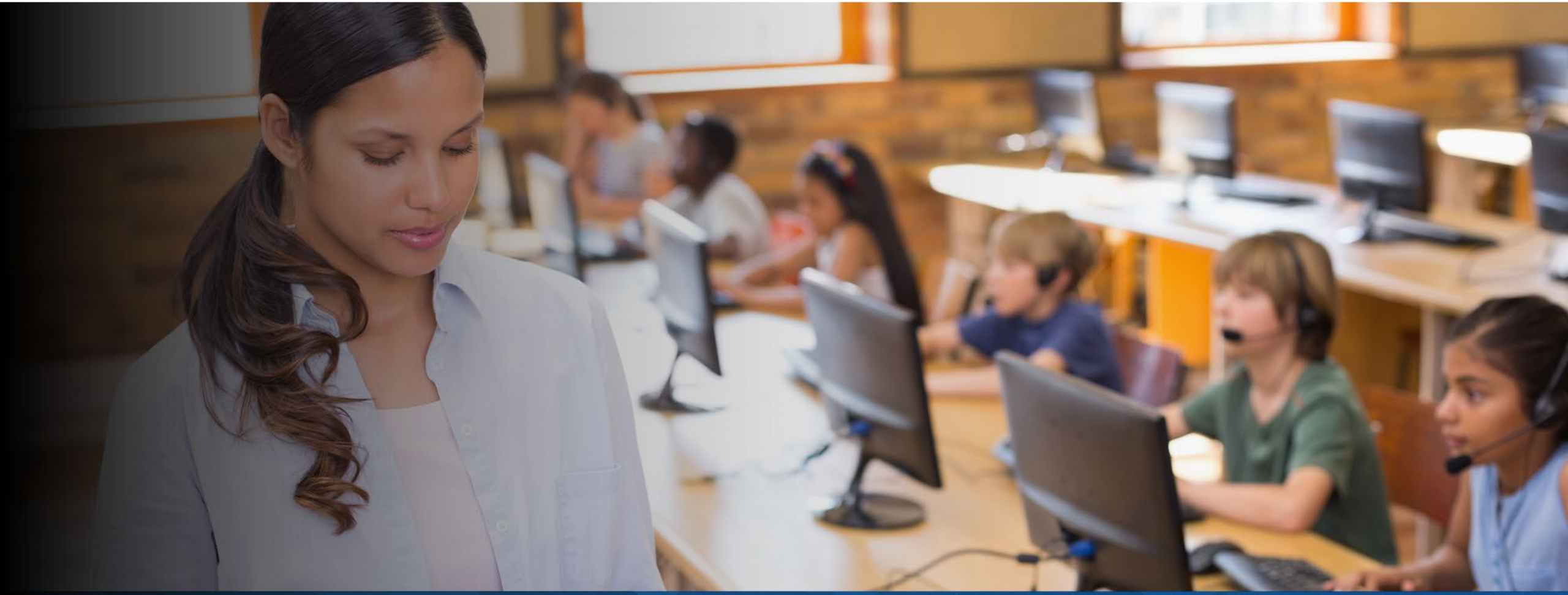
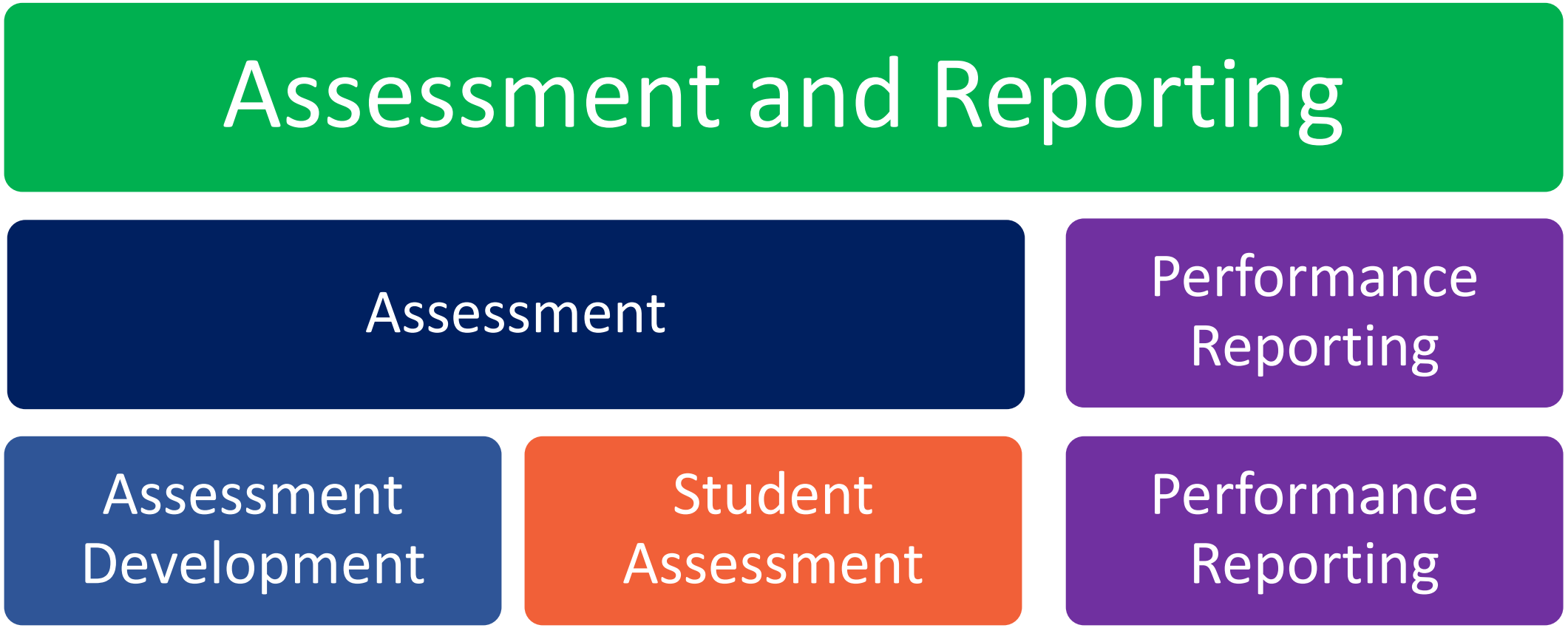


STAAR – Math, Science, and Social Studies

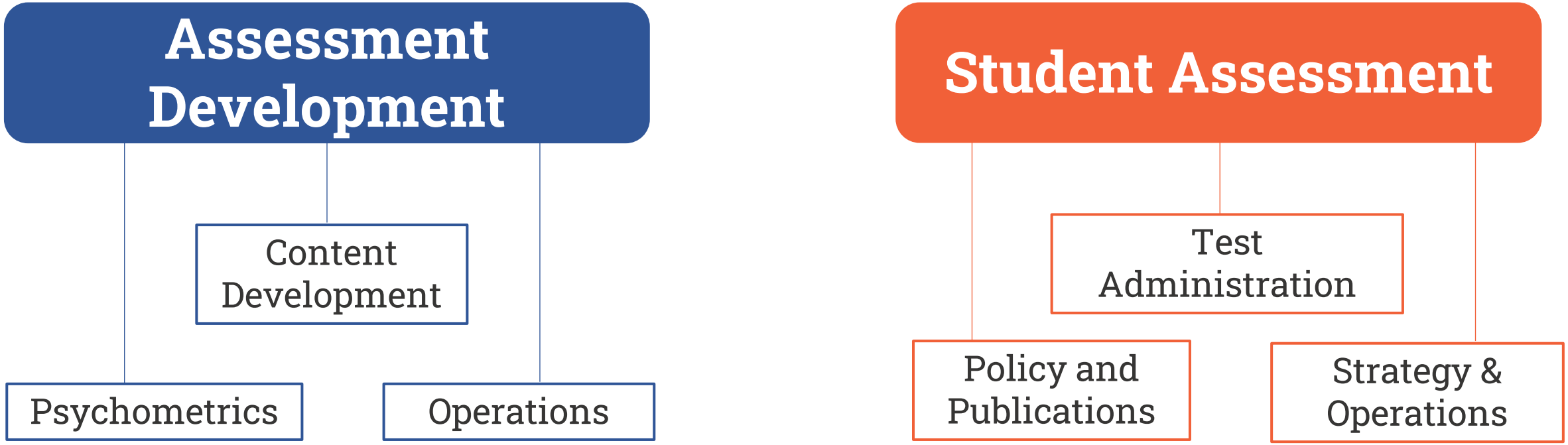
Today's Topics

- Lessons learned from 2023
- Implementing the new science TEKS into STAAR
- Information for 2023-2024
- Opportunities for teachers

The Student Assessment and Performance Reporting Divisions are combined to create the Assessment and Reporting Department.



The two assessment divisions work closely together.



The Student Assessment Division focuses on test administration and systems.

José Ríos, Director, Administration
Student Assessment Division
jose.rios@tea.texas.gov

Test Administration
Andrew Lawver, Director

Strategy and Operations
Karen Mayton, Director

Policy and Publications
Julie Cole, Director

The Assessment Development Division focuses on the content areas.

Chris Rozunick, Director, Content
Assessment Development Division
christine.rozunick@tea.texas.gov

Math, Science, and Social Studies
Jo Ann Bilderback, Director

Spanish/TELPAS
Joe Cisneros, Director

Reading Language Arts
Chelaine Marion, Director

Division Operations
Pete Flores, Director

The math, science, and social studies team works with STAAR and STAAR Alt 2.

Math, Science, and Social Studies Team

Brian Byrwa, Science Specialist, Assessment Development Division
brian.byrwa@tea.texas.gov

Carmen Trejo, Social Studies Specialist, Assessment Development Division
carmen.trejo@tea.texas.gov

Carrie Alexander, Math Specialist, Assessment Development Division
carrie.alexander@tea.texas.gov

Donna Fontenot, Math Specialist, Assessment Development Division
donna.fontenot@tea.texas.gov

Erik Pinter, Math Specialist, Assessment Development Division
erik.pinter@tea.texas.gov

Jo Ann Bilderback, Content Director, Math, Science, and Social Studies Assessment Development Division
joann.bilderback@tea.texas.gov

Our contact information remains the same. The Help Desk will coordinate with the three divisions.

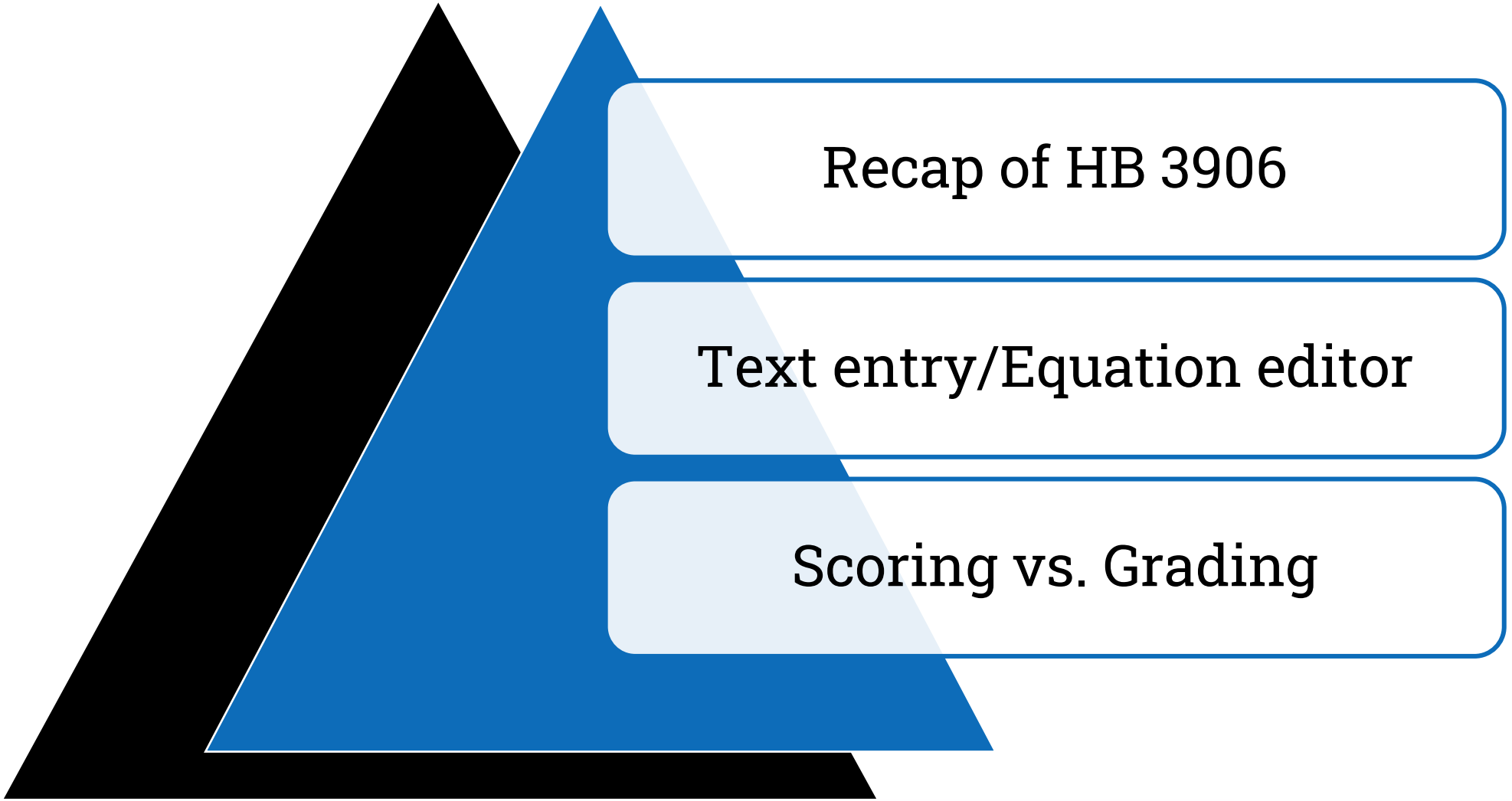
Assessment Help Desk

When you contact the Help Desk, please include the following information:

- Topic
- Questions
- Relevant information
- Contact information
  (Please include availability if you request a phone call.)

