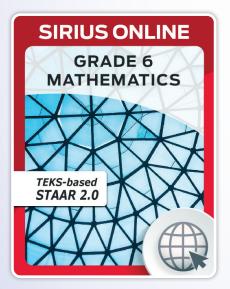


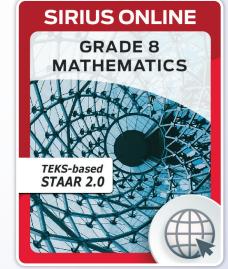
# Sirius Online 2023–24 TEACHER'S GUIDE

### How to Implement Sirius Online in Your Classroom

# Math Grades 6-8







# **Welcome Educators**

Welcome to the *Sirius Online* Grades 6–8 Math **Teacher's Guide**—a reference that helps you understand what resources you get and how you can best use them. We crafted it to save you time and help you avoid difficulties.

- *Sirius Online* is a supplement that **fills gaps** in adopted instructional materials by providing essential TEKS instruction and authentic STAAR 2.0 practice.
- Use *Sirius Online* **alongside your core curriculum** to ensure that your students learn exactly what they need to know and do on STAAR 2.0—its content (word problems), context (online and new question types), and complexity (rigor).
- With *Sirius Online*, your students will focus on the essential TEKS, including how they are tested in STAAR. By helping students apply math skills and concepts to solve STAAR word problems, Sirius **adds depth and rigor** to your curriculum.

We are honored to support you in helping your students succeed. Please contact us for assistance. **And thanks for all you do!** 



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### **QUICK START**

# **Getting Help**

*Sirius Online* Support is available directly inside the platform through the Support tab to the left of your profile image.

Classes	Assignments	Reports	Support	0

Our comprehensive, searchable knowledge base provides detailed step-by-step support instructions, including videos, and is available 24/7 <u>here</u>.



<u>Going Deeper</u> is a document with more in-depth information about *Sirius Online*, and recommendations on how to implement *Sirius Online* in your classroom.



You can quickly connect with Technical and Customer Support in multiple ways:

**Phone:** (800) 942-1379, Option 2 Monday-Friday 7 am–6 pm CT

**Chat:** www.SiriusEducationSolutions.com Available all hours. Use to locate your sales representative and get order or product info.

Email: Support@SiriusEducationSolutions.com

**Online Tickets:** <u>https://Sirius4Learning.zohodesk.com/portal/en/home</u> Create, view, and manage support tickets online.

# **Getting Started**

### Sirius Online System Tutorials

Tutorials provide information about the *Sirius Online* interface for students and for teachers. Add the **tutorials course** to each of your classes and begin with these introductions to become familiar with the platform.

#### FOR STUDENTS



#### **Sirius Tools Tutorial**

This is an introductory tutorial about the Sirius Online tools. Sirius has <u>the same tools</u> found in the online STAAR tests. However, Sirius tools are slightly different in that they are easier to find and use with just one click—students don't have to use submenus. Use this tutorial with your students to familiarize them with the tools.

#### **FOR TEACHERS**



#### Introduction to Sirius Online

To become familiar with Sirius Online, work though this teacher eLearning Module. It only takes about 20 minutes, and you can print a certificate to show completion.

# Introduction to Reporting for Education Leaders

This eLearning Module is directed primarily at administrators and focuses on Reports. Review this at your leisure to understand what Admins see in their dashboards.



# **Using Sirius for Different Contexts**

*Sirius Online* provides a wide range of resources to <u>supplement a core curriculum</u>. *Sirius Online* is easy to use and to adapt for diverse implementation models including different:

- Time frames (from all year long to a couple weeks),
- Ability levels (from Does Not Meet to Masters Grade Level),
- Groupings (whole class, groups, partners, individuals), and
- Instructional approaches (teacher-led, student-centered, asynchronous, etc.).

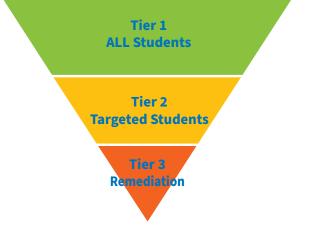
# Sirius Online Supports Differentiation

Sirius Online supports differentiation by empowering teachers to curate:

- What content to assign based on topic, TEKS, or student needs.
- Who to assign content to: whole class, small groups, individuals.
- **Pacing** used: how many assignments and how fast they expect students to complete them.
- **How** assignments are conducted, ranging from teacher-led to student-centered, and synchronous to asynchronous.

