

Explor^elearning[®]

Science4Us[®]

Mississippi Department of Education
High Quality Instructional Materials
K-12 Science Adoption **2025**

Reviewer Guide



What Science4Us?

It's never too early to learn science!

Give kids a head start in STEM.

Science4Us teaches foundational science topics and skills for grades K-2 through literacy-infused lessons with interactive games, songs, virtual notebooks, hands-on experiments, and more.

Designed for your youngest learners, Science4Us features 28 modules full of a variety of online and hands-on activities that take as little as ten minutes to complete.


Students learn about topics such as habitats, energy sources, motion, and weather—all while building cross-curricular skills and learning about the world around them.



Table of Contents

Feel free to use the following links to navigate through our review guide!

- [Review Steps](#)
- [Navigation](#)
- [Resources](#)
- [Product Design](#)

The  button on the top-right corner of the page will bring you back to the Table of Contents.

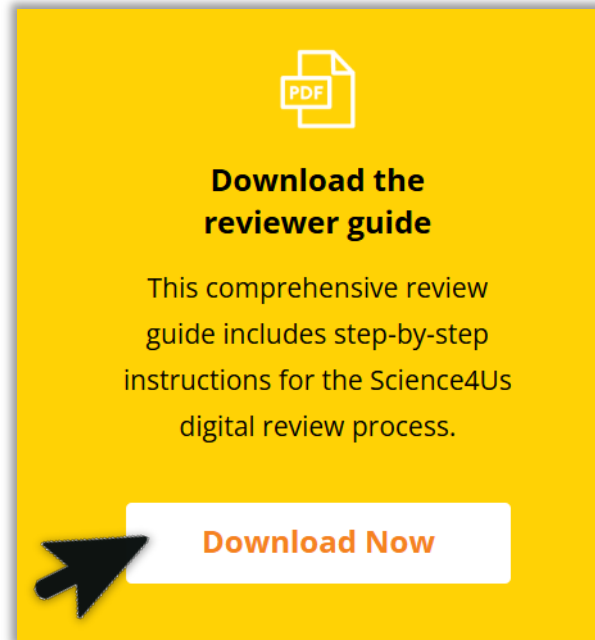


➤ Download the Reviewer Guide

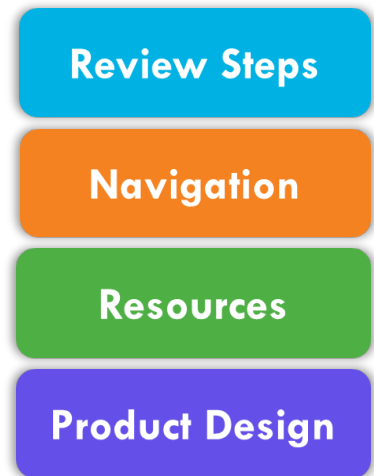
This reviewer guide will take you through an intuitive, step-by-step process through the review steps, navigation, instruction, and pedagogy. Through this process, you will learn about the **1000s of online and offline science activities included in Science4Us.**

1. Click the **Download Now** button to download the reviewer guide.
2. Take note of the colored tabs at the top of each page to track your progress through the four sections of the reviewer guide.

1.



2.