STAAR Redesign: Lessons Learned from 2023

With the implementation of the STAAR Redesign, we learned several things from the students and teachers.



RECALL: State and Federal laws require a redesign of Texas's state summative assessment (STAAR), effective 2022-23

HB 3906 in 2019 created **transformative changes to improve the STAAR program.**

75% multiple choice cap

Transition to 100% online testing

Through-year assessment pilot

Interim and formative assessments

Additionally, the federal government requires Texas to assess the breadth of the TEKS, which for RLA includes **writing** at every grade.

RECALL: For the Spring 2023 administration, each content area test included some of the new question types in addition to multiple-choice questions.

MATH

- Text entry/Equation editor
- Graphing
- Number line
- Hot spot
- Fraction model
- Drag and drop
- Match table grid
- Multiselect

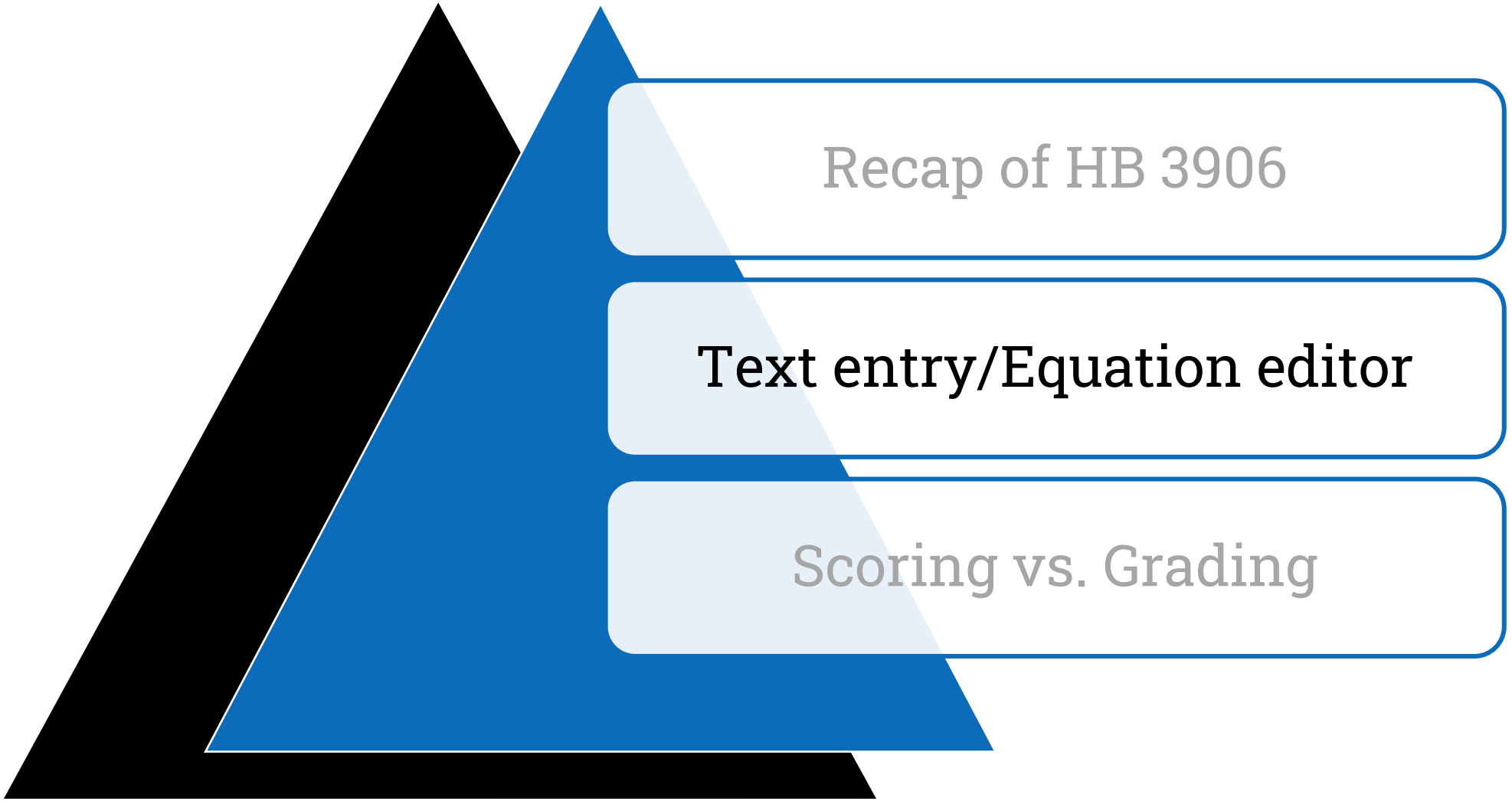
SCIENCE

- Match table grid
- Inline choice
- Text entry
- Hot spot
- Drag and drop
- Multipart
- Multiselect
- Short-constructed response (SCR)

SOCIAL STUDIES

- Inline choice
- Hot spot
- Hot text
- Multipart
- Match table grid
- Multiselect
- Short-constructed response (SCR)

With the implementation of the STAAR Redesign, we learned some things from the students and teachers.



Text entry and Equation editor responses go through an adjudication process to confirm that all correct responses receive credit.

STAAR Administration

- Tests are administered and student responses are collected and scored

Response Adjudication

- Text entry and Equation editor responses are reviewed by vendors and TEA staff

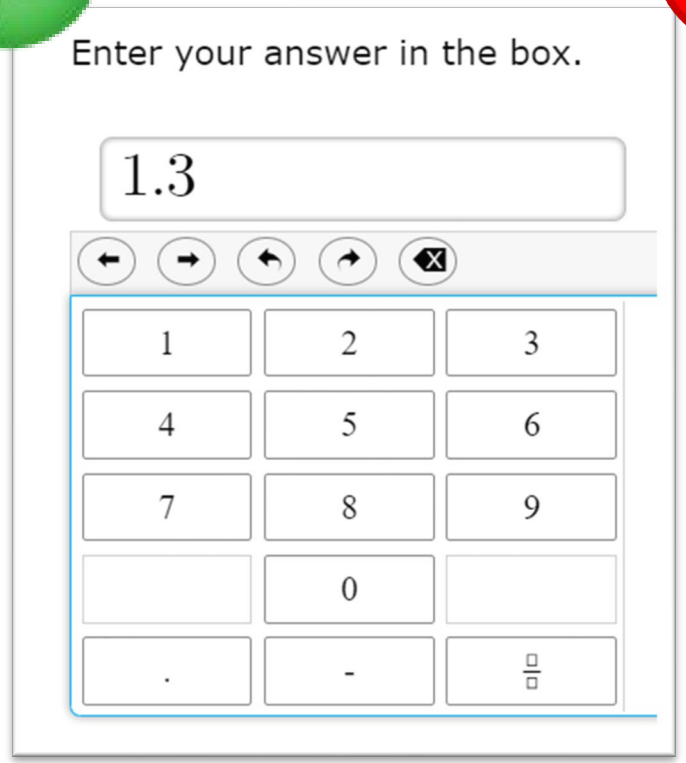
Score

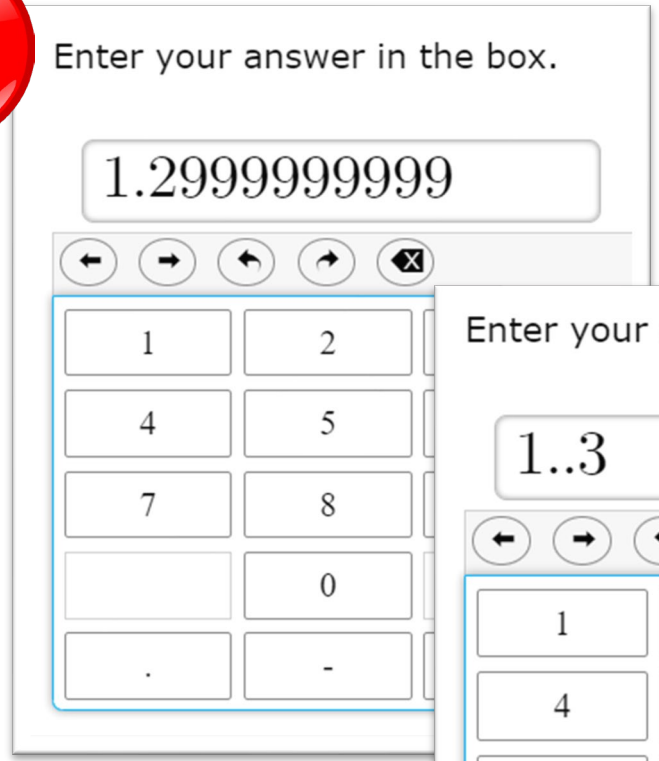
- Scores for questions with flagged responses are adjusted based on adjudication

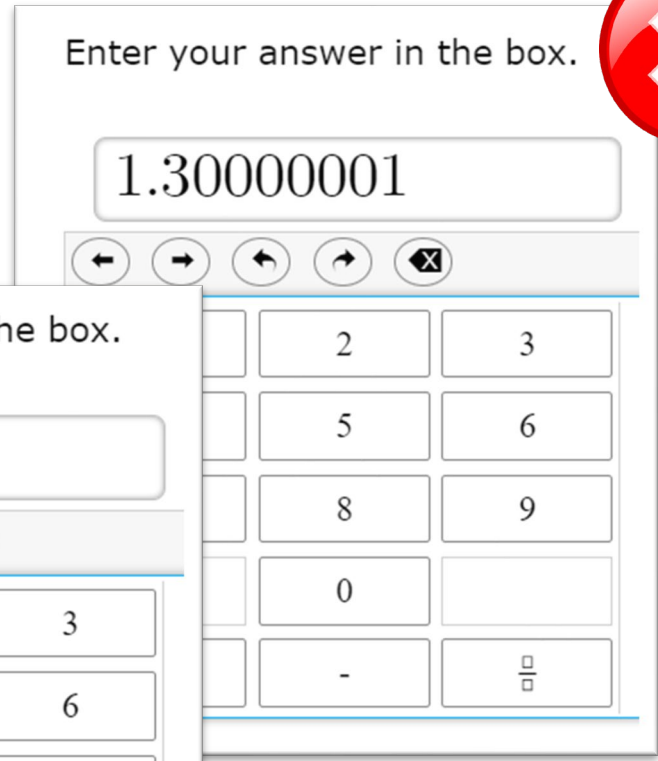
Reporting

- Scores are reported to districts

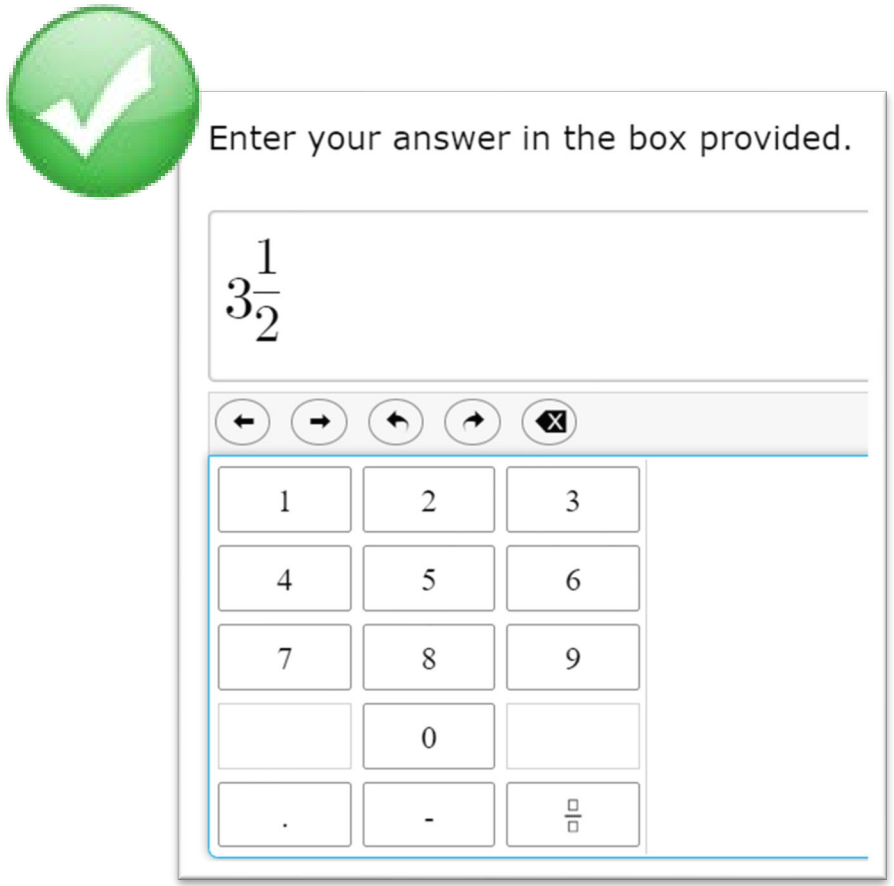
Encourage students to avoid including unnecessary digits or decimals points.