A practical approach to organizing the implementation of *Sirius Online* is to frame it using the Response to Instruction and Intervention (RtII) model with Tier 1, 2, and 3 pathways.





Supplement core **TIER 1** instruction for ALL students with authentic STAAR 2.0 Practice.

Support targeted on grade-level TEKS instruction with **TIER 2** academic interventions.

Provide intensive remediation of below grade-level TEKS with **TIER 3** foundational skills.

#### **TIER 1** Showing Progress for ALL Students

The new Texas accountability system emphasizes <u>progress for all students</u>, and rewards moving students to the Meets and Masters Grade Level. So throughout the year, all students should receive regular authentic STAAR 2.0 practice in solving word problems, as well as mixed and spaced review (Spiral Review). This helps students transfer what they learn in class to the content and format of the online STAAR test.



In the weeks before the STAAR test, use the Mixed Review STAAR Prep to give students systematic practice in the most-tested TEKS, and the Practice Test as a full-length "dress rehearsal." This builds test-taking confidence and provides high quality data.

### **TIER 2** Targeting Instruction for Additional Support

*Sirius Online* supports targeted TEKS-based instruction with on-level resources teachers can use to support struggling and Accelerated Instruction students.

In *Sirius Online* Reports, teachers can easily make individual or group assignments by TEKS to target specific needs.

#### TIER 3 Intensive Support for Below-Level Remediation

*Sirius Online* Tier 3 implementations are mostly limited to <u>identifying key below-level prerequisite skills</u> (Skills Check) needed for on-level Readiness TEKS instruction.

Previous grade-level courses are available for free, and their Readiness TEKS lessons can help students with prerequisites.



SKILLS

**TEKS INSTRUCTION** 

LEARN

# **Assignment Planning and Pacing Guide**

*Sirius Online* can be used over <u>different time frames</u> and for <u>different needs</u>. The table below shows two use cases: all students (Tier 1) and targeted students (Tier 2). Both <u>uses can be combined</u> by assigning additional resources for Tier 2 students.

#### **TIER 3** Below-Level Remediation Instruction

*Sirius Online* Tier 3 implementations are mostly limited to <u>identifying key</u> <u>prerequisite skills</u> using the Skills Check and Skills. NOT shown below.

#### **TIER 2** On-Level for Targeted Students Instruction

Scaffolded <u>TEKS instruction</u> gives Accelerated Instruction and struggling students an alternative approach for the most-tested TEKS.

#### **TIER 1** On-Level for ALL Students

Authentic and rigorous <u>STAAR 2.0 practice and assessment</u> so ALL students learn how to solve STAAR word problems.

Sirius Online Assignments		ALL Students TIER 1	Targeted Students TIER 2	
	_	(0.5 h / wk)	(1 h / wk)	
READINESS ASSESSMENT	•			
Skills Check: PRE-ASSESS	A	<b>O</b>	+	
DIAGNOSTIC TEST	A	<b>v</b>	<b>O</b>	
<b>INSTRUCTION &amp; PRACTICE</b>				
SKILL #	Δ	<b>v</b>	+	
LEARN	Δ	<b>v</b>		
PROBLEM SOLVING	Δ	+		
PRACTICE	Ρ	$\checkmark$	$\checkmark$	
SPIRAL REVIEW	A	<ul> <li>✓</li> </ul>	$\checkmark$	
SUPPORTING PRACTICE	Ρ	+	<b>(</b> )	
POST ASSESSMENT & PREP				
Skills Check: POST-ASSESS	A	<b>v</b>	+	
POST TEST	A	<b>O</b>	<b>O</b>	
Mixed Review STAAR Prep	P A	$\checkmark$		
PRACTICE TEST	A	$\checkmark$	$\checkmark$	
<b>ASSIGNMENT TYPE</b>	YKEY			
Instruction	Recommended: the suggested minimum			
P Practice	Encouraged: helpful in certain contexts			
A Assessment	Optional: when time permits			

#### **INSTRUCTION & PRACTICE DESCRIPTIONS**

**SKILLS** assesses previous-grade prerequisites for each Readiness TEKS. **LEARN** instruction reinforces key skills and concepts for each Readiness TEKS. **PROBLEM SOLVING** gives scaffolded instruction and practice in solving STAAR items. **PRACTICE** provides authentic STAAR 2.0 practice with robust scaffolds and feedback. **SPIRAL REVIEW** provides comprehensive mixed STAAR practice for spaced review.

