

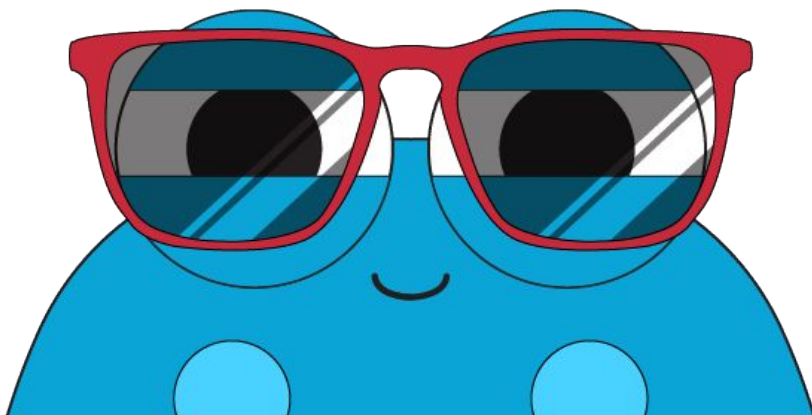


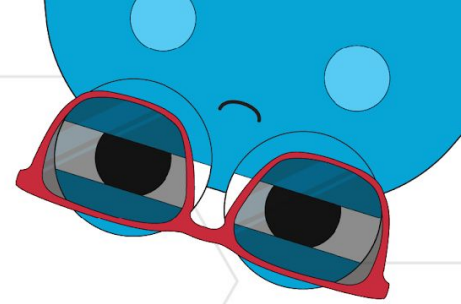
Versatile Lessons for Versatile Classrooms™

Science, Grade 5

RPA FRAMEWORK & TREK GUIDE

Supplemental Science Solution for
Practice, Intervention & STAAR® Preparation





Bring **5th grade** students to new heights with innovation and integration. Learn more with the Recall, Practice, and Apply Framework in TREKs!

Versatile Lessons for Versatile Classrooms

TREKs segments are ready-to-use in daily lessons, student practice, intervention, test prep, and other instructional approaches. Implement varied, engaging and interactive activities in all classroom settings and for all learners across the school year.

