



Program Overview



GRADES K-5



Bring Out Every Student's Inner Scientist

HMH Into Science[®] Texas provides students and educators with a one-of-a-kind learning experience. The TEKS-aligned curriculum allows for easy implementation of standards. Educators will save time with planning tools, multilingual learner support, and assessments that inform instruction. Students will engage in deep explorations of science phenomena through fun hands-on activities.

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HMH Into Science Texas Developed for You

- **Flexible Science Instruction**

The program is paced for 30-minute blocks of time, a few days per week, and rich in opportunities for student-centered learning.

- **Students Engaged in Science Learning**

Students learn to design experiments, observe results, and support or refute scientific claims like scientists through hands-on activities.

- **Achieve Proficiency with the TEKS and ELPS**

Each lesson focuses primarily on one Content TEKS Student Expectation. ELPS Minilessons support students in meeting English Language and Proficiency Standards.

- **Easy-to-Implement Comprehensive Solution**

Point-of-use lesson planning support in the streamlined Teacher's Guide makes planning simple. Educators can teach directly from the digital Student Interactive Lessons.

- **A Fully Equitable Spanish Experience**

HMH *¡Arriba las Ciencias!*® Texas provides all program components in Spanish and was developed using transadaptation to support Emergent Bilinguals.

“My students need to have the knowledge and skills necessary to achieve proficiency with the TEKS.”

Authors and Consultants Who Understand Texas Educators' Needs



MICHAEL DISPEZIO
Global Educator



CHRIS EMDIN
Professor of Education



MARJORIE FRANK
Reading and ELD Specialist



ELENA IZQUIERDO
Emergent Bilingual Consultant
Professor, Teacher Education



PETER MCLAREN
Executive Director of Next Gen
Education, LLC



KAREN OSTLUND
Assistant Professor Emerita, UTeach,
College of Natural Sciences



NEIL SCHICK
Science Teacher



DR. CARY I. SNEIDER
Visiting Scholar



ARIEL TAYLOR
Differentiation Consultant Assistant
Professor Practice and Director of
UTeach Accelerate



SANDRA STURDIVANT WEST
Safety Consultant
Professor of Biology and Science
Education Emerita

How can you make learning science fun and engaging?

HMH Into Science Texas engages students in exploring everyday phenomenon through hands-on activities that **bring science to life**. Lessons follow an **activity-before-content approach** and are structured around experiences that lead students through the productive struggle necessary for sensemaking. **Fun and colorful elements** like the FUNomobots engage young learners.

DAY 2

Name _____ Date _____

Hands-On Activity

Weather is always happening and can change quickly. **Precipitation**, wind, and temperature are parts of weather that change. All three can be used to describe and compare weather.

Ask a question about how weather can be described and compared.



Materials

- Celsius thermometer
- wind vane
- rain gauge
- computer or tablet with Internet connection

Safety

Demonstrate safe practices during field investigations by:

- Washing your hands after coming in from an outdoor investigation.
- Staying with your group. Work in the area as directed by your teacher.



Hands-On Activities:

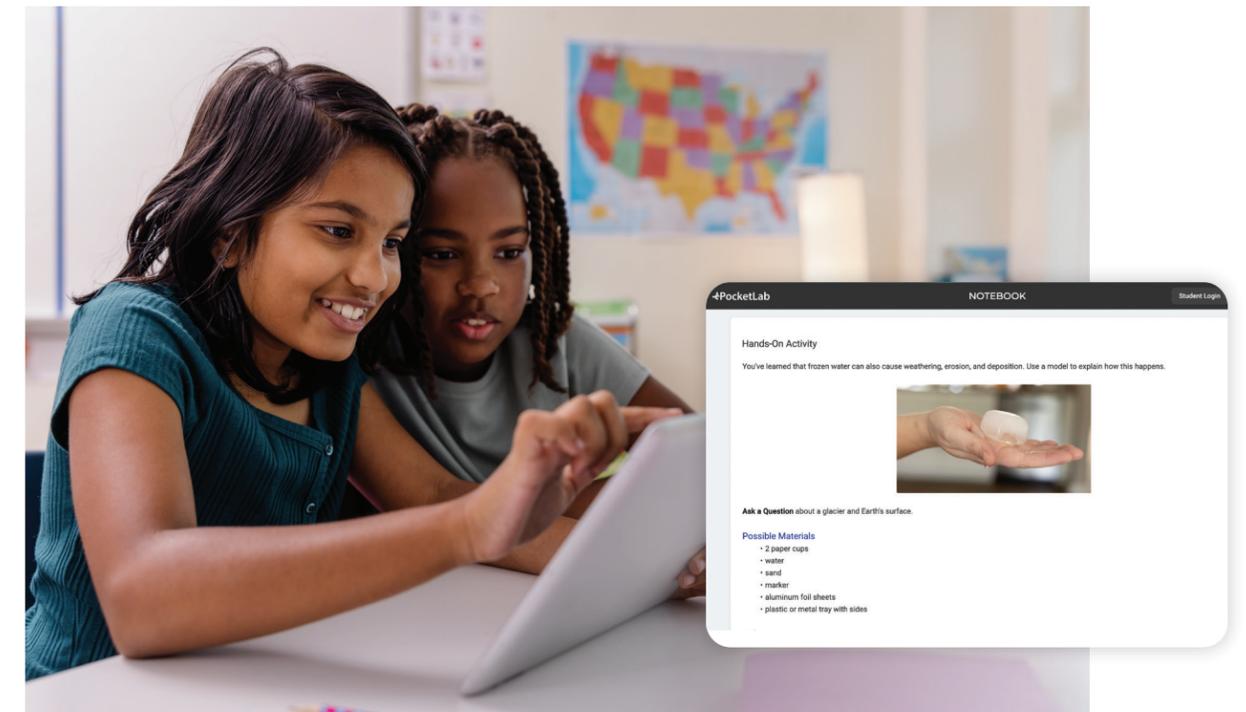
- Drive each exploration as students **make and revise claims** supported by evidence-based reasoning
- Are **fun, short, and easy** to conduct with materials that are readily available
- Assist students in learning to **design experiments** and observe results
- Emphasize **student collaboration** and discourse
- Include **"Engineer It"** versions that engage students in engineering concepts, practices, and vocabulary.

