Student A = Raw Score 28
$Z = 28 - 21.98 / 6.62 = .90$	$Z = 28 - 21.89 / 8.62 = .70$
Z=.90	Z=.70

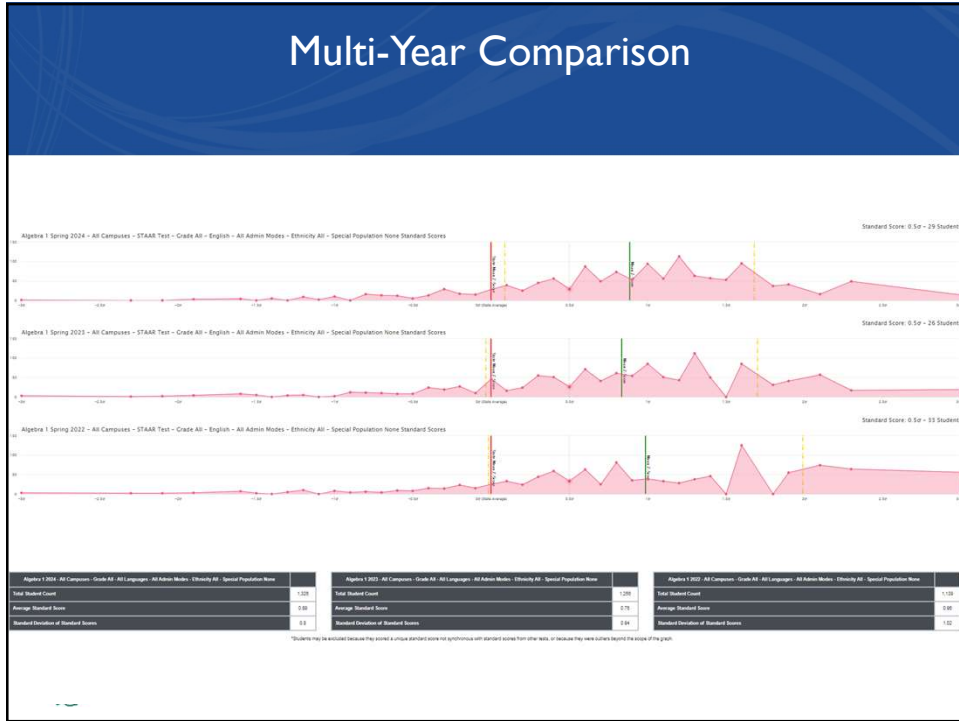
82



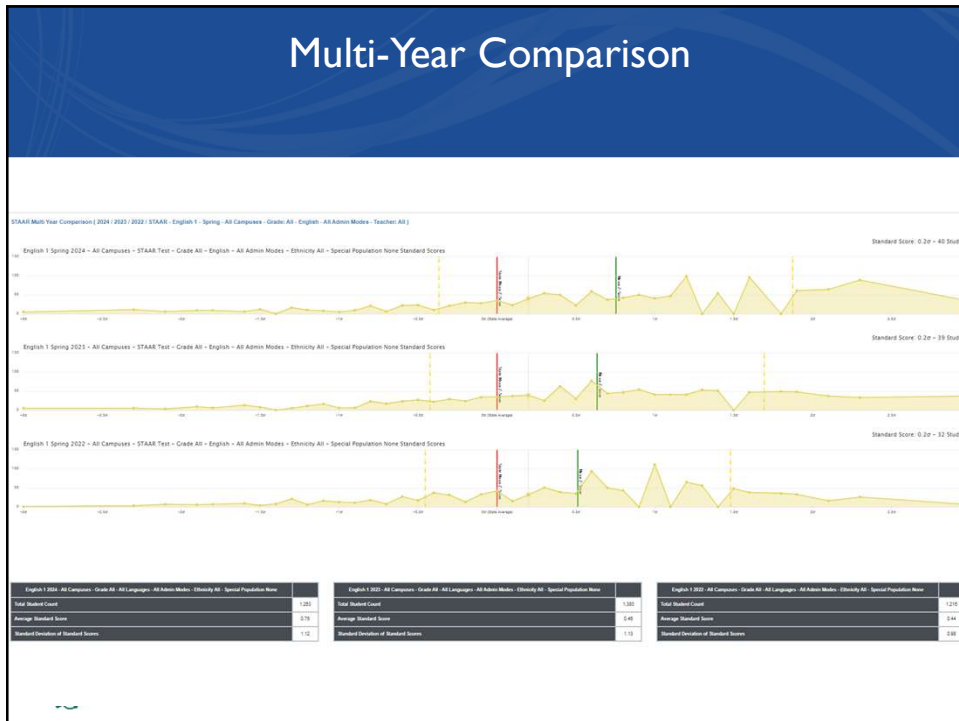
83



84

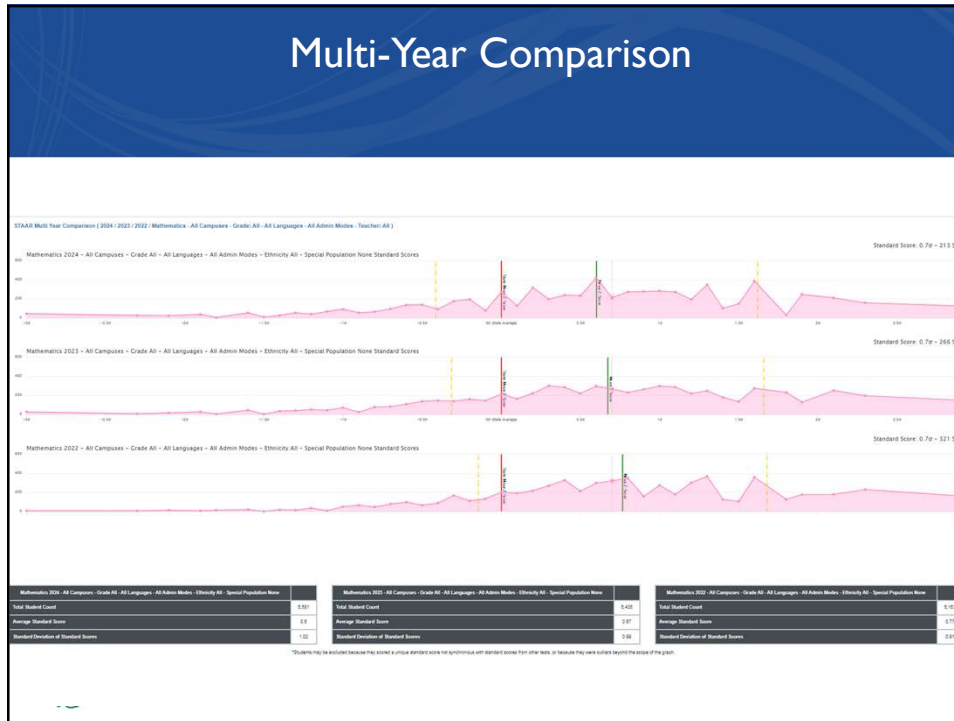


85



86





87

## References

- Andrich, D. & Marais, I. (2019). A course in Rasch measurement theory: Measuring in the Educational, Social, and Health Sciences. Springer. <https://www.springer.com/gp/book/9789811374951>
- Texas Education Agency. (2019a), STAAR 2018-2019 Technical Digest. Austin, Texas: Texas Education Agency. Retrieved from <https://tea.texas.gov/student-assessment/testing/student-assessment-overview/technical-digest-2018-2019>
- Texas Education Agency. (2019b), 2019 STAAR Mean P-Values and Internal Consistency Values by Reporting Category and Content Area. Austin, Texas: Texas Education Agency. Retrieved from [www.tea.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=25769805361&libID=25769805361](http://www.tea.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=25769805361&libID=25769805361).
- Texas Education Agency. (2019c), 2019 STAAR Score Distributions and Statistics by Content Area and Grade. Austin, Texas: Texas Education Agency. Retrieved from <https://tea.texas.gov/sites/default/files/digest19-appendB-STAAR-7-Stats%20and%20Dist.pdf>

88