#### Visualizing How Sirius Online Assignments Interrelate

*Sirius Online* is a comprehensive resource that supports many distinct student needs. Below is a visualization to show how the assignments can be coordinated for each of the Response to Instruction and Intervention (RtII) pathways, as shown below.

- **ON-LEVEL**All students benefit from rigorous authentic STAAR 2.0 practice<br/>(Tier 1). For Tier 2 students, teachers provide additional TEKS<br/>instruction that prioritizes the most-tested TEKS.
- **BELOW-LEVEL** Teachers can identify and reinforce key foundational skills for Tier 3 interventions.

#### **TIER 1: All Students PRE ASSESSMENT TIER 2: Targeted Instruction SKILLS** Recommended are the DIAGNOSTIC CHECK TEST **Pre-Assess** suggested minimum. Α A **Encouraged** can be helpful in certain contexts. **TEKS INSTRUCTION** PROBLEM SUPPORTING A SPIRAL PRACTICE SKILLS LEARN SOLVING PRACTICE В REVIEW Г Ρ Ρ Ρ Ρ Challenge Δ **STAAR PREP POST ASSESSMENT Mixed** SKILLS PRACTICE POST Review **CHECK** TEST TEST **STAAR Prep** Post-Assess Α A Ρ A A

#### **ON-LEVEL RESOURCES**

#### **BELOW-LEVEL RESOURCES**



#### **TIER 3: Intensive Remediation**

# **Three Assignment Types**

*Sirius Online* is a comprehensive supplement with instruction, practice, and assessment. Each assignment fits into one of these 3 types described below.

Assignment Type	Question Types	Student Feedback	Delivery Mode	TEKS Alignment
Instruction 🛕				
Explicit TEKS instruction and STAAR problem solving using the Gradual Release of Responsibility (GRR) model.	STAAR and non-STAAR format items	Immediate correct or incorrect	Practice mode	Lesson level
Practice P				
Authentic STAAR 2.0 items with instructional scaffolds to support problem solving.	STAAR 2.0 items only	Immediate with support scaffolds	Practice mode	Each item
Assessment 🗛				
Authentic STAAR 2.0 items with all online STAAR tools.	STAAR 2.0 items only	No immediate feedback	Test mode	Each item

#### **Instruction vs Practice Assignments**

The focus of *Sirius Online* **Instruction** is on learning the TEKS skills and concepts. Therefore, individual questions may not be STAAR 2.0 items or even use the STAAR item formats. Similarly, **Instruction** questions may not align cleanly with a single TEKS (perhaps because of prerequisites). The entire lesson as a <u>whole is TEKS aligned</u>. In contrast, **Practice** and **Assessments** always use authentic STAAR 2.0 items, and <u>each</u> <u>item is TEKS aligned</u>.

#### **Scaffolded Practice Supports: Empowerment with Choice**

Solving STAAR problems requires complex reasoning. *Sirius Online* <u>empowers students</u> to become more active and better problem solvers by <u>giving students choices</u> in how they navigate each **Practice** problem. Choice helps students feel more "in control" of their learning and encourages them to take greater ownership.

Below are the scaffolded supports that students can choose with rich feedback.



Gives a helpful tip before answering a question. Gives a full solution or explanation in math and science.

Gives immediate feedback on the answer selected.

Gives another try after students receive actionable feedback.

Gives the correct answer and its feedback.

# **GOING DEEPER**



### 1.1 Quick Start

A reference that helps you understand what resources you get and how you can best use them.

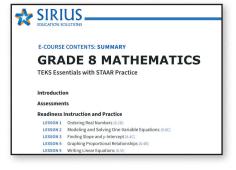
### **1.2 Going Deeper**

You are looking at it! And you will be up and going faster than you can imagine.

### **1.3 Course Contents**

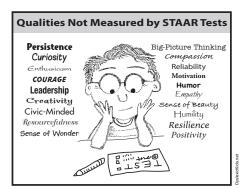
A Summary that shows the course organization, and a Detailed View that lists every assignment in the course.

The TEKS for each assignment are included unless it has multiple TEKS. Use the contents to help you plan when to use *Sirius Online* assignments.