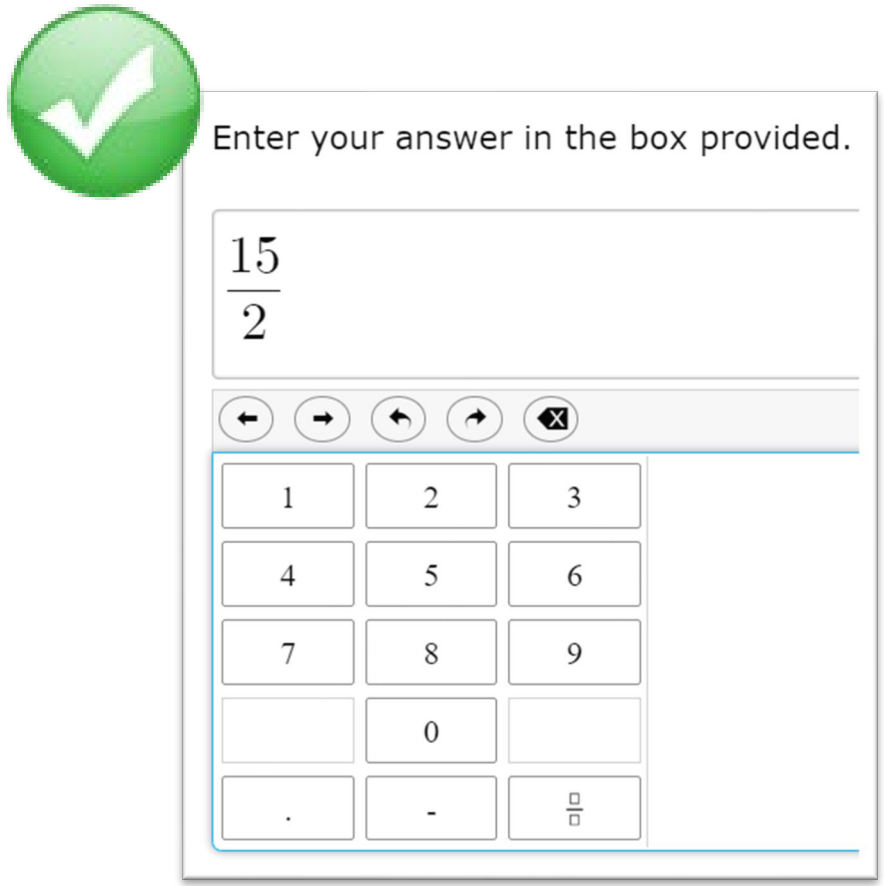




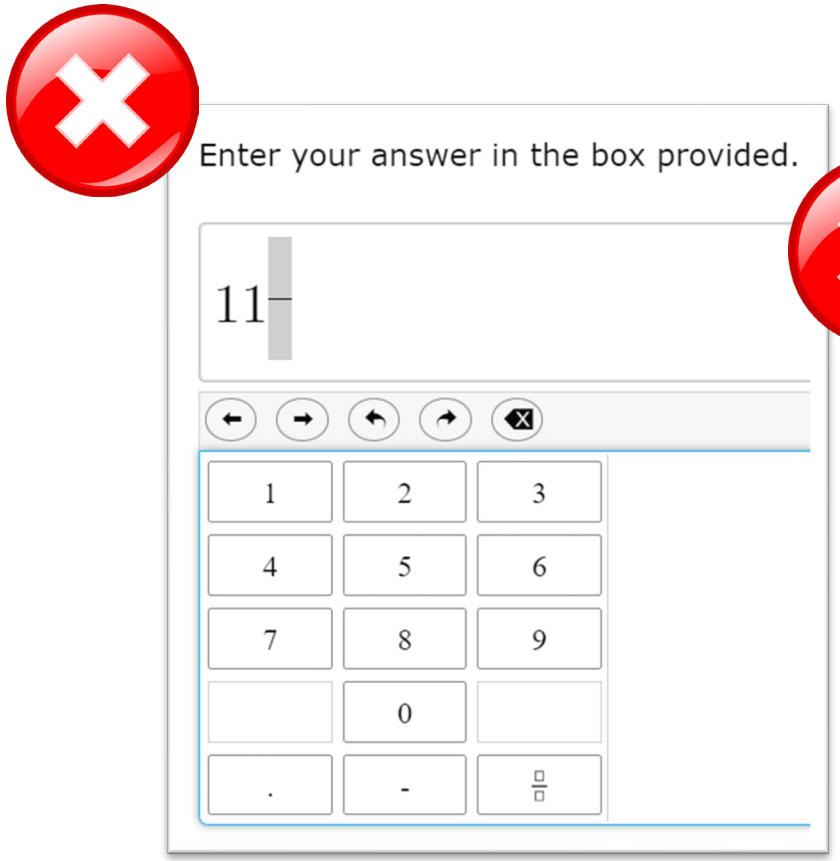


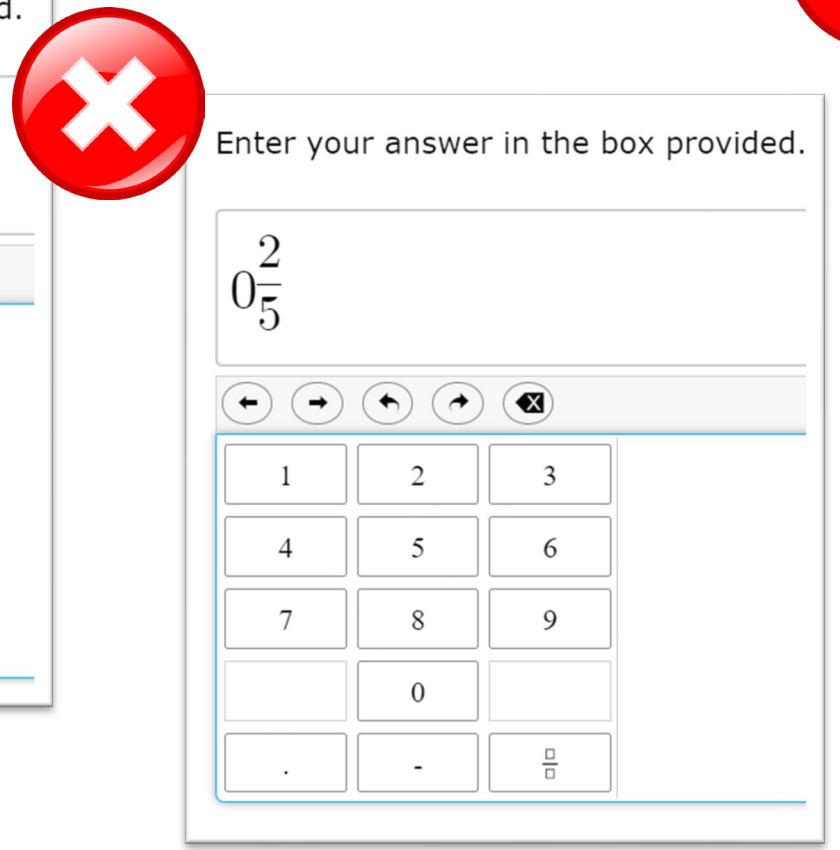
Encourage students to be careful when entering fractions and mixed numbers.

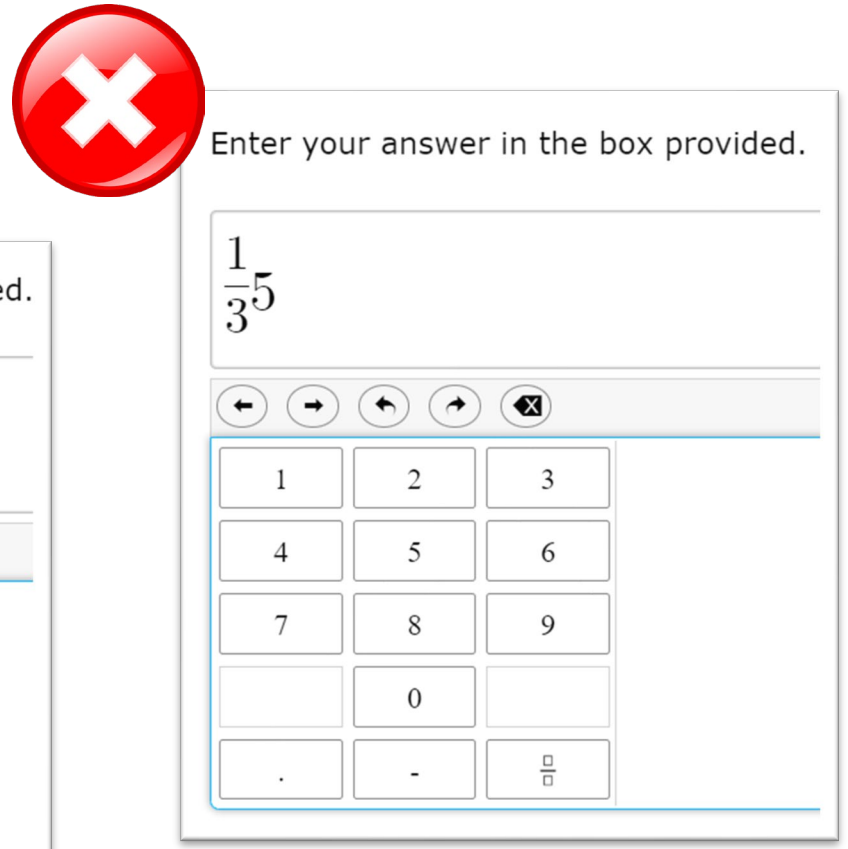




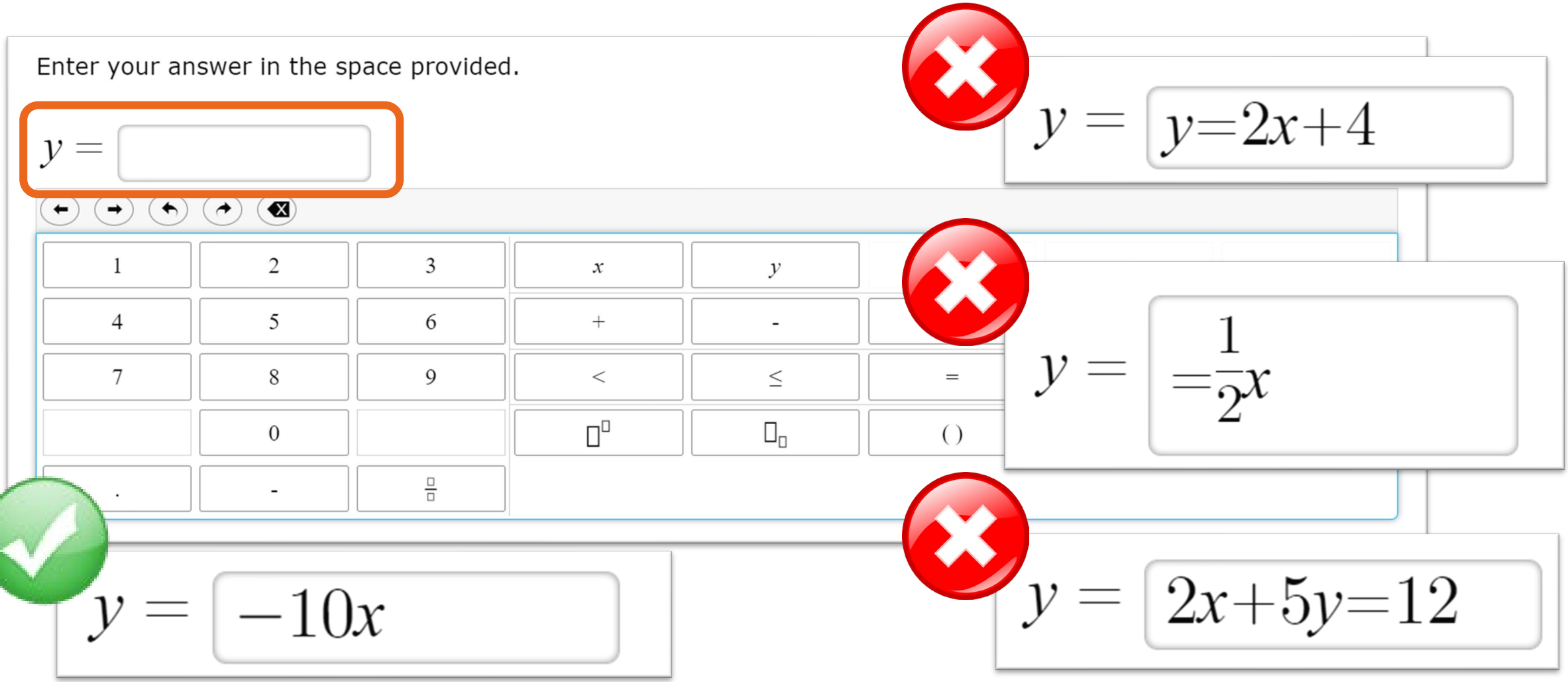
Entries with incorrectly entered fractions or mixed numbers will not receive credit.