FUNomobots!



Access ALL Activities in *PocketLab Notebook!*

Through an exclusive partnership with **PocketLab**® in the Texas science adoption, every *HMH Into Science Texas* hands-on activity is available in *PocketLab Notebook* and organized by the TEKS.

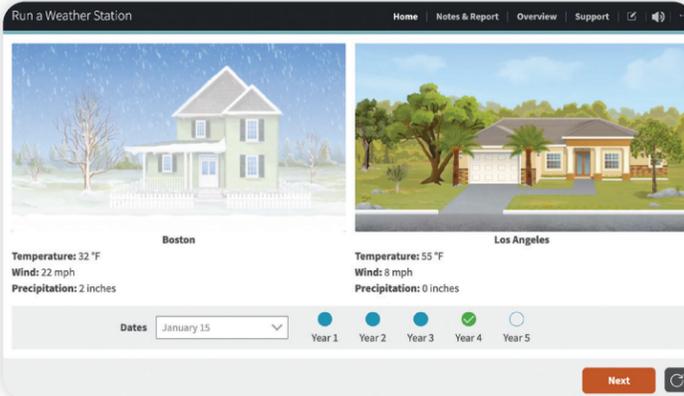


- Each hands-on activity within *PocketLab Notebook* provides opportunities for enhanced student engagement. Working individually or in groups, students can collect and record data and respond to each other in real time.
- Flexible, collaborative, and responsive data collection features make visualizing and analyzing live data easier for students.
- Educators can effortlessly customize hands-on activities, assign them to individual students or groups, and track student progress in real time.

You Solve It! Simulations provide engaging, virtual lab experiences for students to use technology like a scientist, collect and analyze data, and share their evidence in a report.

Run a Weather Station

Home Notes & Report Overview Support



How can you ensure complete coverage of the TEKS and ELPS?

HMH Into Science Texas received extensive Texas educator testing. The result? This **comprehensive program** includes the necessary support to meet the needs of a Texas science classroom. The **TEKS-based organization** of HMH Into Science Texas provides a flexible structure that can be re-arranged to meet your needs.

Texas Essential Knowledge and Skills

Earth and space

3.10.A: compare and describe day-to-day weather in different locations at the same time, including air temperature, wind direction, and precipitation

Energy

Energy is everywhere! Energy makes things move!
Energy makes something happen!

Describe the phenomenon you are observing.
Make note of any observations of types of energy.

Think about what you are observing? Choose either YES or NO.

Feel warmer or cooler than normal? <input type="checkbox"/> YES <input type="checkbox"/> NO	Give off light or glows? <input type="checkbox"/> YES <input type="checkbox"/> NO	Make a noise or sound? <input type="checkbox"/> YES <input type="checkbox"/> NO	Caused by a machine or a moving part? <input type="checkbox"/> YES <input type="checkbox"/> NO
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Choose the type(s) of energy.

Heat Light Sound Mechanical

Did the form of energy change as you observed the phenomenon?
If so, in what way did it change?

TEKS-Based Lessons

Each lesson begins with a phenomenon that relates to the TEKS Student Expectation being covered. Lesson content:

- Addresses the TEKS breakouts
- Reinforces the concepts needed to understand the phenomenon
- Closes by revisiting the phenomenon

Science Themes Organizers scaffold students, use of key Recurring Themes and Concepts to support sensemaking within and across lessons.

New Standards Are Clearly Labeled

Since this is a three-dimensional curriculum, it also covers the Scientific and Engineering Practices (SEPs) and Recurring Themes and Concepts (RTCs). To support educators in implementing these new standards, they are clearly labeled with point-of-use support within the Teacher's Guide.

Scientific and Engineering Practices

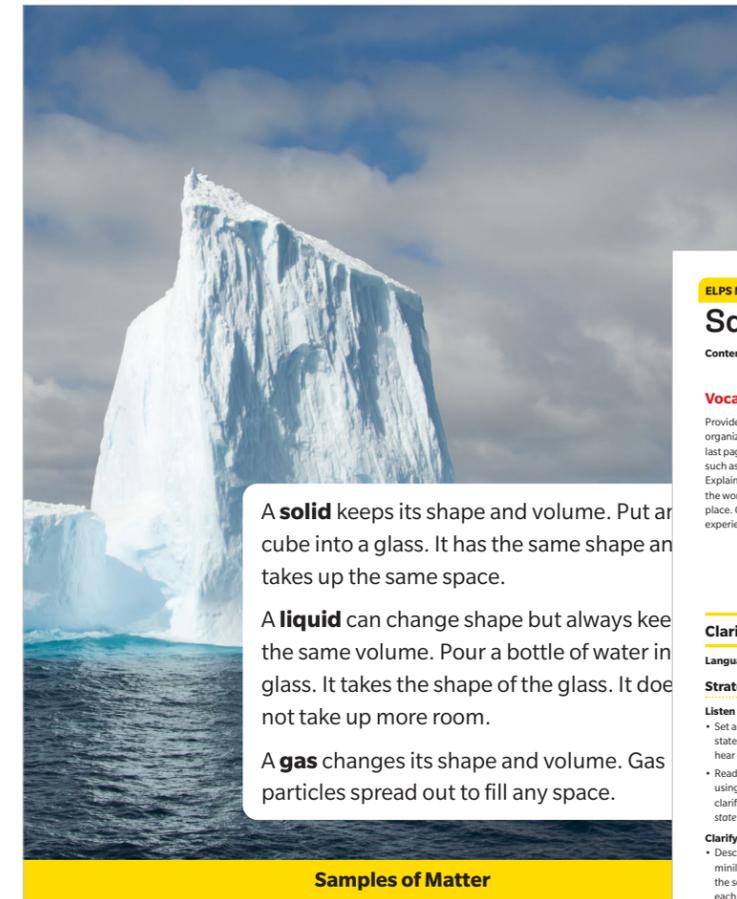
- 3.1.C** demonstrate safe practices and the use of safety equipment during classroom and field investigations as outlined in Texas Education Agency-approved safety standards
- 3.1.D** use tools, including hand lenses; ... Celsius thermometers; wind vanes; rain gauges; ... materials to support digital data collection such as computers, tablets, ... to observe, measure, test, and analyze information
- 3.1.E** collect observations and measurements as evidence