### **1.4 Welcome Letter**

The Welcome Letter introduces the *Sirius Online* Mathematics course to students and seeks to provide context and motivation to students.



The Welcome Letter is available to students through the *Sirius Online* Mathematics course. You will need to assign the Welcome Letter as an assignment for your students.

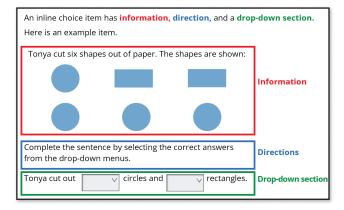
We encourage use of this activity to help students process their feelings about STAAR tests. STAAR tests measure a limited range of capacities, as shown by this comic.

We sincerely believe that students who learn exactly what is tested will indeed succeed and show progress.

### 1.5 Getting Familiar with STAAR Item Types P



These are introductory lessons about the new STAAR 2.0 questions. Students will practice these items throughout the course, so familiarity will become fluency, which then lead to confidence.



These lessons explain the different components of the STAAR questions, including information, directions, and actions.

The lessons also explain strategies students can use to answer the STAAR item types.

You can assign all Getting Familiar assignments at one time, but we suggest spreading them out and using them with Teacher-led instruction.



*Sirius Online* includes several math assessments for different purposes. Below is a description of each type of assessment with an explanation for when they can be used and the information they can provide to both teachers and students.

All Sirius Online math assessments are **auto-scored** and **delivered in Test mode** students do not receive any immediate feedback or Hints, and the final answer for each question is scored when the final Submit button is pressed.

NOTE: If students **Exit** out of an assessment before pressing **Submit**, their work is <u>saved</u>. Students can return to a saved assessment and <u>change any answers</u> before pressing Submit. To limit cheating, we recommend that all assessments be given in class, and ideally under simulated STAAR **testing conditions.** When students experience similar *feelings* to when taking the actual STAAR test, they get to rehearse this stressful context. This also results in more accurate performance data.

### 2.1 Skills Check: Prerequisite Assessments

Many students experience gaps in essential skills and concepts that impair their ability to learn grade-level skills. The Skills Check Assessments are a useful tool for teachers to identify the gaps in their students' knowledge.

Skills Check items are non-STAAR format and provides a <u>quick formative assessment</u> <u>of below grade-level prerequisite skills</u> for the key on-grade TEKS. These should not be used for grading.

Teachers can find the corresponding prerequisite TEKS for each item in the test, see figure below.

SKILLS PRE-ASSESS	SKILLS POST-ASSESS
<ul> <li>Identifies potential gaps in key prerequisite skills from the previous grade.</li> <li>Based on the Pre-Assess results, teachers can assign the corresponding Skill Checks to identify the key skills more precisely for Tier 3 interventions.</li> </ul>	<ul> <li>A parallel form to the Skills Pre-Asses assessment.</li> <li>Can be used after the Skills Check.</li> <li>Compare performance with results from the Skills Pre-Assess to measure progress.</li> </ul>
	• Can identify skills that may benefit from additional review and reinforcement.





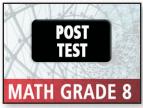
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### 2.2 Readiness TEKS: Mini STAAR 2.0 Assessments

Mini STAAR 2.0 Assessments are useful tools for teachers to check and monitor students' progress towards mastery of grade-level Readiness TEKS.

DIAGNOSTIC TEST	POST TEST A
• Efficiently assesses all Readiness TEKS with authentic STAAR 2.0 items.	• A parallel form to the Diagnostic Test, assessing all Readiness TEKS.
• 12–13 questions, in the same format as the STAAR test.	• 12–13 questions, in the same format as the STAAR test.
<ul> <li>Use as a quick pretest or baseline with one item for each Readiness TEKS.</li> </ul>	<ul> <li>Can monitor progress and identify Readiness TEKS for additional review.</li> </ul>





#### 2.3 Spiral Readiness Review: Cumulative STAAR 2.0 Assessments

Provides *mixed* and *spaced review* of Readiness TEKS with authentic STAAR 2.0 items. Items covering different TEKS are interleaved in an unpredictable sequence, in order to help students move from the individual-TEKS focused learning, to becoming flexible STAAR problem solvers.



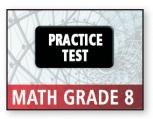
There are six Spiral Readiness Review assessments, each longer than the preceding to include all previous Readiness TEKS.