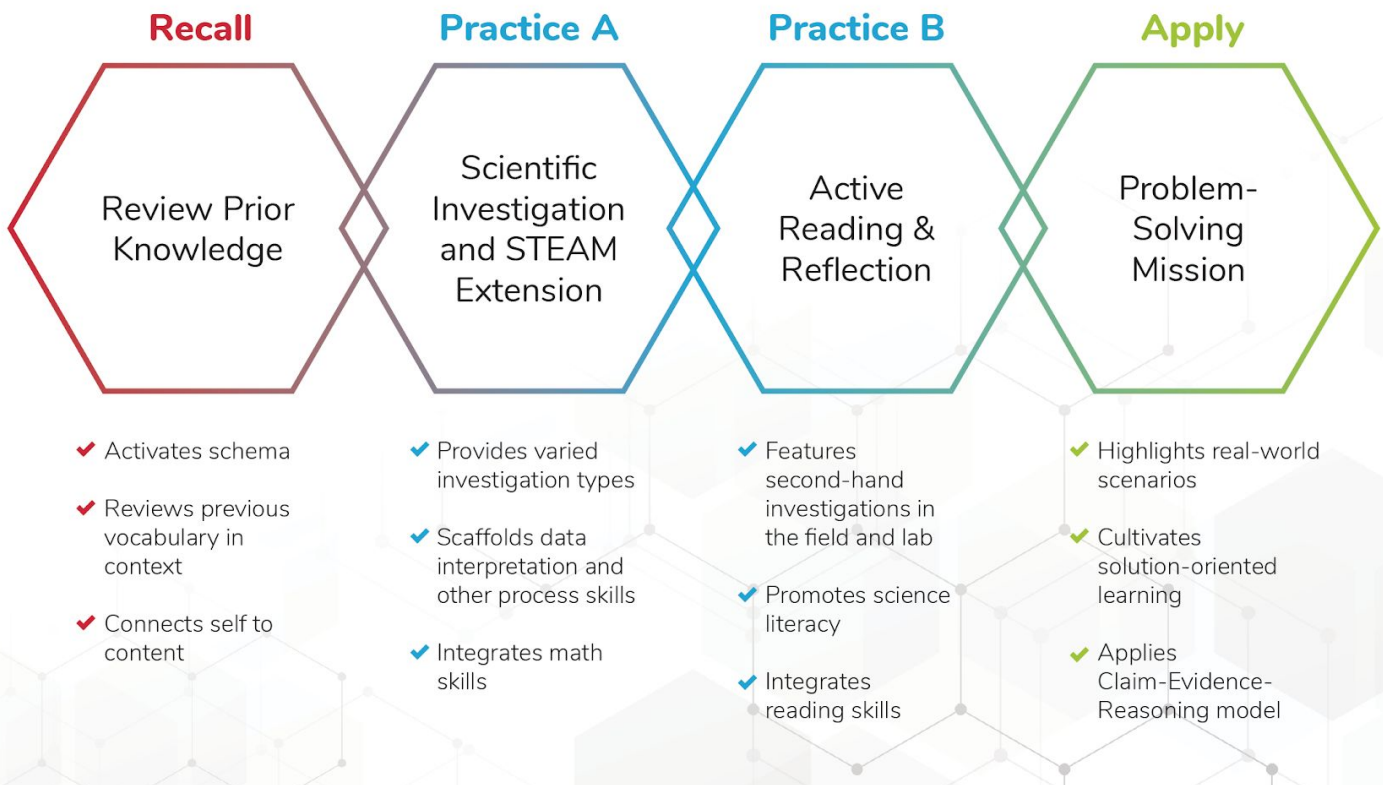
Designed for Durable Learning

Steeped in research, the Recall-Practice-Apply (RPA) framework is designed for interleaved practice. Innovate student retrieval and retention with spacing to interrupt forgetting and improve student learning outcomes.

On-Target for STAAR® 2.0 Success

Our expert STAAR® analysis is the backbone for RPA and each segment of TREKs. We know where students struggle most with essential knowledge and skills. Our content and context seamlessly align with the new question types in STAAR® 2.0.

The RPA Framework and TREK Segments



Our low-prep Recall-Practice-Apply (RPA) TREKs supplemental learning model streamlines reteaching and is designed by teachers for versatile delivery for any classroom setting and all learners' needs.

Learn more and sample at rpatreks.com.

TREK COMPONENTS

RPA TREKs is a supplemental Science solution for practice, intervention and STAAR preparation. TREKs are 100% aligned to the Grade 5 Science Texas Essential Knowledge and Skills (TEKS) and English Language Proficiency Standards (ELPS) to bring you versatile lessons for versatile classrooms.

Each TREK includes teacher- and student-components in an easy-to-use digital platform with an Overview, Teacher Instructions, and *Digital Student Journal*. TREKs are organized into segments called Recall, Practice A, Practice B, and Apply.

Overview for each TREK includes:

- Central Concepts and Misconceptions
- Segment Titles and Activities Descriptions
- Standards Alignment Summary
 - Science Content TEKS
 - Scientific & Engineering Practices and 3D Learning
 - Recurring Themes & Concepts
 - English Language Proficiency Standards (ELPS)
 - English Language Arts Reading TEKS
 - Math TEKS

Teacher Instructions for each Segment

Comprehensive implementation tips and answer keys

- Vertical alignment of objectives, 'I can' statements, and academic terms
- Embedded ELPS, Scientific & Engineering Practices and Recurring Themes & Concepts Spotlights
- Segments can be assigned separately for differentiated instruction, practice, intervention and test prep