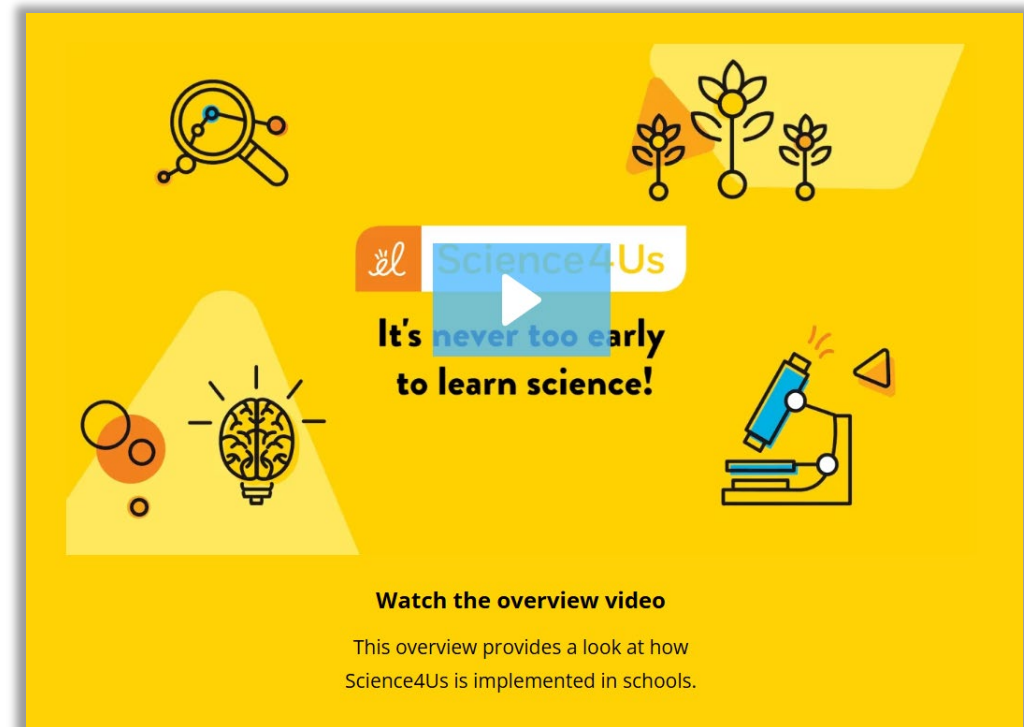




➤ Watch the Science4Us Overview Video

Science4Us was designed with the early elementary teacher and their students in mind, delivering three years' worth of science activities, lessons, games, and videos in 28 instructional modules for students in grades K–2. Every engaging lesson is structured around the 5E Instructional Model (Engage, Explore, Explain, Elaborate, and Evaluate), which encourages students to make connections and extend their knowledge.

Watch the overview video to learn how flexibly Science4Us works in the classroom or at home.



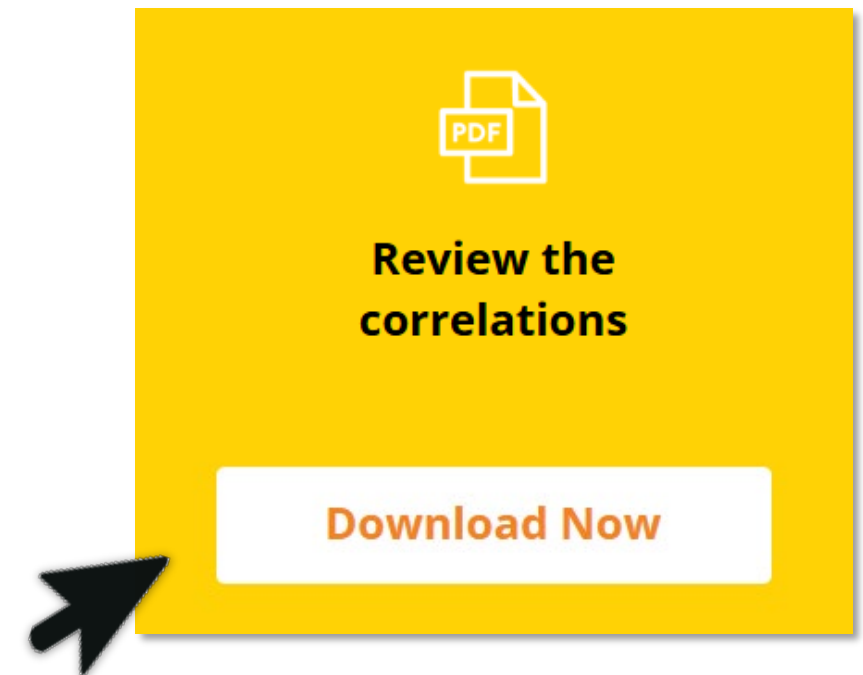


➤ Review Correlations to Academic Standards

Want to know how Science4Us aligns with the Mississippi College- and Career-Readiness Standards (MCCRS)?

Download the correlation document to view a complete list of Science4Us Correlations to Mississippi Department of Education Academic Standards.

Click the **Download Now** button to download and review the correlations.