- 3.1.F** construct appropriate graphic organizers to collect data, including ... bar graphs
- 3.2.B** analyze data by identifying any significant features, patterns, or sources of error
- 3.4.A** explain how scientific discoveries ... impact ... society

Recurring Themes and Concepts

- 3.5.A** identify and use patterns to explain scientific phenomena or to design solutions
- 3.5.C** use quantity to describe, compare, or model different systems

Flexible ELPS Minilessons



A **solid** keeps its shape and volume. Put a cube into a glass. It has the same shape and takes up the same space.

A **liquid** can change shape but always keeps the same volume. Pour a bottle of water in glass. It takes the shape of the glass. It does not take up more room.

A **gas** changes its shape and volume. Gas particles spread out to fill any space.

Samples of Matter

Short, engaging, and effective minilessons support educators in teaching the science ELPS. The minilessons can be taught within the sequence of the science lesson or used during ELA time to support future science instruction.

ELPS MINILESSON to go with TEKS 3.6.B

Samples of Matter

Content Objective: Students describe and classify matter based on shape and properties.

Vocabulary Support

Provide students with a copy of the Vocabulary graphic organizer to complete while reviewing the passage on the last page of this minilesson. Point out any unfamiliar words, such as solid, gas, and liquid, to include in their organizers. Explain that words can have multiple meanings and that the word state in this lesson refers to a condition, not a place. Guide students to connect to prior knowledge and experiences to help them understand the states of matter.

Preview Student Reading: Show students the passage on the last page of this minilesson. Say: *Review the image. Identify the iceberg, the clouds, and the ocean. Point out that the word ice is found in the word iceberg to help them understand how the image is connected with the text. Display the following sentence frame and have partners take turns asking and answering questions. What do you notice? I notice _____. Say: What is this about? I think this is about solids, liquids, and gases. Remind students to ask questions when they encounter confusing words or ideas.*

• For extra practice, additional text passages can be found in *Sciencesaurus*, Levels 2–3.

Clarify Ideas

Language Objective: Listen to a text and use visuals to clarify understanding.

Strategy

Listen to the Text

- Set a listening focus: have students listen for different states of matter and hold up a finger each time they hear one.
- Read aloud the text on the last page of this minilesson using modeled fluent reading. Encourage students to clarify understanding using the frame: What is a _____ state of matter?

Clarify Ideas

- Describe and discuss the image on the last page of this minilesson. Reread the text and have students point to the solid, liquid, and gas as they hear information about each state of matter. (*solid: iceberg, liquid: water, gas: air*)
- Have students identify the different states of matter in the image: What states of matter do you notice? *I notice an iceberg/water/air with clouds in it.*
- Have students clarify understanding by identifying examples of the states of matter from the text using the differentiated supports.

Scaffolding

BEGINNING

Work together to find one example of a solid, one example of a gas, and one example of a liquid from the text and have students add them to the Vocabulary graphic organizer.

INTERMEDIATE
After rereading, have partners orally clarify the three states by identifying examples from the text using the frame: An example of a _____ is _____. Sample answer: *An example of a liquid is water.*

ADVANCED

After rereading, have partners state examples of the states of matter by answering three questions: What is a solid/liquid/gas in the text?

ADVANCED HIGH

Have students write the text examples for solid, liquid, and gas. Then have partners take turns checking one another's examples to see if the answers are correct.

Do the Math

Students should divide 30 cm of rainfall by 5 cm per hour to determine how many hours it will take for the river to flood. Alternatively, students could use multiplication by treating the problem as a missing-factor problem ($5 \text{ cm} \times ? = 30 \text{ cm}$).

Support for Student Answers

Do the Math: Will the river flood? If so, how many hours will it take to overflow? **Sample answer:** In 6 hours, there will be 30 total centimeters of rain.

STEM and Cross-Curricular Connections

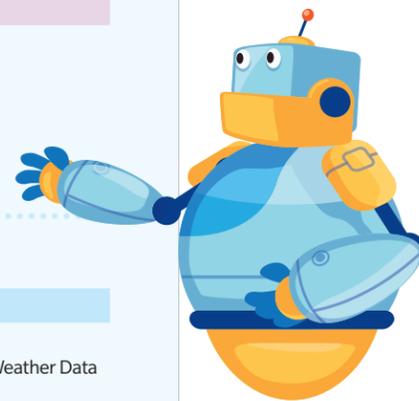
Do the Math; Read, Write, Share; and Language SmArts features connect directly to the content of the lesson while integrating ELA and math skills into the science learning process.

How can you save time with easy lesson planning?