Use after every two Readiness TEKS lessons.

### 2.4 Practice Test: Full-Length STAAR 2.0 Assessment

One full-length authentic STAAR test that matches the STAAR redesign blueprint closely in all details. This test does not include additional field test items. This test can provide insights into your students' likely STAAR test performance. To learn more, visit <u>here</u>.

NOTE: Some of the Practice Tests are being updated to match STAAR 2.0 better and will be available Jan. 2024.



# **Readiness Instruction and Practice**

Readiness Instruction and Practice provides comprehensive instruction and practice in the most-tested TEKS. Each Readiness TEKS has a sequence of **Instruction** and **Practice** assignments for prerequisite skills, TEKS instruction, scaffolded instruction in problem solving, and STAAR 2.0 practice, detailed below.

#### SKILLS CHECK

<b>Overview of Proportional Relationships</b>		
A carpenter made measurements in both yards and feet.		Yards and Fee
$3 yd = 9 ft$ $1 yd = 3 ft$ $\frac{2}{3} yd = 2 ft$ $2 yd = 6 ft$		10 1
The graph of these measurements shows that the points form a linear relationship. The <i>y</i> -intercept is (0,0). The slope is found using two points, such as (1,3) and (2,6).	Feet	9 8 7 6 5 (2,6) 5
siope $-\frac{1}{change in x} - \frac{2}{2-1} - \frac{1}{1} - \frac{3}{3}$ An equation for the relationship is $y = 3x+0$ , or $y = 3x$ .		$\begin{pmatrix} 4\\3\\2\\(1,3)\\2\\(2,2) \end{pmatrix}$
This relationship between yards and feet is an example of a proportional relationship. The slope of the graph is the unit rate of increase or decrease of the relationship. The table		1 1 3 4 5 6 Yards
	A carpenter made measurements in both yards and feet. $3yd = 9 f_{1}  1yd = 3 f_{2}  \frac{2}{3} yd = 2 f_{1}  2 yd = 6 f_{1}$ The graph of these measurements shows that the points form a linear relationship. The y-intercept is (0.0). The slope is found using two points, such as (1,3) and (2,0). $slope = \frac{changen}{changen} in \times \frac{p - 3}{2} = \frac{3}{4} = 3$ An equation for the relationship is y = 3x + 0, or y = 3x. This relationship between yards and feet is an example of a	A carpenter made measurements in both yards and feet. $3yd = 9 ft  1yd = 3 f  \frac{2}{3}yd = 2 ft  2yd = 6 ft$ The graph of these measurements shows that the points form a linear relationship. The y-intercept is (0.0). The slope is found using two points, such as (1,3) and (2,6). $slope = \frac{change}{change} in \frac{y}{2} = -\frac{2}{3} = \frac{3}{3} = 3$ An equation for the relationship is y = 3x + 0, or y = 3x. This relationship between yards and feet is an example of a proportional relationship. In the unit

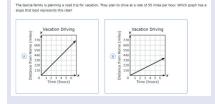
LEARN

Reading Graphs	
Reading Graphs During a storm, the level of a neutron to a height of 40 inches above normal. The graph th models the river's height above normal	
10	
0 1 2 3 4 5 6 7 8 9 10 <b>x</b> Time (h)	

#### PROBLEM SOLVING

graph h	as a slope that best represents Juice	s the ratio of orange juice to pineapple juice in this bottle Juice
Amount of Oranne Juice (802)	20 16 12 8 4 0 2 4 6 8 10 12 8 4 0 2 4 6 8 10 Amount of Pineapelice (fl oz)	c (20 ) (20 )

#### PRACTICE



Quick check of key prerequisites for each LEARN.

- "Warm Up" of 3 key skills of previous grade TEKS
- Model of solved example with 6 exercises
- Immediate feedback for review and reinforcement
- Helps identify and support knowledge gaps.

Systematic TEKS instruction in the skills and concepts that students apply in PRACTICE.

- Full TEKS review and reinforcement
- Step-by-step examples with full solutions
- Scaffolded Your Turn activities

Scaffolded instruction and practice in how to understand and solve STAAR word problems.

- Builds problem-solving skills and confidence
- Engages both struggling and strong students
- Shows common student errors with alternatives

Ample authentic STAAR 2.0 practice with 3 distinct exercise sets for extra practice and challenge.