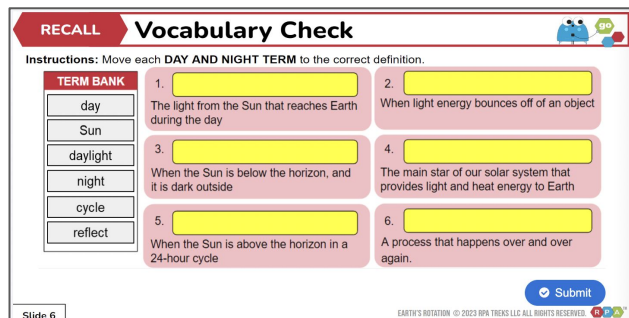
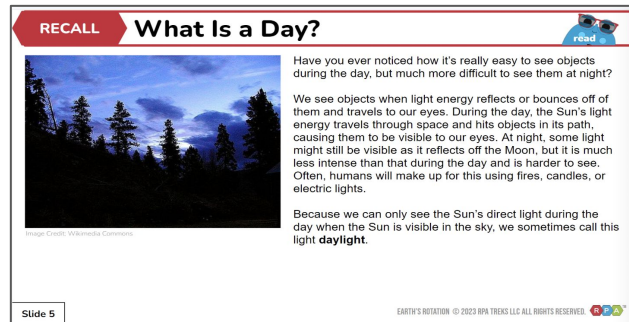
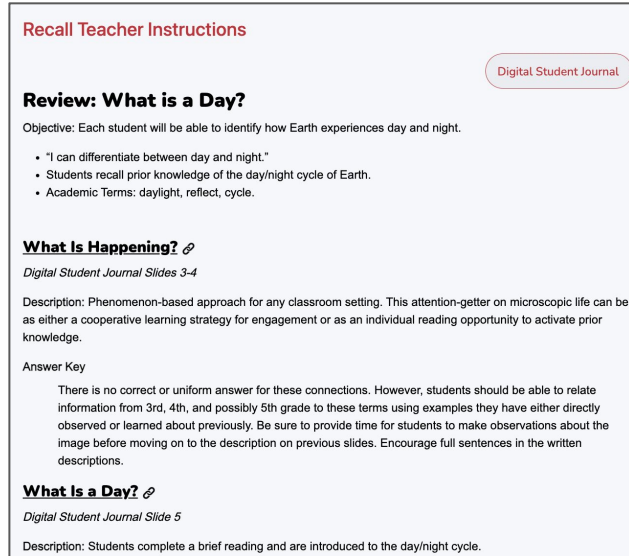
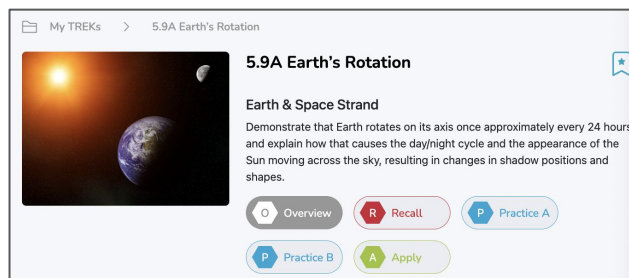
Digital Student Journal

Innovative and interactive activities and assessments

- Easily projected for whole group, small group and independent practice
- Individually assigned for each segment with instant and continual teacher feedback features
- Interactive responses aligned to various new STAAR® question types

Printed Student Journal *Coming Fall 2024

Print-friendly booklet with activities presented parallel to the *Digital Student Journal*.



TREKs PREPARATION

TREKs support versatile classrooms with interactive lessons that require no extra materials. Together with comprehensive teacher guidance, implementation tips, and multiple opportunities for practice, TREKs support a wide range of needs in 5th grade classrooms. TREKs are supplemental solutions for practice, intervention and STAAR® preparation.

Supplementing TREKs Segments Within 5E Lessons

Integrate our supplemental activities in 5E lessons per an existing comprehensive program when needed. Engage students with Recall, encourage Exploration, Explanation and Elaboration with Practice A and Practice B. Finally, culminate Elaboration and Evaluation with the Apply segment.



5E Lesson Planning



Independent Practice

Interleaving Practice with TREKs for Successful Learning

Interrupt forgetting by interleaving practice of concepts and skills over time. Recall, Practice A, Practice B, and Apply segments are scaffolded and standards-aligned. Segments are designed to be assigned before, during, and after primary content using the Assignments feature. See the “TREKs Scope & Sequence At-A-Glance” and “TREKs Suggested Scope & Sequence Interleaved Practice” in this guide for a sample planning calendar.



Small Group Instruction



STAAR® Bootcamp

Addressing Intervention in One-to-One and Small Group Instruction

Bring teachers’ data of gaps in student understanding together with TREKs segments to plan Tier 2 and Tier 3 support. The Assignments feature in our platform makes it easy to assign activities and monitor progress from individual students to small groups. With the addition of the Grading feature, teachers can supervise student performance with automated scores, provide scoring relative to open-ended activities, and submit immediate essential feedback.


Preparing for STAAR® with TREKs

Our expert STAAR® analysis strongly informs the design and standards-alignment for each TREK segment. Formative assessments in the *Pulling It Together* section of Practice A, Practice B, and Apply are optimized to reflect the context and the new question types in STAAR® redesign. Similar functionalities for the new question types, including hotspot, hot text, drag and drop, multiselect, multipart, and short-constructed response question types are dispersed throughout the segments.



PRACTICE A
Pulling It Together
★

During the investigation, you examined models of different landforms, and you developed explanations for how each landform was created. Models are one way to develop evidence-based explanations. Model E used the salt lick to represent a canyon.



The photograph on the left shows a canyon in Big Bend National Park in Texas.