Be careful not to enter redundant symbols in scaffolded responses.



Remind students to watch for instructional phrases in direction lines.

Write your answer in dollars and cents.

Enter your answer in the space provided.

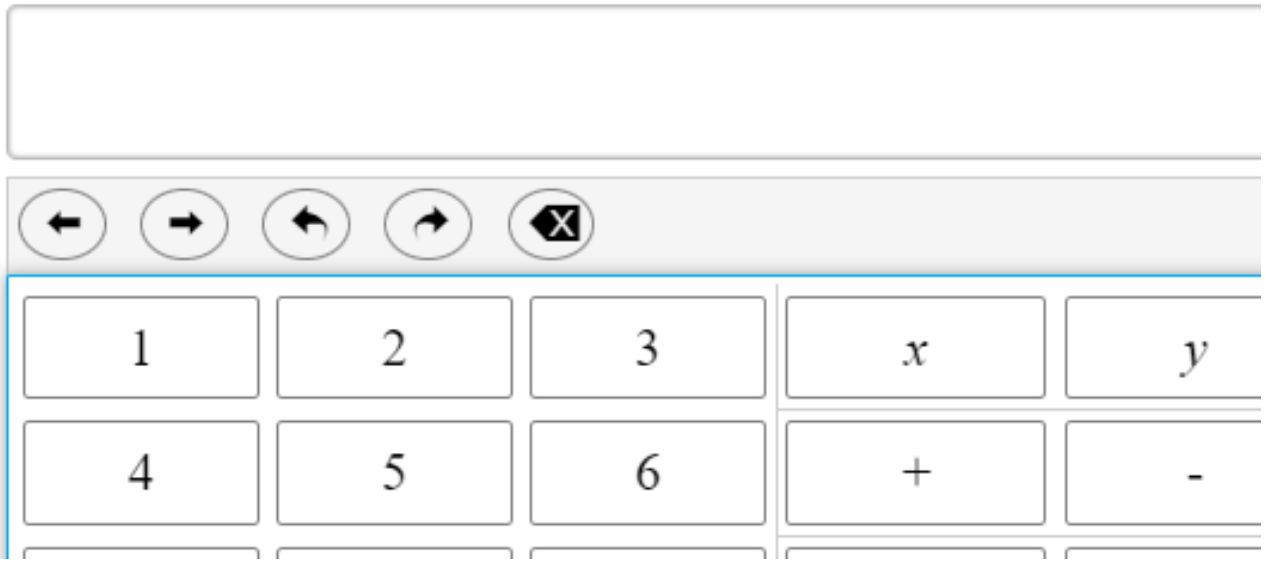
$ 4.50

$ $4\frac{1}{2}$

Remind students to watch for instructional phrases in direction lines.

Write the expression in simplified form.

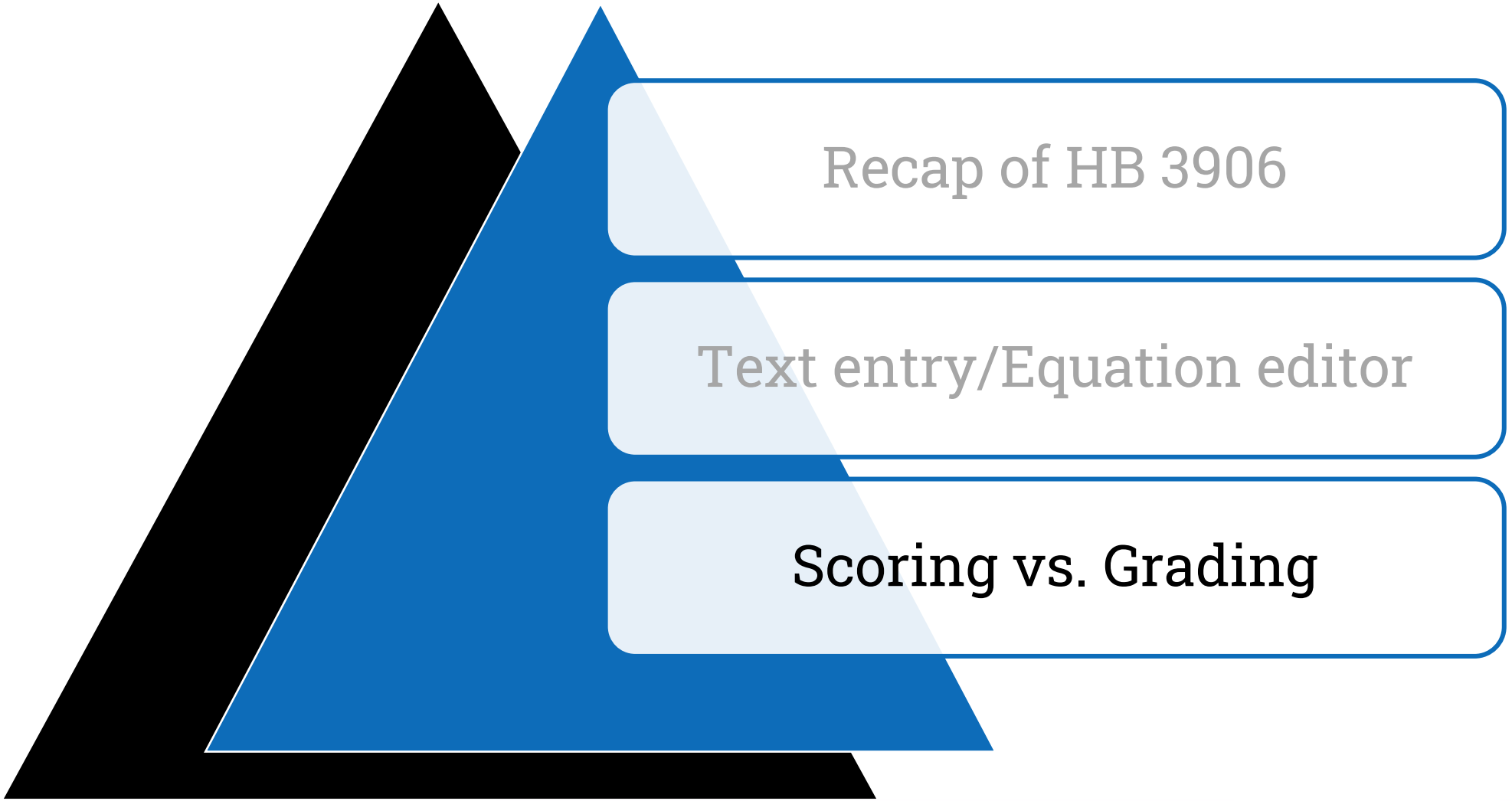
Enter your answer in the box provided.



x^5

x^{2+3}

With the implementation of the STAAR Redesign, we learned some things from the students and teachers.

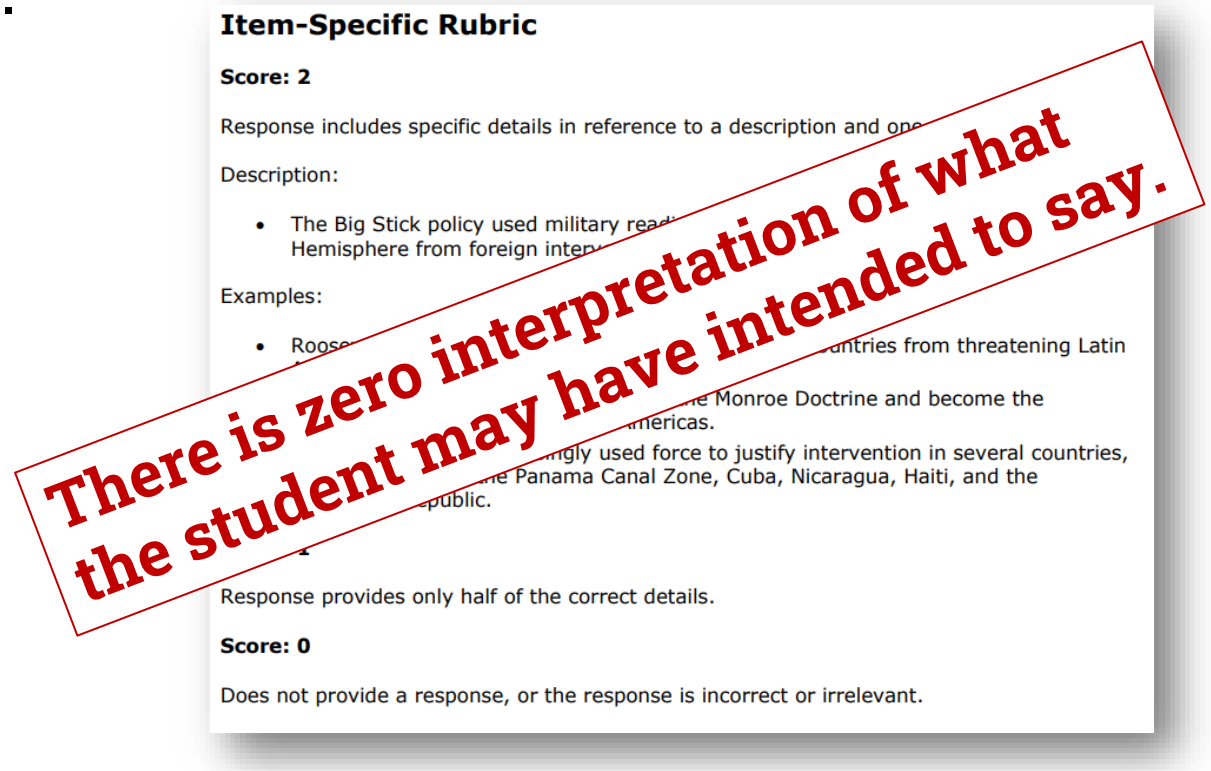


When grading, the teacher knows the student and can interpret the student's knowledge.

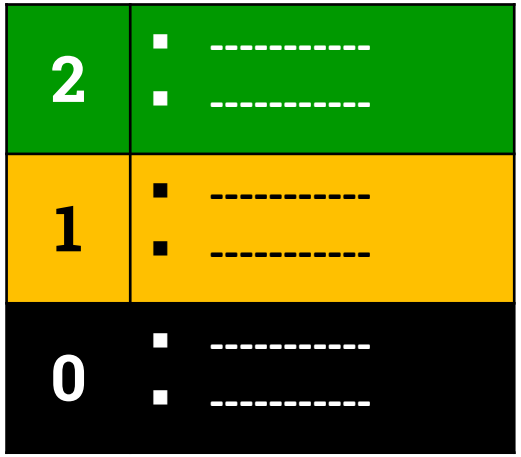
In the classroom, teachers can make judgement calls on grading the student responses because they know the student and can consider the knowledge the student has previously demonstrated during classroom activities.

When scoring, the scorer does not have previous knowledge of the student or what they know about the content.

Points are awarded based on how well the response addresses the question according to the rubric.



There is zero interpretation of what the student may have intended to say.



Each SCR question has an item-specific rubric, so these questions are scored not graded.

Grade 8 Social Studies Prompt

This is an excerpt from a letter written by Alexander Hamilton about a protest by farmers in the early 1790s.

> It appears, moreover, that on the 25th of July last the Mail of the United States, on the road from Pittsburgh to Philadelphia, was stopped by two armed Men, who cut it open, and took out all the letters, except those contained in one packet: these armed men, from all the circumstances which occurred, were manifestly acting on the part of the Insurgents.
>
> The declared object of the foregoing proceedings, is to obstruct the execution and compel a repeal of the laws . . . on spirits distilled within the United States and upon Stills.
>
> —*Alexander Hamilton, A Letter to George Washington, August 5, 1794*

Prompt: What was the cause of the farmers' protest described in Hamilton's letter **AND** how was the protest resolved?

Item-Specific Rubric

Score: 2

Score two points for correct answers that include a reference to **both**:

Cause of the farmers' protest:

- Tax
- Government tax
- Tax on whiskey
- Undue burden on least affording to pay
- Excessive government interference in farmers ability to make money/living

How was protest resolved:

- Government used force
- Government used the army to put down the protest
- Government arrested protestors and put them in jail
- Government charged and tried the protestors in court

Score: 1

The response provides only half of the correct details.

Score: 0

The response is incorrect or irrelevant.

Rubrics are reviewed by the educator item review (EIR) committees prior to the question appearing on STAAR for field-testing.