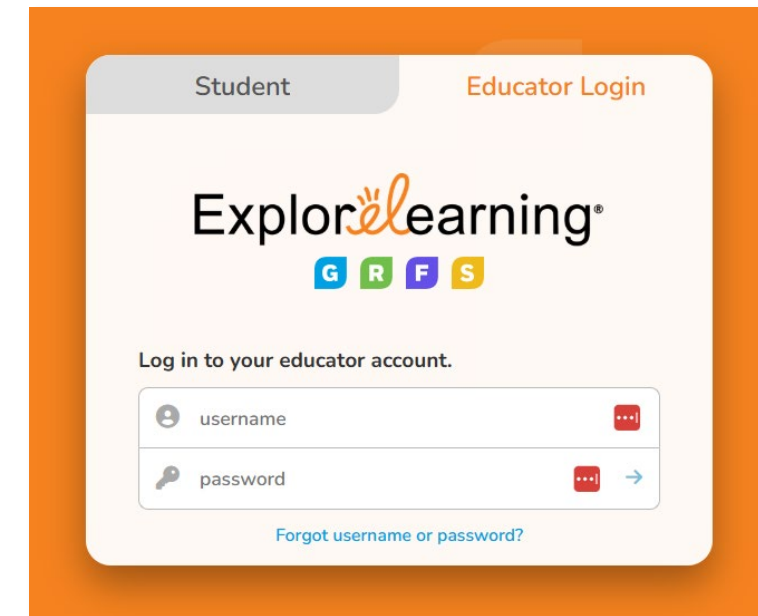
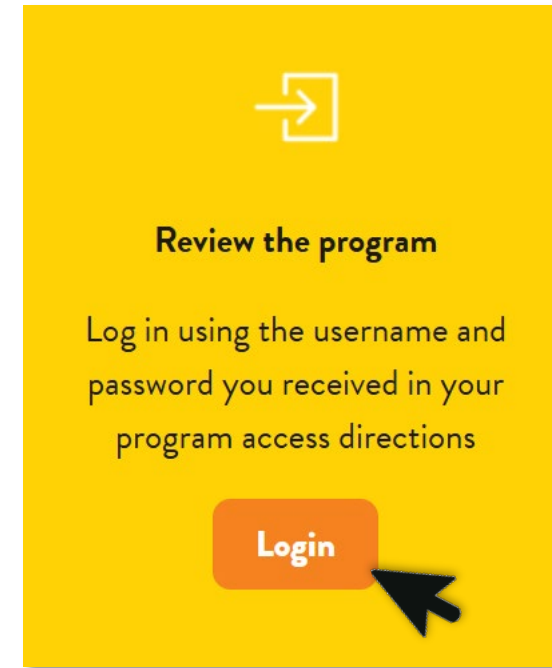


➤ Review the Program

Click the **Log In** button below **Review the Program** to go to the login page. Log in with the username and password you received in the Digital Samples Letter.

Once you log in using the username and password, you will land on My Homepage.

Please note: All Science4Us teacher and student materials are available through the online platform. There are no print student texts or teacher editions.



➤ Getting to Know the Science4Us Features

Now that you're logged in to Science4Us, you will learn about Science4Us navigation, instruction, and design.