Lessons and corresponding lesson support in *HMH Into Science Texas* follow the **consistent and familiar 5E structure** for a predictable classroom routine. This structure allows for a **streamlined Teacher's Guide** and minimal planning. Additionally, student experiences and observations drive classroom learning, taking the pressure off educators to "know" or be able to "tell" all the information.

LESSON MAP TIME: 1 day = 30 min

ENGAGE	EXPLORE AND EXPLAIN	EXPLORE AND EXPLAIN
Day 1 What Do You Already Know? Vocabulary Can You Explain It?	Day 2 Hands-On Activity: Weather All Around, Part 1	Day 3 Hands-On Activity: Weather All Around, Part 2
EXPLORE AND EXPLAIN	EXPLORE AND EXPLAIN	ELABORATE
Day 4 Hands-On Activity: Weather All Around, Part 3	Day 5 Patterns and Maps	Day 6 People in Science Dr. J. Marshall Shepherd
EVALUATE		
Day 7 Formative Assessment: Changes in Weather (TEKS 3.10.A) Quiz		
EXTENSIONS: Choose none, some, or all of the following.		
1 DAY ELPS English Language Development Minilesson 3.5.1	1 DAY Elaborate You Solve It: Run a Weather Station	1 DAY Elaborate Project: Collect Weather Data

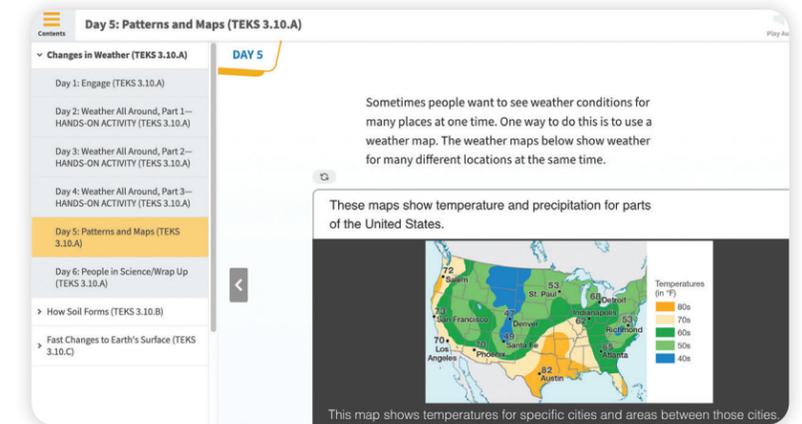


Easily Save Time with Built-In Planning Tools

The "Lesson at a Glance" shows you the Lesson Map of learning pieces as well as available extensions and assessments via a simple pacing tool. Texas educators who are already implementing *HMH Into Reading® Texas* will find connections called out, when available, within the Teacher's Guide planning pages.

Maximize Student Learning Time

All students are supported with hands-on activities and science readings in **30-minute blocks of time**—so there is always time for science. Educators can teach directly from the **digital Student Interactive Lessons**, with no need to build their own slide presentations. The interactive lessons work well in any class setting.

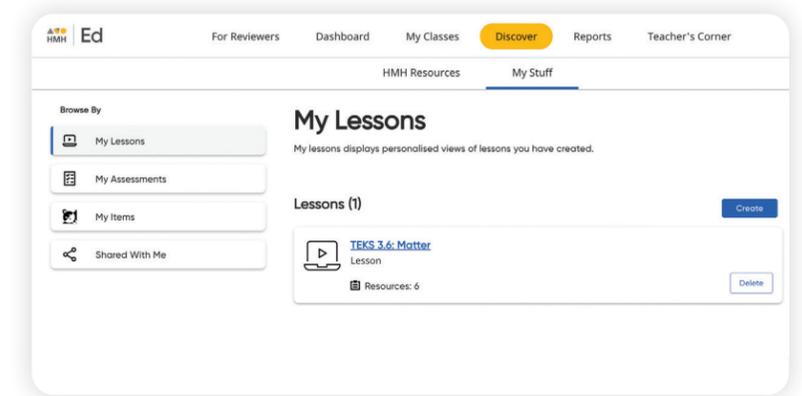


All You Need for Hands-On Fun!

Grade Level Kits that contain consumable and nonconsumable materials **reduce preparation time** and make hands-on activities easy for educators to conduct with students.

Easy-to-Access Classroom Essentials

The MyStuff section on *HMH Ed™* allows educators to organize the resources they plan to use so they're always at their fingertips to assign to students and share with colleagues!



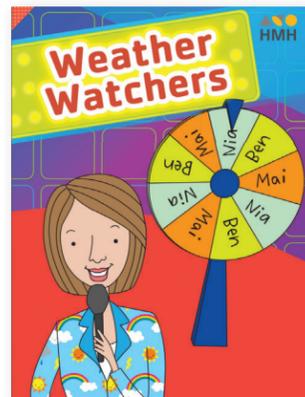
How can you ensure ALL of your students are supported?

HMH Into Science Texas includes built-in supports to help educators meet all learners where they are and scaffold them for success. The Teacher's Guide makes supporting students easy by indicating when and where to use these supports.

Differentiation: Challenge

A rain gauge works for measuring precipitation in the form of rain. But what if your students live where there is a lot of snow. Challenge them to come up with a system for measuring the quantity of snow. **Sample answer:** We could stand up a meterstick on the ground and measure the quantity of snow in inches or centimeters.

Sources of Error: Have student identify the unit of length abbreviated in the table and graph (centimeters) and compare it to the units they used to record precipitation (inches or centimeters).



Vocabulary

Language SmArts: Get ready for this lesson by exploring the words you'll need.



thermometer
A thermometer is a tool used to measure temperature. Air temperature is measured in degrees Celsius or degrees Fahrenheit.



wind vane
A wind vane is a tool that measures the direction of the wind.