The **EIR committees can provide feedback** and suggestions to all items, including the SCR prompt and item-specific rubric.

This is the **opportunity for edits** to be made **to the rubric**, not after the question has been field-tested.

United States History Prompt

Prompt: What was President Theodore Roosevelt's Big Stick policy **AND** what was an example of this policy?

Item-Specific Rubric

Score: 2

Response includes specific details in reference to a description and one example:

Description:

- The Big Stick policy used military readiness and diplomacy to protect the Western Hemisphere from foreign intervention.

Examples:

- Roosevelt used this diplomacy to restrain European countries from threatening Latin American countries.
- Roosevelt issued this policy to enforce the Monroe Doctrine and become the international police power of the Americas.
- The United States increasingly used force to justify intervention in several countries, including securing the Panama Canal Zone, Cuba, Nicaragua, Haiti, and the Dominican Republic.

Score: 1

Response provides only half of the correct details.

Score: 0

Does not provide a response, or the response is incorrect or irrelevant.

Anchor approval committees provide guidance for scoring in addition to the rubric.

The **anchor approval committees** review SCR responses from the field-test to provide feedback concerning the application of the scoring rubric and **provide guidance for scorers** to use on responses that are not clearly correct or clearly incorrect.

Two major military events were code orange, when they dropped stuff onto Vietnam's soil to kill of the trees so their enemies couldn't hide. the second is the new years attack where the american army were attacked unexpectedly by the vietnams.

Treaty signed by the Soviet Union and the US that limits the production of nuclear weapons.

Massacres of Vietnamese villages by American soldiers.

Edits are not made to the rubric after the question has been field-tested.

Guerilla warfare- The North Viatnamese used their knowlege of their homeland to their advantage by hiding in the trees and bushes.
Blockade- The US prevented North Viatnamese from getting supplies in order to starve their army.

The content in the rubric and the scoring guidance provided by the anchor approval committees is used to score these questions.

Item-Specific Rubric

Score: 2

Score two points for correct answers that include a reference to **both**:

Cause of the farmers' protest:

- Tax
- Government tax
- Tax on whiskey
- Undue burden on least affording to pay
- Excessive government interference in farmers ability to make money/living

How was protest resolved:

- Government used force
- Government used the army to put down the protest
- Government arrested protestors and put them in jail
- Government charged and tried the protestors in court

Score: 1

The response provides only half of the correct details.

Score: 0

The response is incorrect or irrelevant.

The **rubrics cannot** always **provide an exhaustive list** of possible answers.

Anchor approval committees provide scoring guidance that is used to train the scorers on how to score the responses.

Responses that are outside the rubric or scoring guidance are escalated to a supervisor's review.

Item-Specific Rubric

Score: 2

Score two points for correct answers that include a reference to **both**:

Cause of the farmers' protest:

- Tax
- Government tax
- Tax on whiskey
- Undue burden on least affording to pay
- Excessive government interference in farmers ability to make money/living

How was protest resolved:

- Government used force
- Government used the army to put down the protest
- Government arrested protestors and put them in jail
- Government charged and tried the protestors in court

Score: 1

The response provides only half of the correct details.

Score: 0

The response is incorrect or irrelevant.

Unlike teachers providing grades on classroom assessments, **scorers cannot make judgements** outside of the rubric or scoring guidance.

Responses that are **outside the scope** of the rubric or scoring guidance **are elevated to a higher review** with the vendor and TEA.

Short constructed response questions are scored using a prompt-specific two-point rubric.

Grade 8 Social Studies – Prompt

This is an excerpt from a letter written by Alexander Hamilton about protest by farmers in the early 1790s.

> It appears, moreover, that on the 25th of July last the Mail of the United States, on the road from Pittsburgh to Philadelphia, was stopped by two armed Men, who cut it open, and took out all the letters, except those contained in one packet: these armed men, from all the circumstances which occurred, were manifestly acting on the part of the Insurgents.
>
> The declared object of the foregoing proceedings, is to obstruct the execution and compel a repeal of the laws . . . on spirits distilled within the United States and upon Stills.
>
> —*Alexander Hamilton, A Letter to George Washington, August 5, 1794*

Prompt: What was the cause of the farmers' protest described in Hamilton's letter **AND** how was the protest resolved?

Score: 1

The response provides only half of the correct details.

Score: 0

The response is incorrect or irrelevant.

Grade 8 Social Studies – Item-specific Rubric

Score: 2

Score two points for correct answers that include a reference to **both**:

Cause of the farmers' protest:

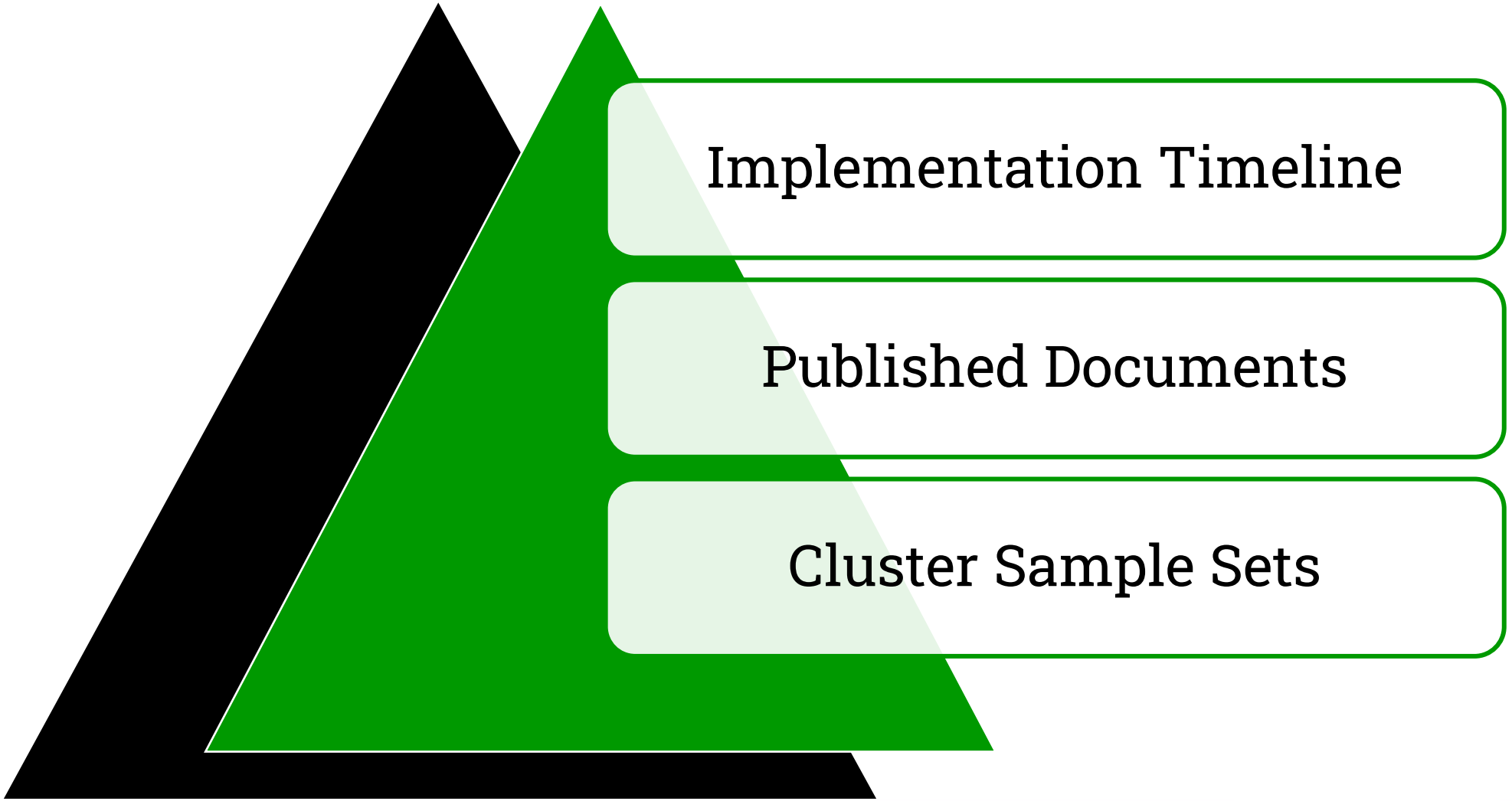
- Tax
- Government tax
- Tax on whiskey
- Undue burden on least, affording to pay
- Excessive government interference in farmers ability to make money/living

How was protest resolved:

- Government used force
- Government used the army to put down the protest
- Government arrested protestors and put them in jail
- Government charged and tried the protestors in court

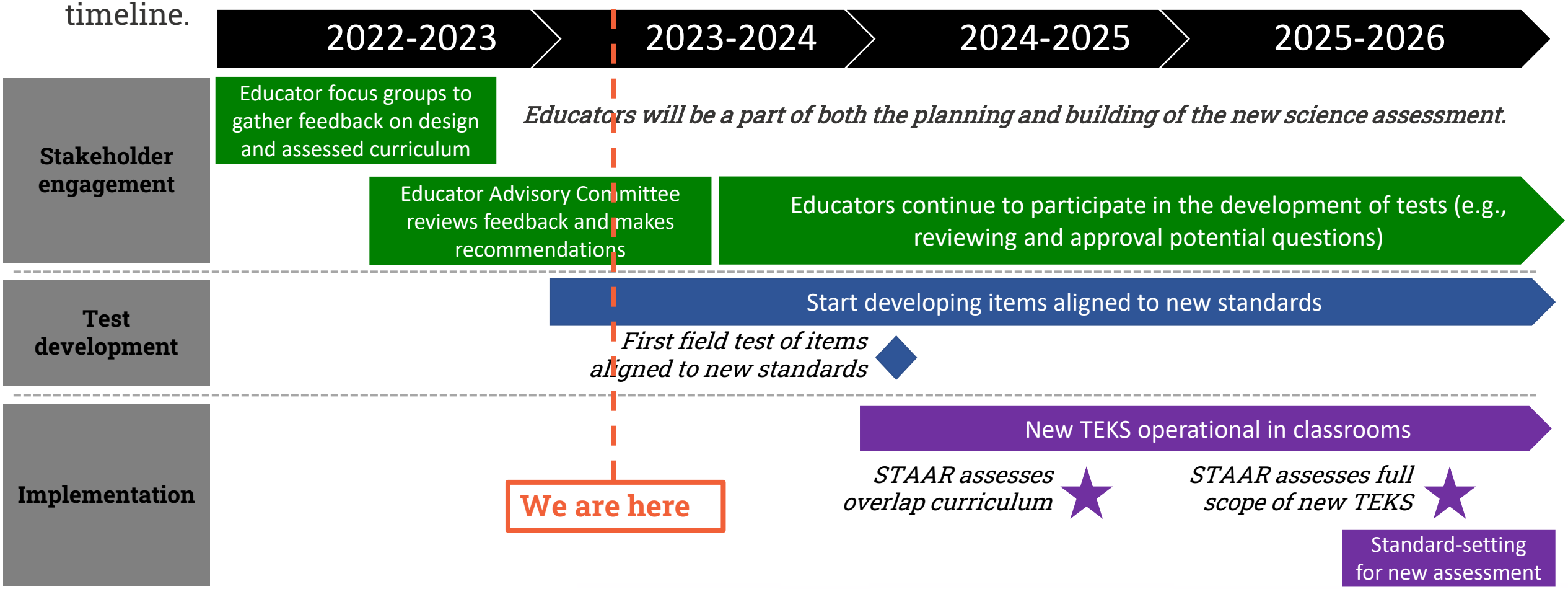
Implementing the New Science TEKS into STAAR

The implementation of the new science TEKS into STAAR requires a two-year process.

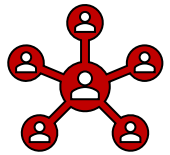
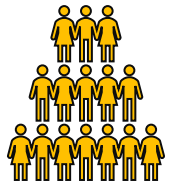


RECALL: Timeline for implementing the new science TEKS in the state assessment program

In 2020-2021, the SBOE has adopted revised TEKS for science in grades K-12. TEA will work with Texas educators to update the science STAAR tests to assess the newly adopted standards on the following timeline.