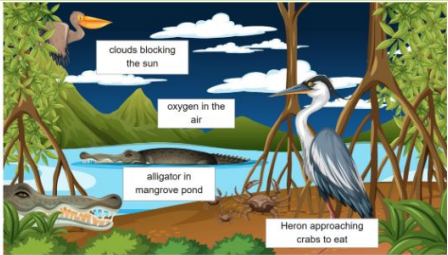
- Look at the image carefully. How would you explain how this canyon most likely was formed? Write a short explanation.

Submit

Slide 23
LANDFORMS © 2023 RPA TREKS LLC ALL RIGHTS RESERVED.

APPLY
Pulling It Together
★

2. Which examples in the image demonstrate organisms surviving by interacting with biotic factors in this mangrove wetland ecosystem? Select **TWO** correct answers.



Submit

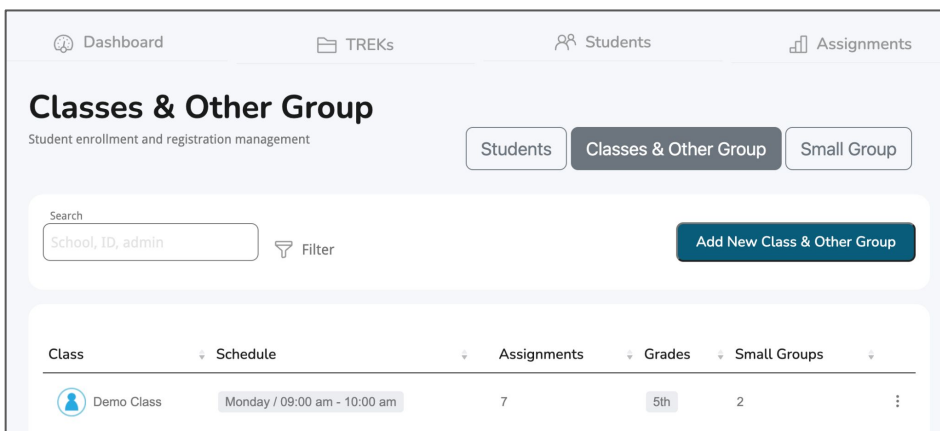
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INTERDEPENDENCE © 2023 RPA TREKS LLC ALL RIGHTS RESERVED.

PORTAL FEATURES

For optimal performance, we recommend using up-to-date versions of Google Chrome® and Firefox®.

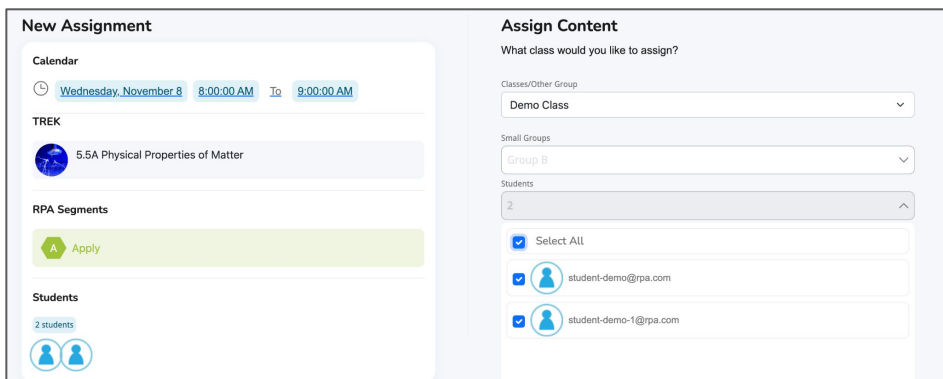
Managing Students

The RPA TREKs portal allows teachers to add individual student accounts and create classes and small groups using the Students feature.



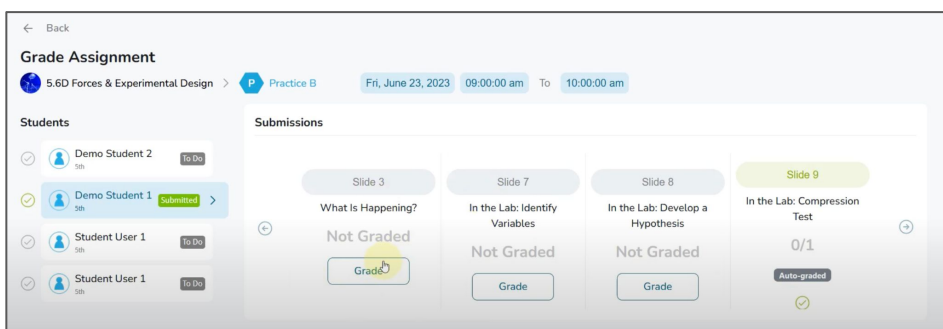
Managing Assignments

The Assignments feature in our platform allows teachers to assign any segment to individual students as well as small and whole groups.