- **Support differentiation** and sensemaking with the Grade K Big Book of FUNomenal Read-Alouds and FUNomenal Readers for Grades 1–5.
- **Challenge students with assessments** that use a scaffolded approach—with simpler questions and items followed by more difficult ones.
- **Help students internalize new words** and organize academic vocabulary with Language Development Worksheets and Vocabulary Anchor Charts.
- **Motivate students to manage information effectively**, communicate scientific findings, and express understanding using Writing Graphic Organizers.

“I need a solution that offers ALL teacher- and student-facing components in Spanish.”



Equitable Resources for ALL

English Language Proficiency options and Language X-Ray support vocabulary and language acquisition for all students, including Emergent Bilinguals. For a completely equitable Spanish experience for Emergent Bilinguals, EVERY student- and teacher-facing component is available in Spanish in the HMH ¡Arriba Las Ciencias! Texas curriculum.

EMERGENT BILINGUALS SUPPORT

Content Objective

Compare and describe day-to-day weather in different locations at the same time, including air temperature, wind direction, and precipitation.

TEKS 3.10.A

Use these routines to support emergent bilingual students throughout the lesson:

DAY 1 ⌚ 15–20 minutes

Introduce terms and language structures, and explicitly model how to use them. Then have students follow your models to practice using language.

Have students express their knowledge in ways that are accessible to them, such as

- writing a term in another language they know, then looking it up in a bilingual dictionary to confirm the term's meaning
- using visuals, gestures, and other nonverbal cues to reinforce or express understanding

Repeat modeling as needed with appropriate scaffolds for different language proficiency levels.

Language Objective

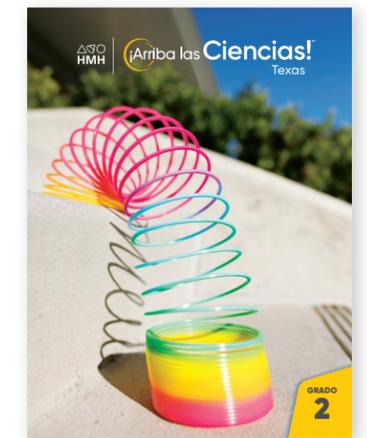
Orally describe and compare the properties of different types of matter through science investigation with peer collaboration. Write about these properties. **ELPS: 3H, 4C**

ALL OTHER DAYS ⌚ as needed

Reinforce vocabulary and language structures, including signal words and sentence frames, to

- give students additional practice using oral, written, or nonverbal language to demonstrate their understanding and interact with peers
- confirm students' understanding of the target concept(s) and gauge their progress on the language development continuum

Targeted strategies, routines, and practices to support emergent bilingual learners are supplied through the Language X-Ray and/or the ELPS minilesson associated with this lesson (see the Ed Online box above).



How can you assess students' understanding?

Educators need a constant gauge of students' understanding to ensure that they have the knowledge and skills necessary to **achieve proficiency with the TEKS**. *HMH Into Science Texas* assessment options give Texas educators **maximum flexibility in assessing** their students.

Assess to Improve Teaching and Learning

Formative and ongoing assessments support educators in assessing student learning and addressing misconceptions. These formative assessment opportunities, including classroom discussions, Check Your Learning Exit Tickets, and TEKS quizzes, **eliminate the guesswork** around if and when to modify instruction.

TEKS 3.10.A

Planning for Assessment

Ed
Online

Daily Formative Assessment

Exit Tickets: To check understanding of the content on Days 2, 3, 4, and 5, use the Exit Ticket on the last screen of each day in the interactive Student Edition.

[Day 2 Exit Ticket](#)
[Day 4 Exit Ticket](#)

[Day 3 Exit Ticket](#)
[Day 5 Exit Ticket](#)

Evaluate

- For the TEKS Quiz and the TEKS Test, assessments are available in an editable, printable format or can be administered and auto-graded on Ed.
- When administered online on Ed, reporting capabilities will be available to provide data by student or by class.
- When administered online on Ed, audio is available for additional reading support.
- The TEKS Test is provided in two formats, Test A and Test B. Test B has a reduced difficulty and reading load, to be used in the classroom for differentiation.

Formative Assessment: TEKS Quiz

[Changes in Weather \(TEKS 3.10.A\) Quiz A](#)
[Answer Key](#)

Lesson planning assessment support and point-of-use support for student answers can be found in the Teacher's Guide.

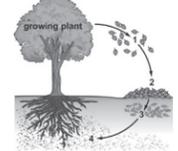
Meet the TEKS and Prep for State Tests

Assessment items often intertwine the TEKS with SEPs and RTCs to ensure that students can **demonstrate proficiency with all 13 TEKS** and to prepare them for the types of items they will see on the redesigned State Assessment.

Since the SEPs and RTCs are new to the TEKS, a **Skills Bank** provides additional options for assessing them. Educators can **create their own assessments** using these items or **customize existing assessments** to include them.

TEKS 3.10
Test A

8. Tara investigates a growing plant that is dropping leaves to the ground. She makes this model based on her observations.



Which statements complete the model? Write the letter of **ONE** correct answer in each box to label each part of the model.

1	
2	
3	
4	

A. Leaf litter slowly decomposes.

B. Plant matter transforms into soil.

C. Dead leaves drop onto the ground.

D. Decomposed leaves mix into the soil.

9. Rishi made a model to show rapid changes to Earth's surface. Rishi illustrated the model using a computer but needs to add labels.

Exit Ticket

Check your learning with this question.

Would a weather map that shows air temperature over a large area look the same from day to day? Explain your answer.

Start Typing...

TEKS 3.10.A
Quiz A

Changes in Weather (TEKS 3.10.A) Quiz

Read each question. Follow the instructions to answer the questions.