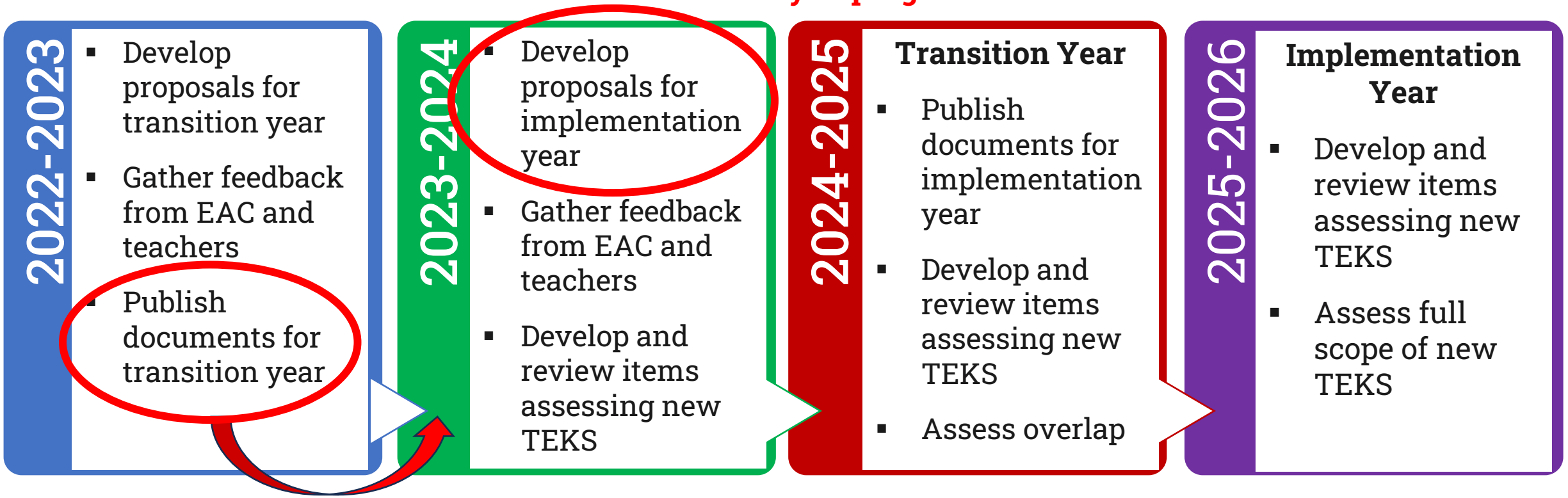


Recall: A variety of stakeholders participate in the process of assessing the revised TEKS. This will conclude at the end of the 2023-2024 school year.

- ☑  **State Board of Education** – Adopts the revised TEKS
- ☑  **Community** – Provides public comments
- ☑  **Teacher Committees** – Provides initial feedback on the design and assessed curriculum
- ☑  **Educator Advisory Committee** - Provides feedback to TEA assessment divisions
- ☐ 2023-2024 School Year  **Teacher Committees** – Continue to provide feedback and review assessment questions

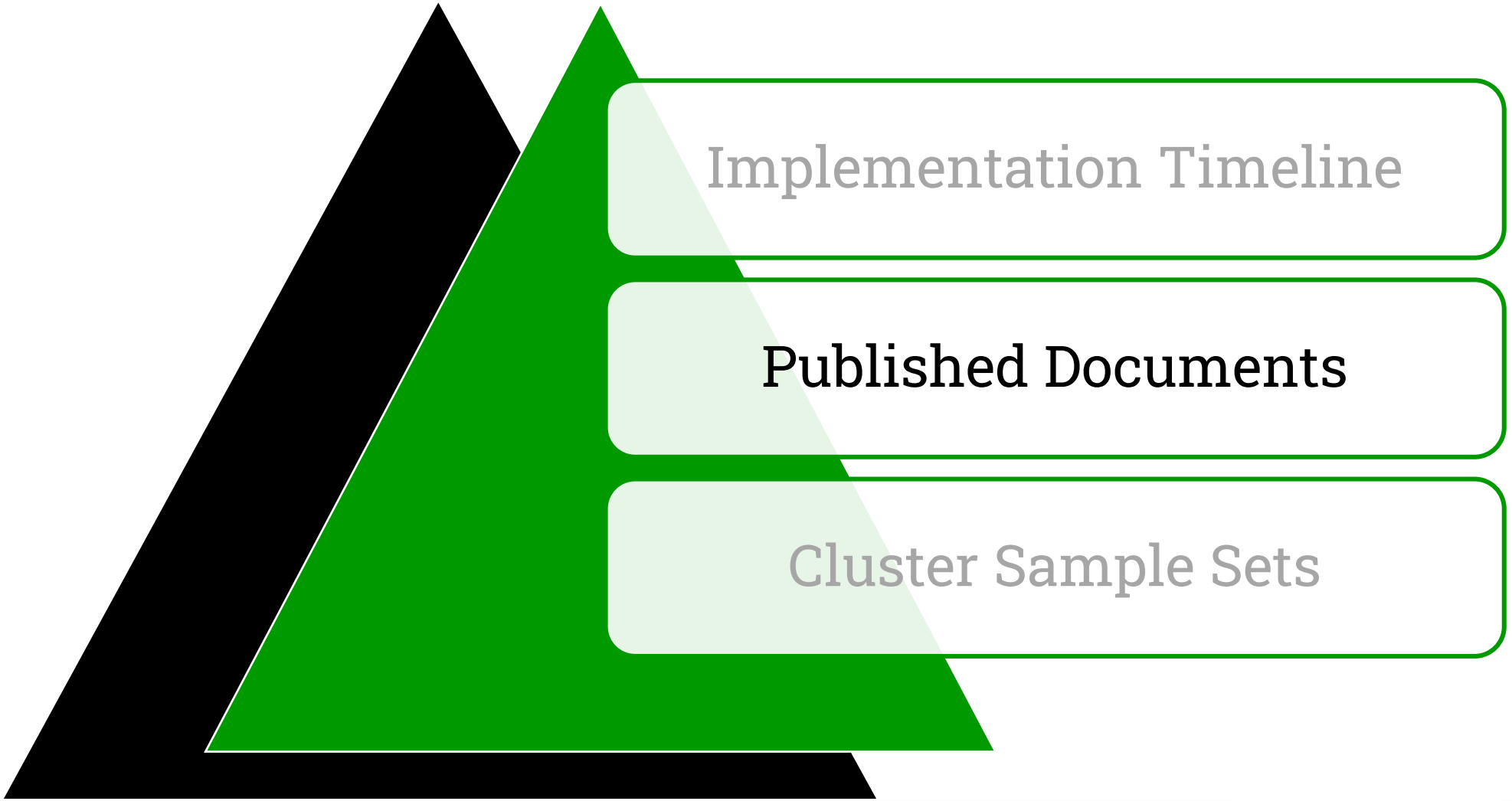
Recall: Tasks have been outlined to produce and publish documents a year prior to the transition and implementation years.

Already in progress

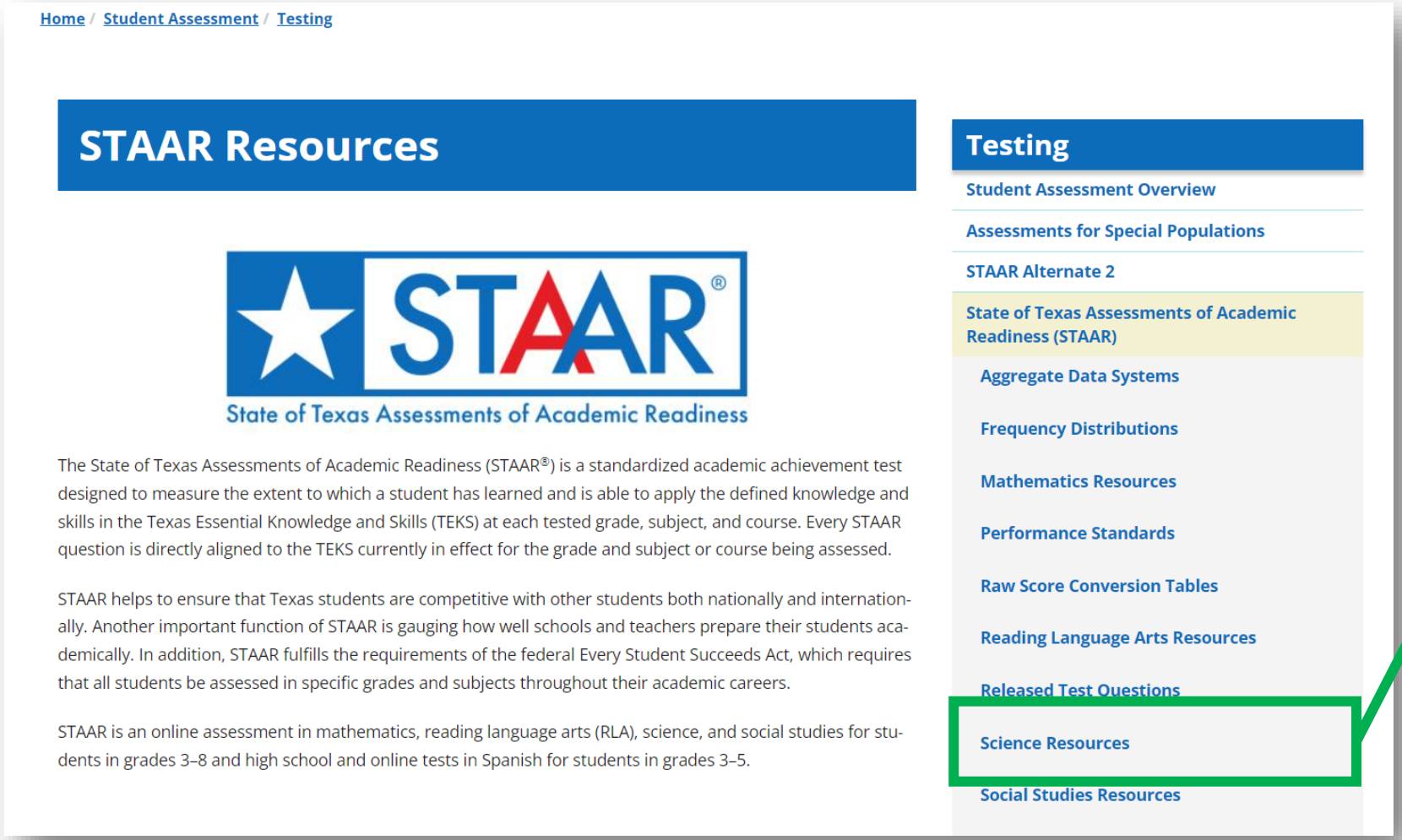


Focus groups concluded at the end of July. Documents for the transition year were published in October 2023.

The implementation of the new science TEKS into STAAR requires a two-year process.



The Assessed Curriculum documents and Blueprints for the transition year are available on the TEA website.



The documents for the 2024-2025 school year (transition year) are located by grade level on the Science Resources page.

The transition year documents are identified with the 2024-2025 school year in each section.

STAAR Science Resources

Located below are resources for STAAR grades 5 and 8 science and Biology assessments. To see all available STAAR resources, visit the STAAR Resources webpage.

Expand All

- Assessed Curriculum
- Blueprints
- Performance Level Descriptors
- Constructed Response Scoring Guides
- Additional Resources

State of Texas Assessments of Academic Readiness (STAAR)

- Aggregate Data Systems
- Frequency Distributions
- Mathematics Resources
- Performance Standards
- Raw Score Conversion Tables
- Reading Language Arts Resources
- Released Test Questions
- Science Resources
- Social Studies Resources
- STAAR Spanish Resources
- Statewide Item Analysis Reports
- Statewide Summary Reports

Contact Information

Student Assessment Division

(512) 463-9536

Assessment Help Desk

Expand All

Assessed Curriculum

2023–2024

- Grade5
- Grade 5 Spanish
- Grade 8
- Biology

2024–2025 Transition Year

- Grade 5
- Grade 8
- Biology

Blueprints

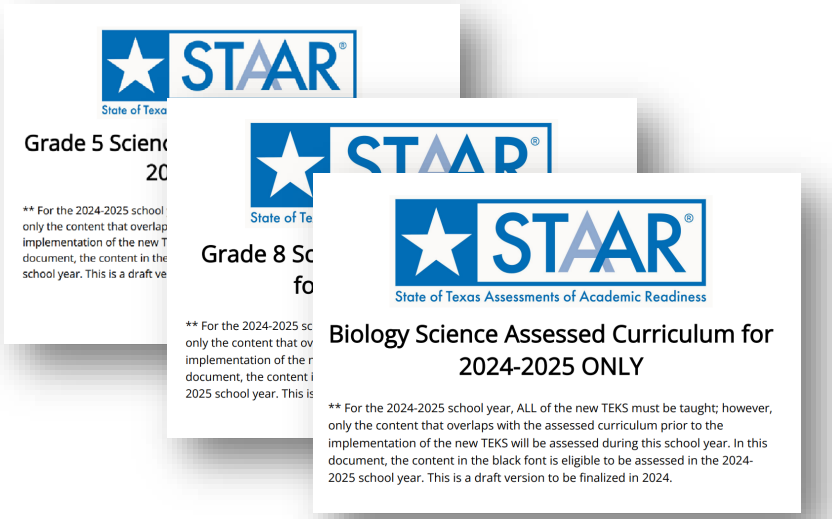
2023–2024

- Grade 5
- Grade 5 Spanish
- Grade 8
- Biology

2024–2025 Transition Year

- Grade 5
- Grade 8
- Biology

Information on how to read the document is given on the cover page.