Managing Grading

The Grading feature is embedded in the Assignments feature. After a student has submitted their responses for a segment assignment, teachers can review their answers. Teacher-to-student feedback is also available in this feature.



Most student answers are auto-graded. However, short-constructed response and other open-ended items are manually graded by the teacher. Possible point values for each activity vary, depending on its format, and the corresponding Teacher Instructions provides scoring considerations.

Students can go to their *Grades* section to immediately see a summary of the results of auto-graded items. Students will see pending scores for open-ended items that require manual grading by the teacher.

Using the Dashboard, a teacher can review and analyze scores for all of their students to help determine additional assignments and other supports.

TREKs ACCESSIBILITY

Starting school year 2024-2025, the *Digital Student Journals* will be fully transcribed per slide, assuring all student materials are machine-readable. This accessibility supports both reading and responding to the instructional materials. Below are recommendations to further support students needing accommodations.

Oral Administration

Preparation: For students who require more personalized assistance, consider offering oral administration of the assessment. Prior to the assessment, identify the students who will benefit from this accommodation.

Quiet Environment: Ensure the testing environment is quiet and free from distractions to facilitate a comfortable setting for oral administration.

Read Aloud: Sit with the student individually or in a small group and read the assessment questions and answer choices aloud. Remain neutral in tone and pace to provide consistency across all students.

Clarifications: Be prepared to provide clarifications or rephrase questions if students request further explanation. Avoid giving away answers but offer support in understanding the content.

Using a Dictation (Speech-to-Text) Tool

Identify Needs: For students who may have difficulty typing their responses, identify those who require transcribing of their answers.

Implementation: Before the assessment begins, ensure that each student's computer is set up with a speech-to-text tool. Support the student by providing any training needed for how to use the tool. Instruct the students to navigate to the assessment using the applicable web browser.

Opening the Dictation Tool: Once students are on the assessment page, direct them to the text box where they need to input their response. Instruct the students to open the dictation tool.

Dictating Responses for Transcription: Remind students they will use the microphone and should speak clearly and at a normal pace to ensure accurate transcription.

Completing the Assessment: Once the response is transcribed and edited, students can proceed to the next question or task as usual. Provide support if any technical issues arise or if students encounter challenges during the process.

Transcribing for Student Access

Identify Needs: Identify the students who will require transcription support through the dictation tool. These are students who have difficulty typing and need their spoken responses transcribed.

Designate a Scribe: Assign a scribe who can transcribe the student's spoken responses onto the digital platform. This could be the instructor, a teaching assistant, or a peer.

Clear Communication: Ensure that the scribe understands the importance of accurately transcribing the student's responses without altering their meaning.

Review with Student: Once the assessment is transcribed, review the answers with the student to confirm accuracy and make any necessary corrections.

For dictation, we recommend the use of the Microsoft[®] Edge browser, Google Chrome[®] extension *Voice In*, the installed computer operating system Accessibility application, or similar.

TREKs SCOPE & SEQUENCE AT-A-GLANCE

Get peers and families on the same page with this sample TREKs calendar. As teachers implement primary Grade 5 Science curriculum materials over the school year, use the supplementary TREKs for enriching and deepening the learning experiences in primary instruction. See the “TREKs Suggested Scope & Sequence Interleaved Practice” for detailed guidance on interleaving practice with various TREKs segments from beginning to end of the instructional calendar.

SEPTEMBER	
Week	Force Motion & Energy
1	
2	
3	5.7A Patterns of Motions
4	5.7B Forces & Experimental Design

JANUARY	
Week	Earth & Space
1	WINTER BREAK
2	5.10A Water Cycle & Weather
3	5.10A / 5.10C Landforms
4	5.10C Landforms

OCTOBER	
Week	Transition to Matter & Energy
1	5.7B Forces & Experimental Design
2	5.6AD Physical Properties of Matter
3	5.6AD Physical Properties of Matter
4	5.6BC Mixtures & Solutions

FEBRUARY	
Week	Complete Earth & Space
1	5.10B Formation of Sedimentary Rocks
2	5.9A Earth’s Rotation
3	5.11A Natural Resources
4	5.12A Interdependence