I. A group of students collected and compared day-to-day wind changes in two cities.

Location	Odessa, TX	Tucson, AZ
Wind Direction/Speed on Monday	SSE, 16 km/hr	S, 14 km/hr
Wind Direction/Speed on Tuesday	SSE, 26 km/hr	WSW, 8 km/hr

Which city had the highest wind speed on which day?

A. Odessa on Monday

B. Tucson on Monday

C. Odessa on Tuesday

D. Tucson on Tuesday

Choose the Tools that Best Support You

Quizzes and tests are available online with **auto-grading and detailed reporting**. They are also provided in printable PDF format and editable Word formats—allowing educators the **choice of assessing students** digitally, in print, or a combination of the two.

Changes in Weather (TEKS 3.10.A) Quiz A

Noma and Gino live in different states. They collected data about the weather for one week by measuring with wind vanes and thermometers. The table below shows the data they collected.

		Monday	Tuesday	Wednesday	Thursday	Friday
Noma	☁️	36 °F 14 mph	☀️	40 °F 13 mph	☁️	38 °F 14 mph
Gino	☀️	68 °F 8 mph	☀️	69 °F 6 mph	☁️	67 °F 7 mph

Compare the quantities of weather data where Noma and Gino live.

Move **ONE** correct answer to each blank to complete the sentences. Each answer may be used more than once. Not all answers will be used.

The weather where Gino lives is warm and _____ The weather where Noma lives is cold and _____ The evidence for this is _____

Noma. Where Noma lives, it is _____ likely to be windy and cold on any given day than it is where Gino lives.

Where can you find guided implementation support?

Are you looking for a partner to collaborate side by side with your district? *HMH Into Science Texas* includes unlimited implementation support to create meaningful professional learning experiences that support you in achieving your teaching and learning goals.

Getting Started with *HMH Into Science Texas*

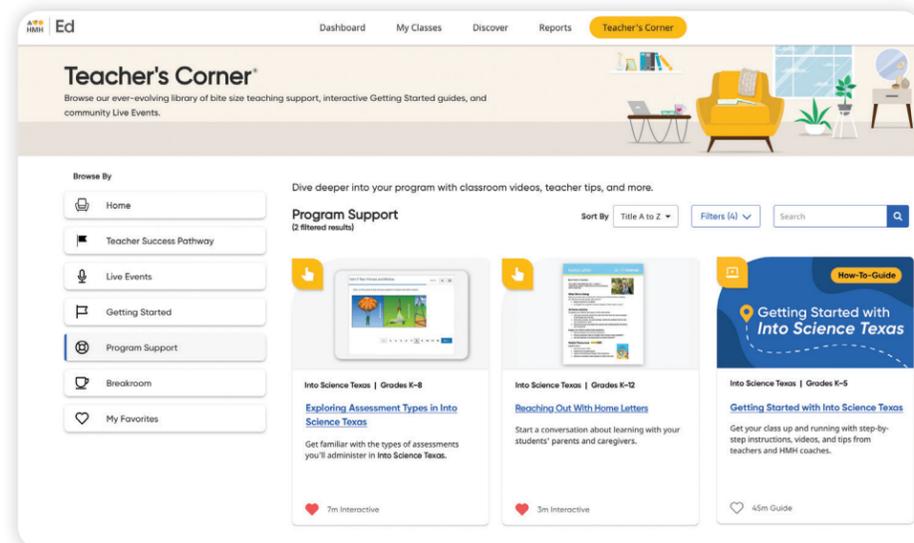
Build community and prepare for your first week of lessons during a Getting Started session. This session kicks off your *HMH Into Science Texas* implementation with a preview of the first week of lessons, guidance in navigating *Ed*, and an introduction to the personalized learning available to you.

Build Confidence in 30 Days

Your recommended Teacher Success Pathway on *Ed* is personalized professional development that supports the way you teach. Choose from live or on-demand sessions designed to fit your busy schedule. Pathway resources help Texas educators plan, teach, and assess learning using their new *HMH Into Science Texas* program.

Explore Teacher's Corner®

Support continues throughout the year with our searchable library of articles and videos, live online events, on-demand recordings, and so much more!



“I need a flexible science program that allows me to make the most out of the time I have.”

Flexible Professional Development

Our **Coaching Membership**, available at an additional cost, allows you to partner with an instructional coach to meet your district's specific needs. Our professional learning provides the perfect opportunity to focus on standards-aligned instruction and practice.

A Year-Long Coaching Membership Includes:

- Personalized instructional support based on unique teacher needs
- Guidance that helps teachers set, track, and accomplish goals
- Flexible scheduling to align with a PLC or PD plan



HMH also offers **Leader Live-Online Sessions**, at an additional cost, to prepare school and district leaders to implement their new *HMH Into Science Texas* program successfully in the first 30 days. The session includes an overview of the program's instructional model and resources, assessments, and *Ed*, the HMH program platform. Recommendations for instructional time, program essentials, assessment guidelines, and a timeline for professional learning are discussed collaboratively. Leaders receive tools to help understand what to look for during instruction to better support teachers in implementing the program with integrity.