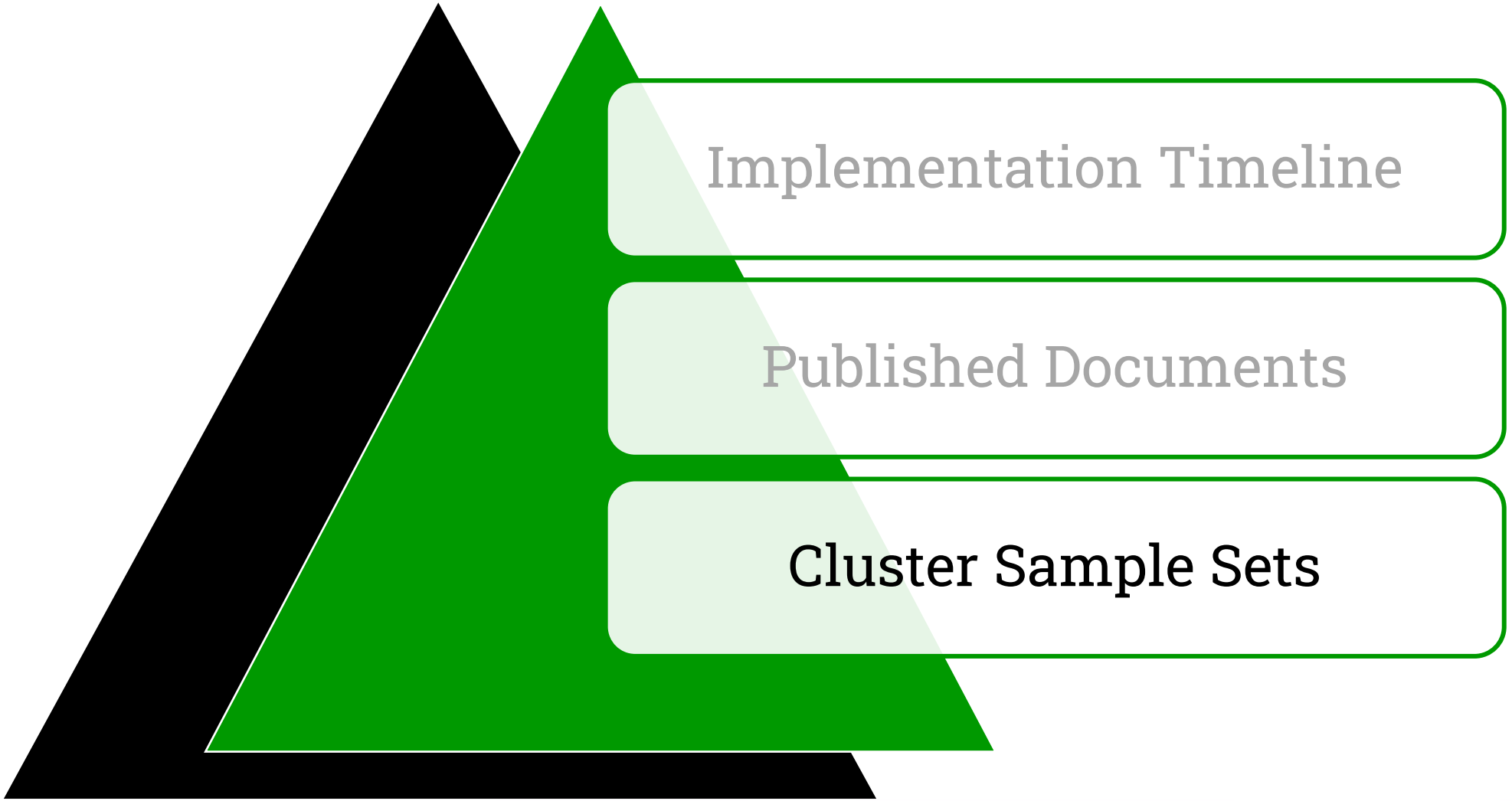


** For the 2024-2025 school year, ALL of the new TEKS must be taught; however, only the content that overlaps with the assessed curriculum prior to the implementation of the new TEKS will be assessed during this school year. In this document, the content in the black font is eligible to be assessed in the 2024-2025 school year. This is a draft version to be finalized in 2024.

Reporting Category 2: Force, Motion, and Energy

Old TEKS	Before 2024–2025	R/S	New TEKS	Implemented in 2024–2025	R/S
8.6A	demonstrate and calculate how unbalanced forces change the speed or direction of an object's motion;	Readiness	8.7A	calculate and analyze how the acceleration of an object is dependent upon the net force acting on the object and the mass of the object using Newton's Second Law of Motion; and	Readiness
			6.7B	calculate the net force on an object in a horizontal or vertical direction using diagrams and determine if the forces are balanced or unbalanced; and	Readiness
8.6B	differentiate between speed, velocity, and acceleration; and	Supporting			
8.6C	investigate and describe applications of Newton's three laws of motion such as in vehicle restraints, sports activities, amusement park rides, Earth's tectonic activities, and rocket launches.	Readiness	8.7B	investigate and describe how Newton's three laws of motion act simultaneously within systems such as in vehicle restraints, sports activities, amusement park rides, Earth's tectonic activities, and rocket launches.	Readiness
6.8A	compare and contrast potential and kinetic energy;	Supporting	6.8A	compare and contrast gravitational, elastic, and chemical potential energies with kinetic energy;	Supporting
6.8C	calculate average speed using distance and time measurements; and	Supporting	7.7A	calculate average speed using distance and time measurements from investigations;	Supporting
6.8D	measure and graph changes in motion.	Supporting	7.7C	measure (record) and interpret an object's motion using distance-time graphs;	Supporting
6.9C	demonstrate energy transformations such as energy in a flashlight battery changes from chemical energy to electrical energy to light energy.	Supporting	6.8C	describe how energy is conserved through transfers and transformations in systems such as electrical circuits, food webs, amusement park rides, or photosynthesis; and	Supporting

The implementation of the new science TEKS into STAAR requires a two-year process.



The feedback from educators on the cluster item sets was very positive.

PROPOSE:

Include 1-2 cluster item sets for each test title.

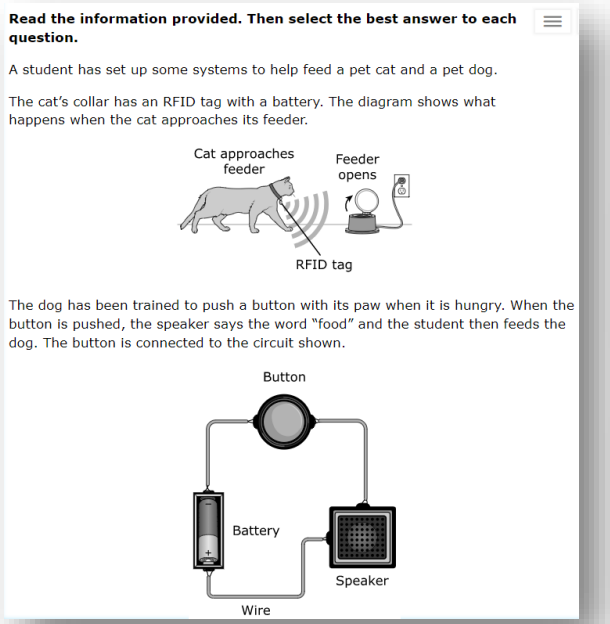
These item sets would contain **3-5 stand-alone questions** that **reference the same stimulus**.

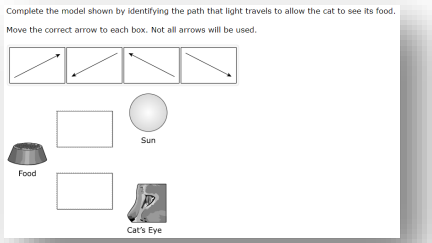
POTENTIAL BENEFITS:

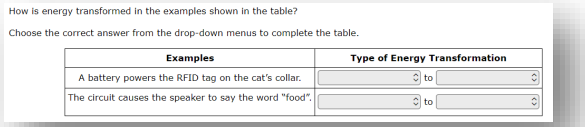
- Groups concepts together which could reinforce the recurring themes in the TEKS – align to classroom instruction
- Reinforces cross-curricular focus
- Scores items individually which would not require changes to the test blueprint.

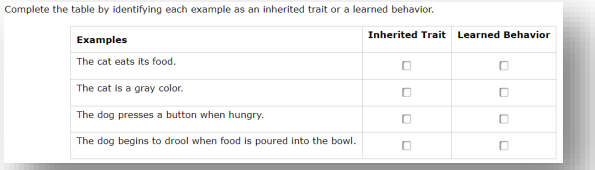
90% of the teachers gave **positive feedback** on the item sets.

There are several things considered when developing the clusters.







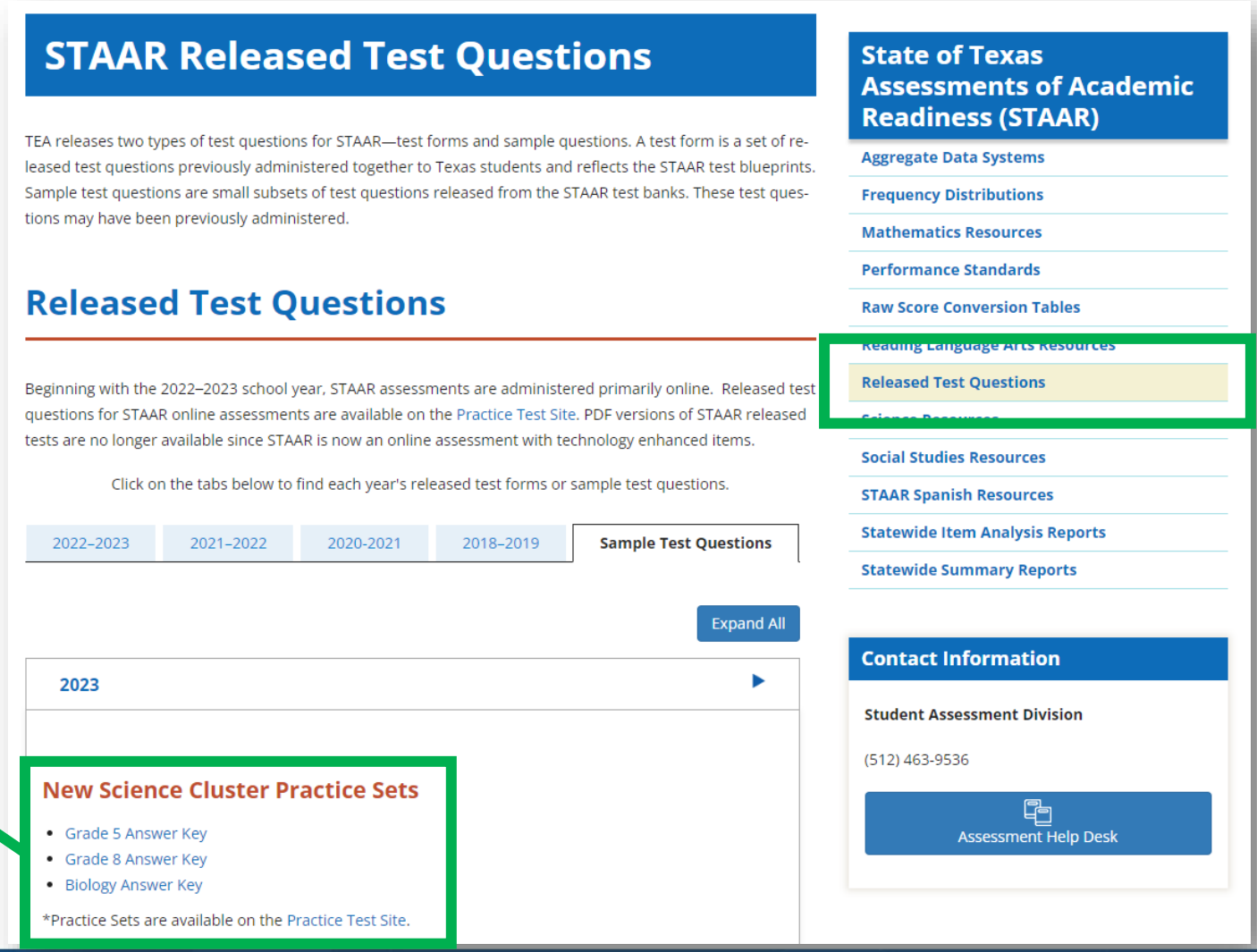


- Address the limited amount of screen space available
- Minimize the amount of reading in the stimulus; use graphics
- Score each question individually, not as a set
- Vary the question types in the set

The cluster samples are available with the Practice Items, and the answer keys are located on the TEA website.

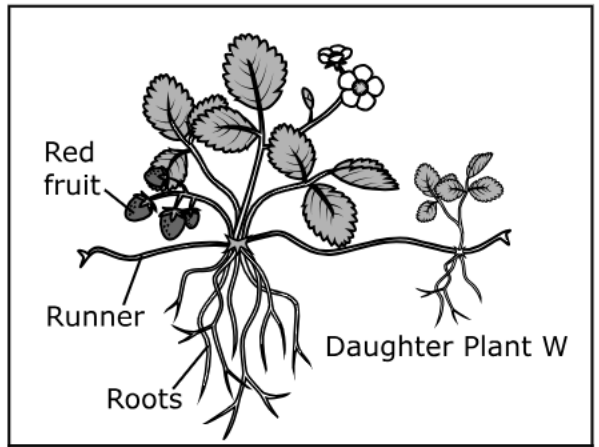
These items are provided as examples. **They have not been through the STAAR review process**, including teacher committees, and they **do not have performance data** attached to them.