NOVEMBER	
Week	Matter & Energy, Force Motion & Energy
1	5.6BC Mixtures & Solutions
2	5.8A Energy Transformations in Systems
3	HOLIDAY WEEK
4	5.8C Light

MARCH	
Week	Organisms & Environments
1	5.12B Ecosystems & Flow of Energy
2	5.13A Structure & Function
3	SPRING BREAK
4	Interleave 5.13A Structure & Function

DECEMBER	
Week	Force Motion & Energy
1	5.8C Light / 5.8B Complete Circuits
2	5.8B Complete Circuits
3	WINTER BREAK
4	WINTER BREAK

APRIL	
Week	Complete Organisms & Environments
1	5.13B Behavioral Traits
2	5.12C Human Activities in Ecosystems
3	REVIEW
4	REVIEW


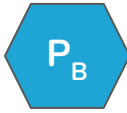
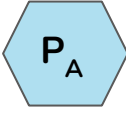

Individual independent school district calendars may vary.

TREKs SUGGESTED SCOPE & SEQUENCE WITH INTERLEAVED PRACTICE

RPA TREKs is a supplementary curriculum designed to support research-driven interleaved practice. TREKs enhance sustained learning around the primary curriculum. The lesson scheduling provided outline offers guidance for how to consider implementing each TREK's segments across the school year.

The duration time listed for each TREK segment is approximate. Consider breaking up various segments over more than one class period through assigning extended due dates. The intent is to support students by interacting with TREKs and their segments multiple times.

Suggested TREK Segment Time Duration



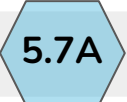
	20 minutes		45 minutes
	60 minutes		45 minutes

Note that while **Recall** is an intentional review of previous grade-level TEKS, the remaining segments do not necessarily have to be sequenced in the order they have been organized.

For example, **Practice B** could be assigned before **Practice A**; **Apply** could be assigned before **Practice B**. This inherent flexibility allows teachers to adapt and deliver enriching content in the best way for classes, groups, and individual students.

TREKs Name and Associated TEKS

- 5.6AD Physical Properties of Matter
- 5.6BC Mixtures & Solutions
- 5.7A Patterns of Motion
- 5.7B Forces & Experimental Design
- 5.8A Energy Transformations in Systems
- 5.8B Complete Circuits
- 5.8C Light
- 5.9A Earth's Rotation
- 5.10A Water Cycle & Weather
- 5.10B Formation of Sedimentary Rocks
- 5.10C Landforms
- 5.11A Natural Resources
- 5.12A Interdependence
- 5.12B Ecosystems & Flow of Energy
- 5.12C Human Activities in Ecosystems
- 5.13A Structure & Function
- 5.13B Behavioral Traits

SEPTEMBER	
Week	Primary Curriculum Delivery by TEK
2	
3	5.7A 
4	5.7B 

OCTOBER

1	5.6AD	5.7B
2	5.6AD	5.7B
3	5.6AD	5.6BC
4	5.6BC	5.6AD

NOVEMBER

1	5.7A	5.6BC	5.8A
2		5.8A	5.8C
3	HOLIDAY WEEK		
4	5.8B	5.8C	

DECEMBER

1	5.7B	5.8C/5.8B	5.7A
2		5.8B	5.6AD, 5.10A
WINTER BREAK			

JANUARY

1	WINTER BREAK			
2	5.8B	5.10C	5.10A	5.8A, 5.8C
3	5.6AD	5.10A/5.10C		
4		5.8A	5.10C	5.10B, 5.10A

FEBRUARY

1	5.8B	5.8A	5.10B	5.9A
2		5.11A	5.9A	5.6BC
3	5.10A	5.8C	5.11A	5.12A
4		5.8C	5.12A	5.8B, 5.12B

MARCH

1		5.13A	5.12B	5.7B	5.10B
2	5.10A	5.9A	5.10B	5.13A	5.8C, 5.11A, 5.13B
3	BREAK				
4	5.6BC	5.10C	5.13A/5.13B	5.12A	

APRIL

1	5.9A	5.11A	5.12C	5.13B	5.12A	5.6BC
2	5.12B	5.10B		5.12C	5.11A	5.12B
3	5.12A	5.10C	REVIEW		5.13A	
4	5.13B	5.9A	5.13A	REVIEW	5.12B	5.12C

MAY

1		5.12C	REVIEW	5.10C	5.13B
2		5.13A	5.13B	REVIEW	5.12C
3	STAAR®				