Nationally Recognized

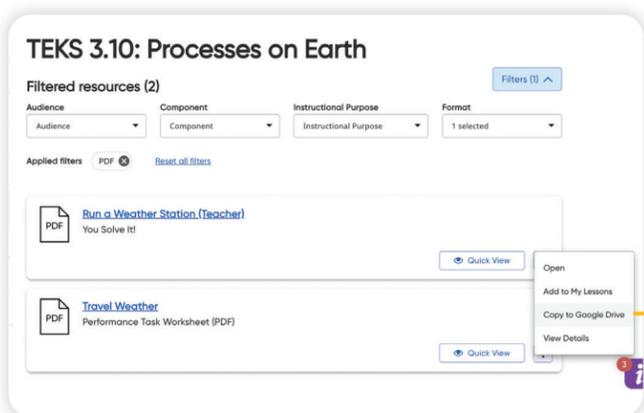
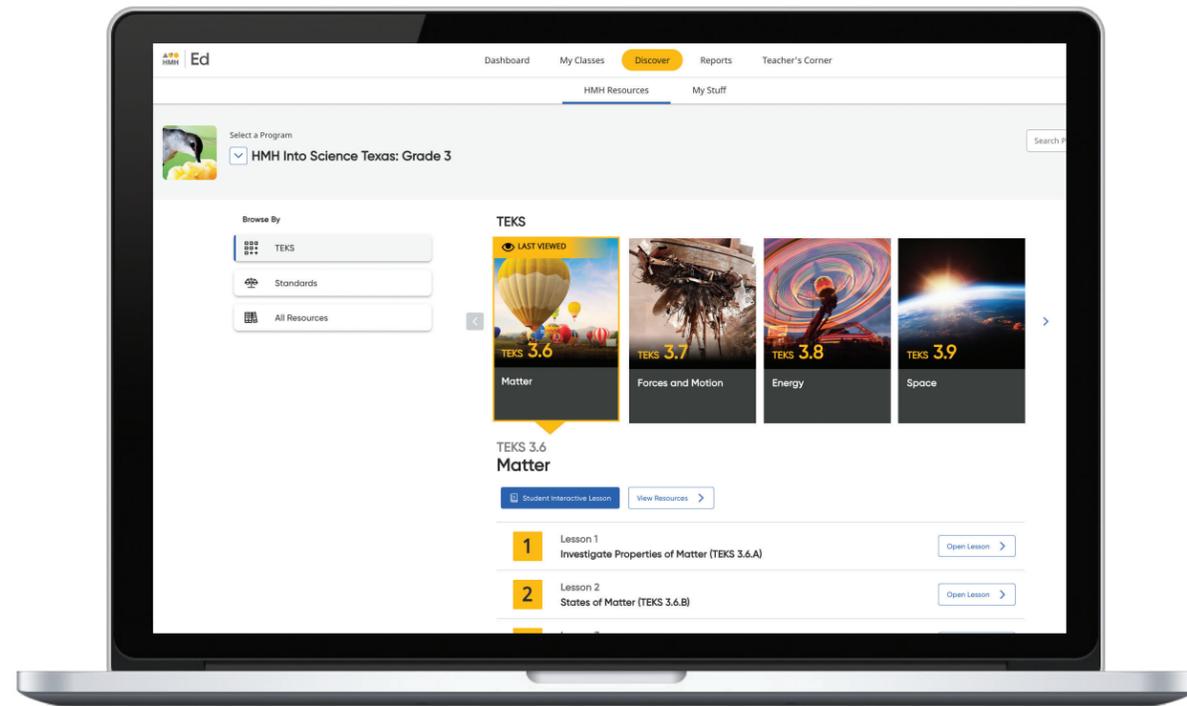
Did you know HMH Professional Learning has been nationally recognized for our ability to support implementation and provide ongoing teacher and leader professional development?



For more information, please visit us at hnhco.com/professionalservices

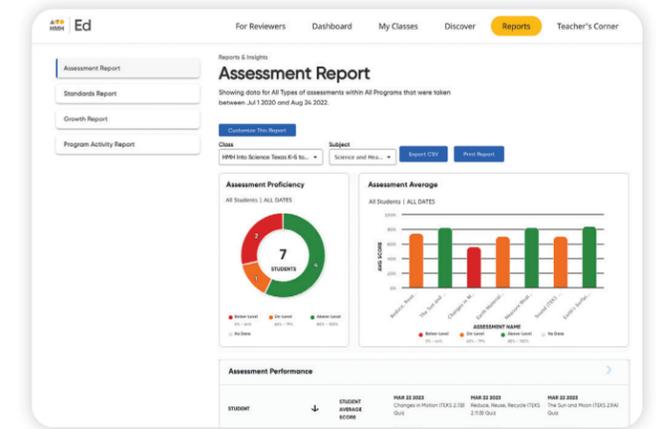
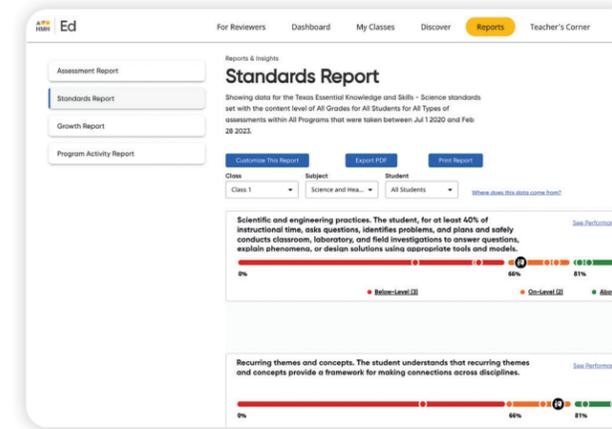
How will you connect it all together?

HMH Into Science Texas resides on Ed, the HMH Learning Platform, which **combines the best of technology, content, instruction, and professional learning** to support each moment in a student's and teacher's journey. With Ed, educators can easily create lesson plans, deliver instruction, and customize and assign assessments.