- Set A in an increasing order of difficulty
- Set B is parallel to set A (same problems with different numbers and scenarios)
- Challenge with complex STAAR problems

Teachers can group-assign all components of **Readiness Instruction and Practice** to all classes in one step.

Alternatively, teachers can customize by selecting some components and/or adjusting for different classes. Assignments can be made to groups of students within a class.

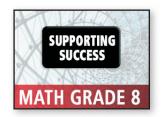
All assignments are auto-scored and provide students with immediate feedback.



# 4 Additional STAAR 2.0 Preparation

### 4.1 Supporting Practice

Authentic STAAR 2.0 practice for each Supporting TEKS, with a greater emphasis on the most-tested TEKS. Supporting Practice is organized by Reporting Category and TEKS and includes some Problem Solving lessons.



Supporting Practice should be a lower priority than the Readiness STAAR Practice. Most assignments include only 6 to

10 questions, so they are relatively short. They do not provide three sets of exercises like the STAAR Practice. Supporting Practice does include the most-tested STAAR problems for each Supporting TEKS.

### 4.2 Mixed Review STAAR Prep (MRSP)

This intensive review is designed for the 4 to 6 weeks before the STAAR test. It takes <10 minutes a day and addresses all Readiness TEKS and the key Supporting TEKS. It focuses on the most-tested STAAR problems—helping students get ready for STAAR 2.0. Also included are weekly Quizzes and a Readiness Test.



For additional suggestions on Implementing Mixed Review STAAR Prep, watch this 3-minute Overview Video here.

NOTE: The Mixed Review STAAR Prep resource was designed to enhance many intensive STAAR Boot Camps that focus on vocabulary, skills, and concepts. Instead, this resource provide word problems with feedback and student reflection activities to promote better problem solving.

# **5** Planning *Sirius Online* Implementations

*Sirius Online* was designed to help <u>ALL students</u> learn the tested TEKS in the context of how they are tested in STAAR. And *Sirius Online* is a comprehensive supplement that is easily adapted for a wide range of use cases and student needs.

For support in creating a unique implementation for your particular needs, you may want to consider the following <u>questions to guide your planning</u>.

Questions to Guide Planning				
Intentions	What are our goals?			
<b>Evaluation</b> What does success look like? How will we measure it?				
Obstacles	What are our primary needs or challenges?			
Timing	Where does the student instruction fit into the school year?			
Integration	Where does Sirius Online integrate into the curriculum/classes?			
Coordination	How does Sirius Online connect to your core curriculum?			
Needs	What are the instructional pathways for different students?			

There is <u>no one best way to use</u> *Sirius Online* because each classroom has unique needs. However, we strongly encourage implementations that extend throughout the school year. Research shows that "cramming" is not effective for complex cognitive tasks, such as online STAAR word problem solving.

### 5.1 Common Use Cases

Below are four common use cases based on start date.

Start Date		ALL Students TIER 1	Targeted Students TIER 2
Н	Beginning of Year	STAAR Practice	+ TEKS Instruction
FAL	After First 9-Weeks	STAAR Practice	+ TEKS Instruction
DNI	After Mid-Year Benchmark	STAAR Practice	+ TEKS Instruction
SPR	After Spring Break	MRSP + Practice Test	MRSP + Practice Test

#### TIER 1 On-Level for ALL Students

Authentic and rigorous <u>STAAR 2.0 practice and assessment</u> so ALL students learn how to solve STAAR word problems.

#### **TIER 2** On-Level for Targeted Students

Scaffolded <u>TEKS instruction</u> gives Accelerated Instruction and struggling students an alternative approach for the most-tested TEKS.

# 6 Instructional Tips for Using Sirius Online

#### 6.1 Make a Commitment to Use Sirius Online

New habits do not just happen. They take deliberate effort. We encourage teachers to make a commitment to use *Sirius Online* (ideally each week), and to designate a certain day and time to assign, review student work, and plan for next steps.

In working with students, rhythm and routine can be powerful supports in encouraging them to apply themselves. Your internal commitment to use Sirius Online (something new) will be sensed and respected by students. Students tend to follow their teachers.

### 6.2 Use Instruction and Practice for Ungraded Activities

We highly recommend that Instruction and Practice assignments be ungraded. Research shows that students are more likely to take risks, make mistakes, and use the feedback to get better in low stakes activities. In contrast, for Assessments, students should be focusing on getting the correct answer: performing and instead of practicing.