[Practice Test Site]



This example is from grade 8. Match table grid questions are in development for science beginning with this year.

Strawberry plants can reproduce in two ways. Plants can produce flowers, and they can also produce long, horizontal stems called runners. A runner can produce a daughter plant in areas where it touches the ground. The diagram shows two different varieties of strawberry plants, their flowers, fruits, runners, and daughter plants.



Parent Plant W

1 2 3 4

1

GUEST, GUEST

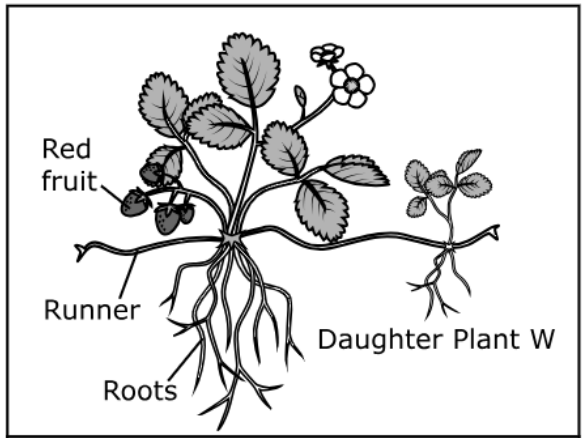
Determine whether the statements in the table describe a characteristic of asexual reproduction or sexual reproduction in strawberry plants.

Select the correct answer in each row.

Statement	Asexual Reproduction	Sexual Reproduction
The parent plant produces offspring by using runners.	☐	☐
The offspring are identical to one another.	☐	☐
The offspring can have two parents.	☐	☐

This example is from grade 8. Inline choice questions are in development for science beginning with this year.

Strawberry plants can reproduce in two ways. Plants can produce flowers, and they can also produce long, horizontal stems called runners. A runner can produce a daughter plant in areas where it touches the ground. The diagram shows two different varieties of strawberry plants, their flowers, fruits, runners, and daughter plants.



Parent Plant W

1 2 3 4

4

GUEST, GUEST

How does energy change form during the process of photosynthesis so that the daughter plant can grow?

Choose the correct answer from each drop-down menu to complete the statements.

The plant absorbs [ ] from the sun.

This energy is co[ ].

This energy is [ ] the form of sugars.

- mechanical energy
- chemical energy
- light energy
- electrical energy

Information for 2023-2024

Blueprints for each grade level are current.

This is the year was first implemented. These blueprint continue to be in effect.

STAAR Grade 4 Math Blueprint
Effective as of School Year 2022–23

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

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.

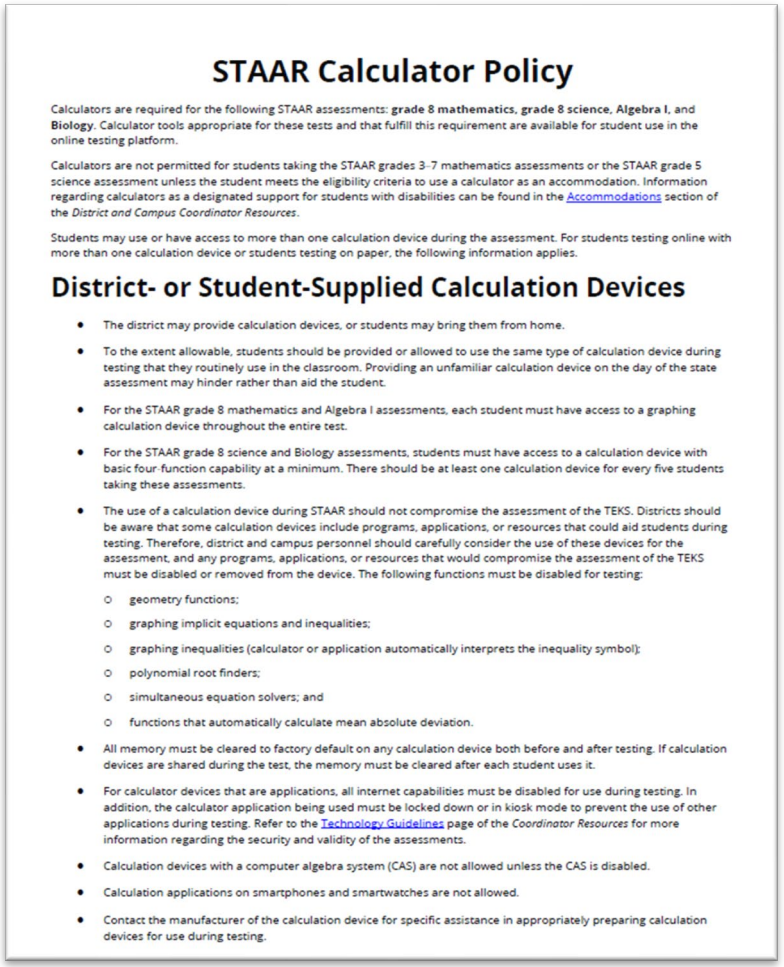
Step 3: Questions are tested out by Texas students but do not count towards their scores to confirm that the questions are unbiased and accurate. These are called "field-test questions."

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*

Links to additional resources.

The STAAR Calculator Policy has been updated to provide more clarity.



STAAR Calculator Policy

Calculators are required for the following STAAR assessments: **grade 8 mathematics**, **grade 8 science**, **Algebra I**, and **Biology**. Calculator tools appropriate for these tests and that fulfill this requirement are available for student use in the online testing platform.

Calculators are not permitted for students taking the STAAR grades 3–7 mathematics assessments or the STAAR grade 5 science assessment unless the student meets the eligibility criteria to use a calculator as an accommodation. Information regarding calculators as a designated support for students with disabilities can be found in the Accommodations section of the *District and Campus Coordinator Resources*.

Students may use or have access to more than one calculation device during the assessment. For students testing online with more than one calculation device or students testing on paper, the following information applies.

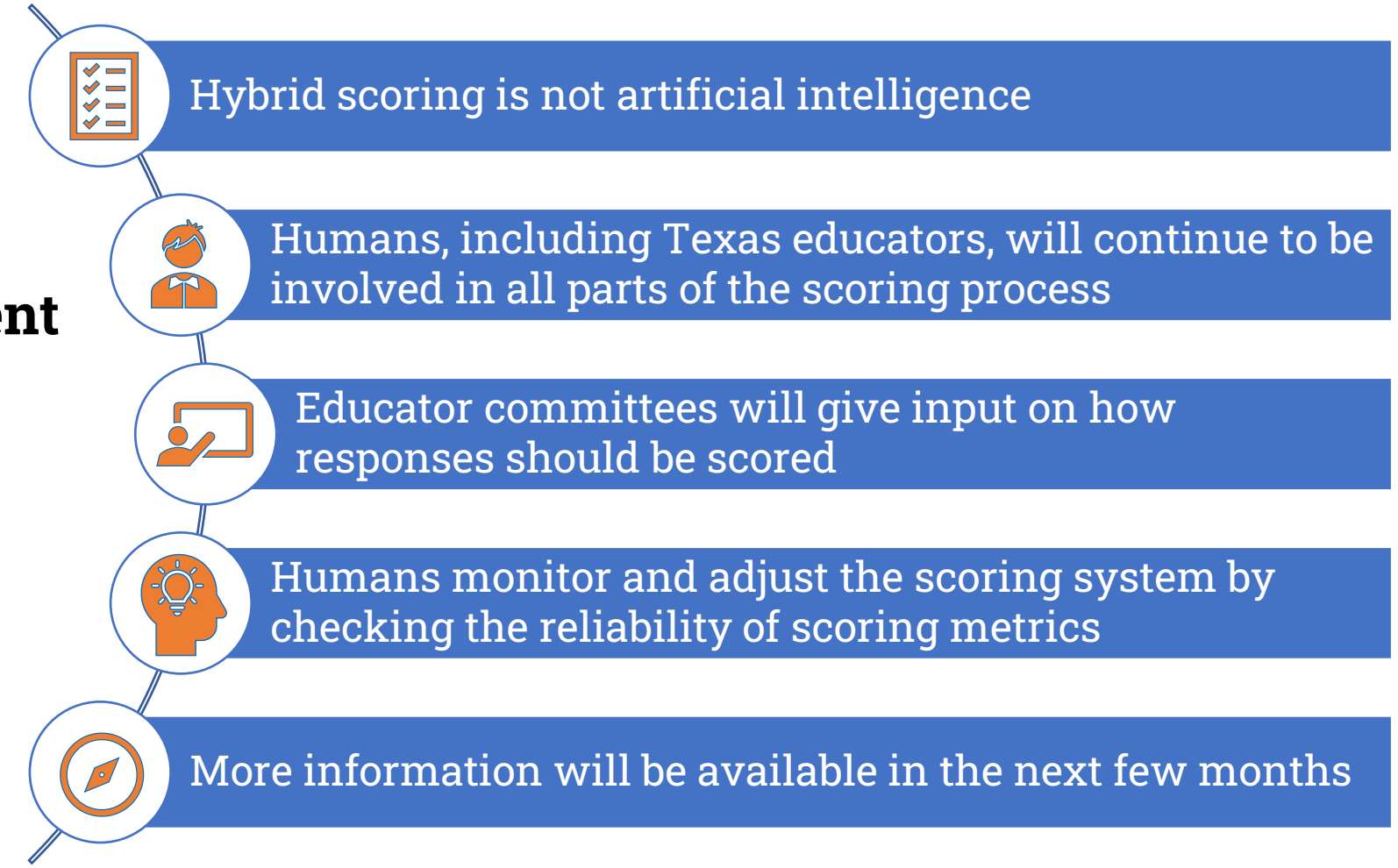
District- or Student-Supplied Calculation Devices

- The district may provide calculation devices, or students may bring them from home.
- To the extent allowable, students should be provided or allowed to use the same type of calculation device during testing that they routinely use in the classroom. Providing an unfamiliar calculation device on the day of the state assessment may hinder rather than aid the student.
- For the STAAR grade 8 mathematics and Algebra I assessments, each student must have access to a graphing calculation device throughout the entire test.
- For the STAAR grade 8 science and Biology assessments, students must have access to a calculation device with basic four-function capability at a minimum. There should be at least one calculation device for every five students taking these assessments.
- The use of a calculation device during STAAR should not compromise the assessment of the TEKS. Districts should be aware that some calculation devices include programs, applications, or resources that could aid students during testing. Therefore, district and campus personnel should carefully consider the use of these devices for the assessment, and any programs, applications, or resources that would compromise the assessment of the TEKS must be disabled or removed from the device. The following functions must be disabled for testing:
  - geometry functions;
  - graphing implicit equations and inequalities;
  - graphing inequalities (calculator or application automatically interprets the inequality symbol);
  - polynomial root finders;
  - simultaneous equation solvers; and
  - functions that automatically calculate mean absolute deviation.
- All memory must be cleared to factory default on any calculation device both before and after testing. If calculation devices are shared during the test, the memory must be cleared after each student uses it.
- For calculator devices that are applications, all internet capabilities must be disabled for use during testing. In addition, the calculator application being used must be locked down or in kiosk mode to prevent the use of other applications during testing. Refer to the Technology Guidelines page of the *Coordinator Resources* for more information regarding the security and validity of the assessments.
- Calculation devices with a computer algebra system (CAS) are not allowed unless the CAS is disabled.
- Calculation applications on smartphones and smartwatches are not allowed.
- Contact the manufacturer of the calculation device for specific assistance in appropriately preparing calculation devices for use during testing.

- The STAAR Calculator Policy has been restructured for clarity
- Polynomial root finders and simultaneous equation solvers have been added to the list of functions that must be disabled. The requirement to disable these functions is not new because they compromise the assessment of specific TEKS
- The policy is posted in the DCCR and on the TEA website.

TEA ensures that the scoring model for SCR questions is valid and reliable. We are consistently exploring how to improve the process.

Beginning in December 2023, TEA will implement a hybrid-scoring model that incorporates automated scoring alongside our human expert scorers.



Opportunities for Teachers to be Involved with STAAR

Benefits of participating in the STAAR educator item review committee include:

- Review potential STAAR items before field testing
- Make recommendations for changes to items
- Share knowledge with a diverse group of educators from across Texas
- Earn 16-36 CPE hours

Complete the Educator Committee Application Form found in the Texas Assessment Learning Management System.

Let’s learn a little more about our teacher committees

Please register for one of our committees on the Texas Assessment Learning Management System!

Classroom teachers, instructional coaches, campus and district content specialists, and campus administrators can serve in a variety of ways:

- **Educator item review** – each potential question for a state test is reviewed and approved by a committee of Texas educators
- **Anchor Approval Committees** – educators are convened to set the scoring boundaries for student constructed responses based on the rubric
- **Subject-area advisory groups** – groups of educators are convened to provide feedback on subject-area-specific topics

Educator Committee Application

Thank you for attending our session today.

Please provide your input.

Math

Carrie Alexander

Donna Fontenot

Erik Pinter

Science

Brian Byrwa

Social Studies

Carmen Trejo

Math/Science/Social Studies Director

JoAnn Bilderback

TEA Texas Education Agency | TEXAS ASSESSMENT