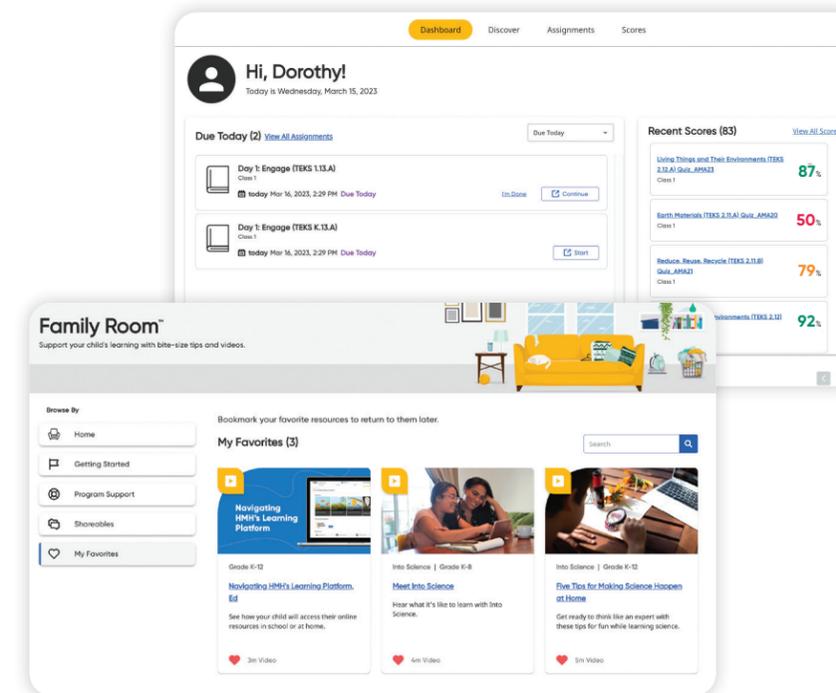
To further support planning and instruction, Ed offers assignability and compatibility with these platforms:

- Google Drive™
- Google Classroom
- Canvas®
- Schoology®



Effortlessly Connect Assessment to Instruction

Once assignments are completed, Ed can **auto-grade** them and **deliver actionable data** to inform instruction. Ed can also group students and recommend targeted differentiation or allow educators to **customize groups** based on student assessment performance.



Accessible Support for Student Learning

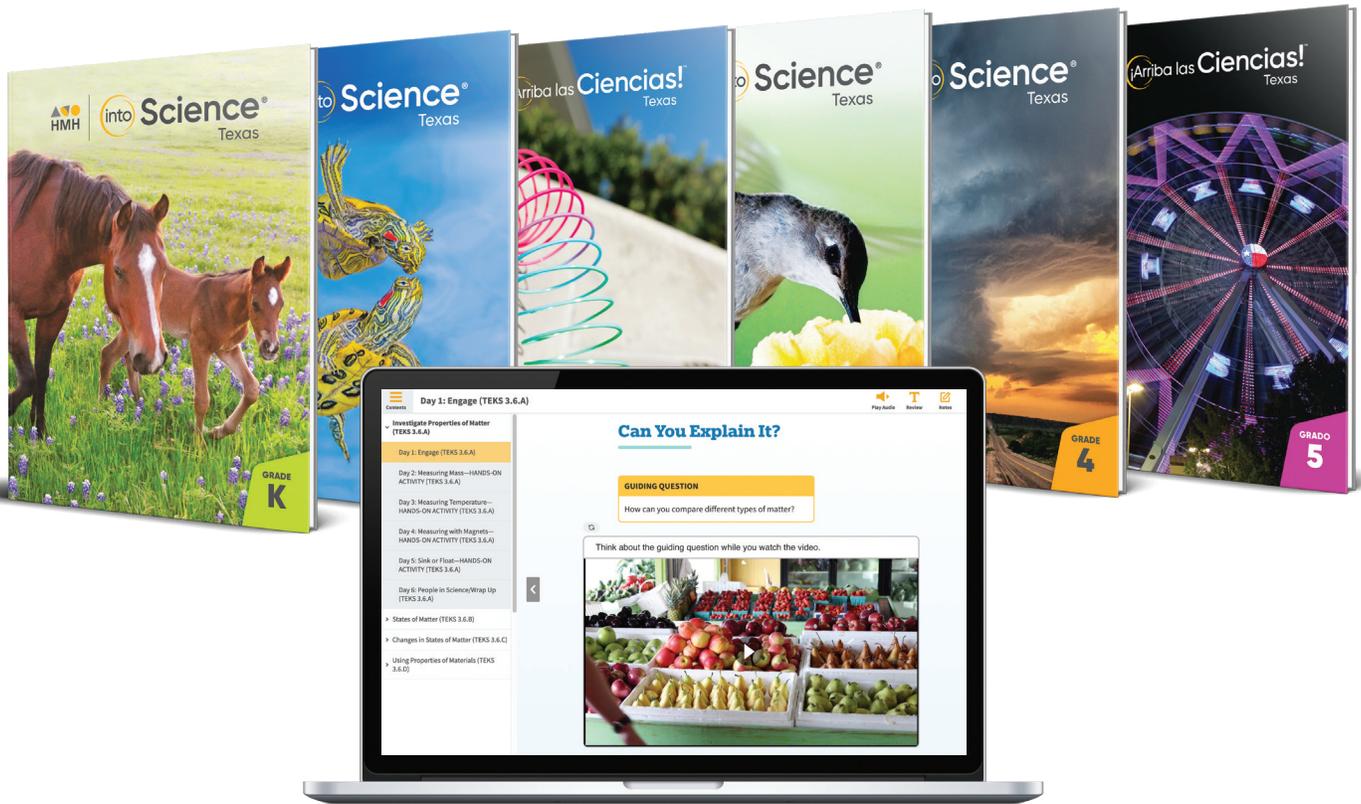
From Ed, students can view all their digital, student-facing resources and connect to *PocketLab Notebook*. They can also access the **status and due dates** of their assignments and the scores on those they have completed. **Family Room™** provides caregivers resources to support their student's learning.



into Science®
Texas



¡Arriba las Ciencias!
Texas



To learn more or to get a sample, visit:

hmhco.com/TXscience

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