Although teachers can convert Practice assignments into Assessments (so students get no immediate feedback), we suggest that this be used cautiously for special situations.

### 6.3 Release Assignments for Student Review

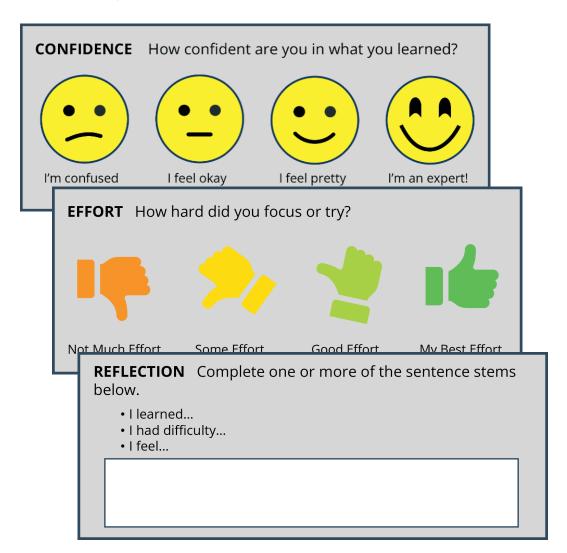
We encourage teachers to release assignments for students to review their work. Furthermore, teachers need to help students develop the habit of using the Review only mode to analyze the items that they got correct and/or incorrect. In Review mode, students also get access to full solutions as well as the tools that they used such as Highlights, Sticky Notes, and feedback comments from the teacher. For assessment, you can simply delay the release of any assessment until all students have submitted it.

### 6.4 Build Teacher-Student Relationships

We encourage teachers to take advantage of the student Self Evaluation at the end of each Instruction and Practice assignment. Teachers can respond directly to each student's written response to encourage, support, and challenge them individually.

- **Confidence** in what students learned/practiced
- Effort or how hard students tried
- Reflect or short written response (shared with teacher)

*Sirius Online* Instruction and Practice assignments ask students to reflect on their work with 3 end-of-assignment unscored questions:



Many students are poor judges of their **learning** and/or **effort**. Teachers should look for students who are particularly off—meaning their **performance** does not match their confidence and/or their **effort** does not match their **time on task**.

Understanding and working with students' self-perceptions can be a key factor in helping change student behaviors. Research shows that students' self-efficacy or beliefs may be the most important factor in student engagement.

Teachers can share observations including student written responses (anonymously) with the entire class. This shows the teacher is reviewing student work and that they are focusing on productive problem-solving behaviors instead of scores. When students feel seen, they tend to engage more deeply.

### 6.5 Focus on Problem Solving

#### **STAAR Math Tests Are Problem-Solving Tests**

STAAR math tests <u>emphasize problem solving</u>. So instead of recall or number computations, students need to apply math skills and concepts to solve word problems, including real-world applications. Thus, STAAR test questions demand careful reading, identifying given information and what is being asked, selecting and executing math procedures, analyzing answers, and navigating new STAAR 2.0 question types as well as the online testing platform.

#### Learning Problem Solving Is a Process: It Takes Time and Persistence

Helping students become better and more confident STAAR word-problem solvers is challenging and takes time. The learning process for problem solving is similar to riding a bicycle—students <u>learn by doing it themselves</u>. *Sirius Online* has ample practice with scaffolds that empower students to make choices and take greater ownership of problem-solving processes.

<u>Thinking is hard work</u>, and some students will be reluctant to apply themselves to diligently solving problems. But you cannot do the work for students. Some teachers need to be careful to monitor and limit the help that they provide student to avoid undermining the necessary struggle. Because thinking is invisible, we cannot know for sure when students are thinking. We can only create the conditions that encourage and support thinking more deeply.

#### **Three Key Thinking Habits Teachers Can Promote**

To promote careful thinking and problem-solving, we suggest teachers focus on positive <u>affirmations for three common bad thinking habits</u> (and related limiting attitudes). Teacher can repeat each phrase regularly, such as after a student request for help.

Take time to think	Get students to slow down and resist impulsivity!
Keep at it	Get students to try again and practice persistence!
Consider all options	Get students to be systematic and not rigid!

For a singular instructional goal, we suggest anything that <u>slows students down</u>, so they <u>think more carefully</u>. Most of human thinking happens fast and automatically. Careful and deliberate thinking takes time and effort.

# 7 Concluding Questions

### 7.1 What Is Special About Sirius Online?

#### **TEKS-Focused Instruction**

Sirius Online supplements enhance existing instructional materials by providing essential TEKS instruction and authentic STAAR 2.0 practice. *Sirius Online* is used <u>along</u> <u>with a core curriculum</u>, not as a replacement. However, *Sirius Online* is needed because it <u>fills instructional gaps</u> in older adopted materials by closely matching STAAR 2.0 in all its details: content, format, and rigor.

#### **Problem-Solving Focus**

Because STAAR math tests are problem-solving tests, Sirius <u>adds depth and rigor</u> by helping students apply math skills and concepts to solving word problems. Learning to be a better problem solver is hard work. Because thinking is invisible, we cannot know for sure when students are thinking, and we cannot force students to think. But teachers can create the conditions that <u>encourage and support thinking more deeply</u>.

#### **High-Quality Feedback**

Effective feedback enables learning and relies upon a culture that is open to using <u>feedback to impact future choices—to feedforward</u>. This is where Sirius' robust and high-quality feedback comes in. *Sirius Online's* comprehensive feedback options are designed to <u>empower students through choice</u>, and to be supported by teachers who can focus on student learning (instead of finding rigorous and effective curriculum

# 7.2 How Do I Get Students and Parents to Support Use of Sirius?

Your belief that Sirius will help your students is the key, because this belief will be transmitted to students and parents in everything you say and do. Students and parents trust you and will see your sincere efforts to help.

No surprise, the more you understand *Sirius Online*, the better you can use and appreciate our value in helping you support your students in learning the essential tested TEKS and practice them in the exact ways they are tested in STAAR 2.0.

Yes, *Sirius Online* can be an efficient way to improve your students STAAR performance. But you are you are sharing with them a <u>focus on a process of getting better at STAAR</u> <u>tested thinking</u>. And all students can improve and show progress. When talking with parents, it can be helpful to know how they perceive STAAR and testing in general. Because STAAR is a requirement, we suggest <u>avoiding negative talk</u> <u>about STAAR tests</u>. We encourage teachers to focus on students and their needs and how STAAR focuses on word problems.

This is the same message you communicate to students: you are helping them learn and practice math word problem solving, the thinking and rigor of STAAR. Complaining about STAAR to students can be give them an excuse not to try their best and develop their capacities through hard work. And students are looking for any excuse!

# **Sirius Companion Workbooks**

### **Blended Learning That's Easy to Use**

Sirius Online courses and our complementary print resources have similar organization and content so you can easily move between each medium, to adapt to best serve the needs of vour unique students.

Many struggling students often take greater ownership of their learning when they can write in their OWN workbooks.

Additionally, students are better able to transfer their thinking processes to an online format when they experience the same content in both the print and online formats.

Sirius Online's comprehensive math courses integrate all the content from our print-based workbooks, and more: digital Skills Review, Mixed Review STAAR Prep, and a fulllength Practice Test. And with online resources, students get immediate feedback while teachers get auto scoring and powerful reporting.

You can register here to examine our printed math workbooks as eBooks.

# Sirius Online Is Research-Based

Sirius uses established research and design principles to ensure its resources are effective and easy to use to support teachers in helping students learn the essential TEKS and succeed on STAAR tests.

### Sirius has partnered with McREL International

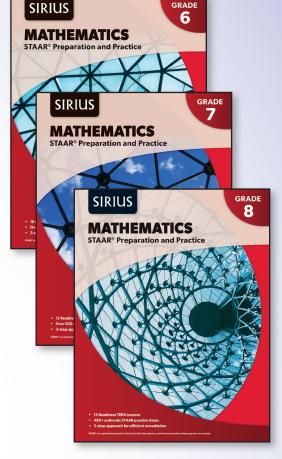
to research the following expected outcomes.

#### **Increased student:**

- STAAR test performance
- Engagement and motivation with STAAR content
- Confidence in answering complex STAAR questions
- Self-efficacy about improving STAAR test performance

Sirius Education Solutions is conducting **ongoing user-experience** and **efficacy research** to continuously improve the student and educator experience.





GRADE

### **Contact us to learn more and partner with us!**