Navigation

1. Getting Started
2. The Four Books of Science

Resources

1. Instructional Features
2. The 5E Model
3. Assessment
4. Reporting
5. Implementation & Teaching Supports

Product Design

1. Embedded Literacy and Math
2. Three-Dimensional Learning
3. Real-World, Inquiry-Based Lessons
4. Multimodal Practice

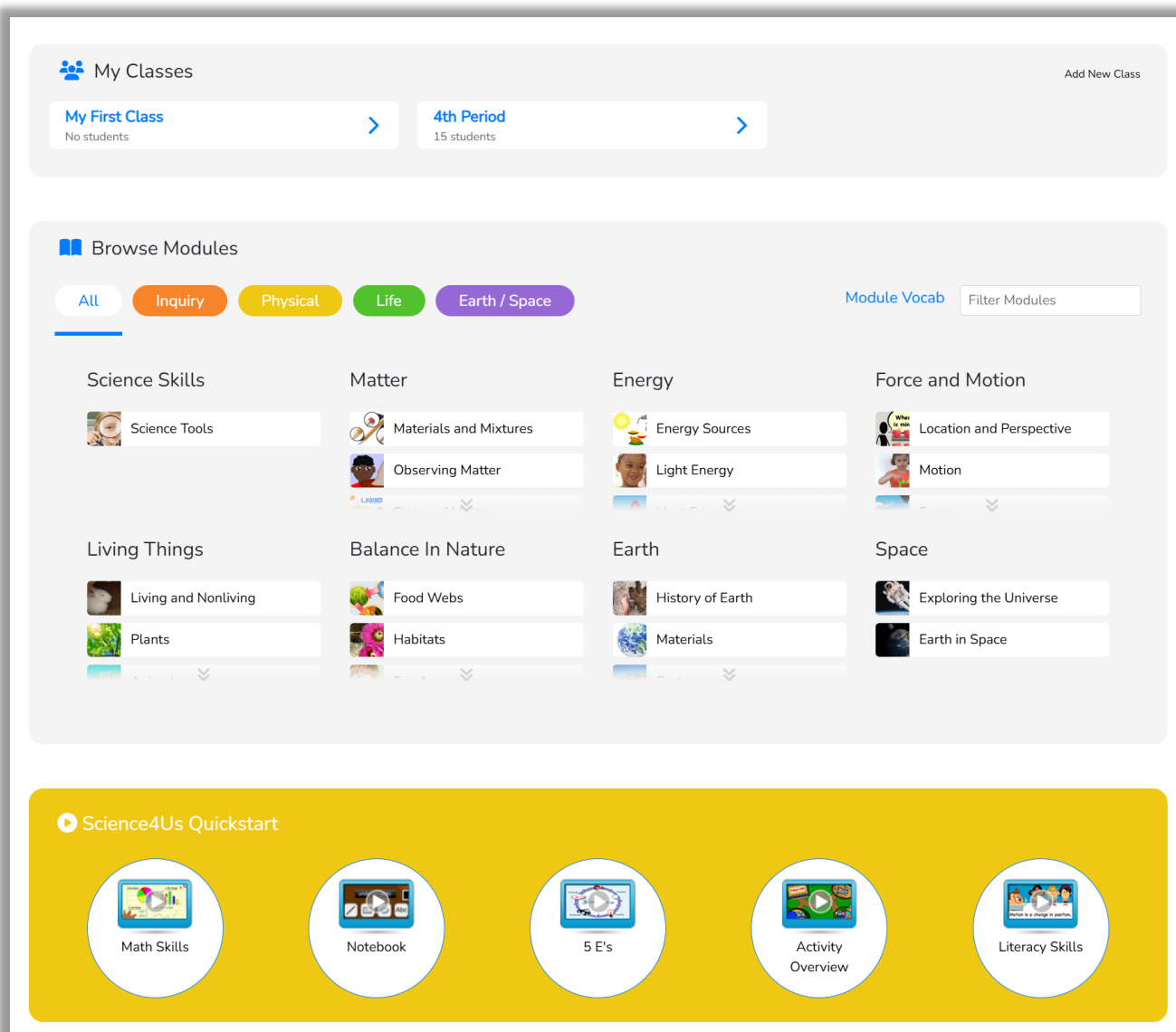




➤ Getting Started

The navigation section of this reviewer guide will show you how to get started with Science4Us by familiarizing yourself with the materials and features of the program.

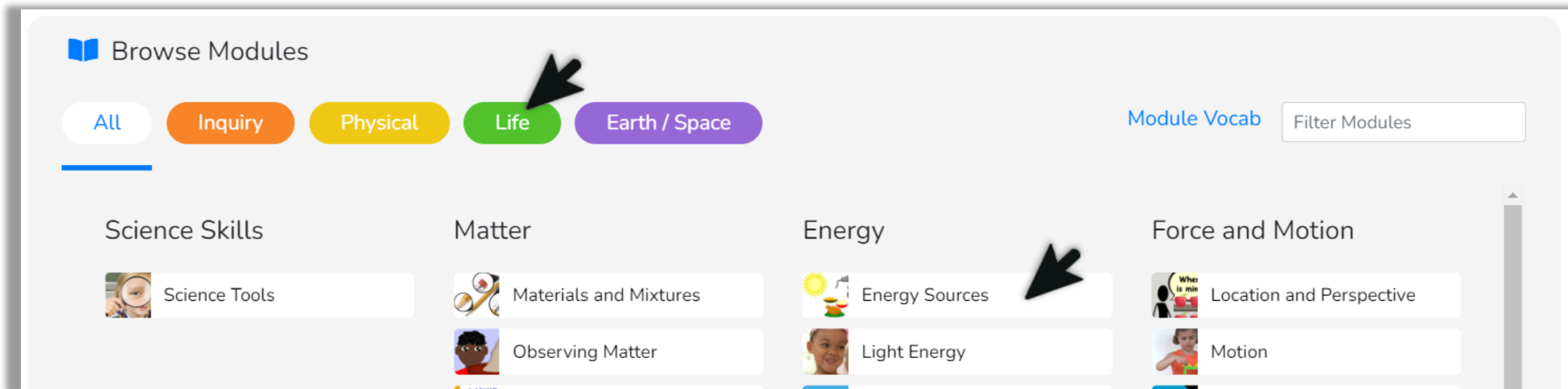
1. **Take a visual tour of the dashboard** to familiarize yourself with Science4Us components and features.
2. **Start on the top navigation bar**, noticing the dropdown options within each of these main tabs: Teaching Strategies, Standards, Demos, etc.
3. **Watch the short teaching resources videos** at the bottom of the lesson plans page to familiarize yourself with Science4Us' teaching resources: notebook, student reports, 5Es, activity overview, and literacy skills.



➤ The Four Books of Science

Science4Us supports teachers of all experience levels in addressing the key foundational science skills across four science disciplines, or “books,” which include Inquiry, Physical Science, Life Science, and Earth/Space Science. Within the four books are 28 modules/units that include more than 350 animated online activities and over 1,000 interactive offline activities.

1. **Click on one of the four books** to see all the modules and topics.
2. Next, **click one of the modules** to see all lessons, instructional materials, and teacher guidance.





➤ Instructional Features

Each lesson plan includes ready-to-use features to support planning and implementation, as shown through the key below:

1. The blue link reveals the module's **core concept and essential vocabulary**.
2. There are **8 daily sessions** in each module based on the 5E model of science instruction.
3. The day's 5E icon and link display the **interactive digital activities** available.
4. Each module's **teacher guide** includes lesson plans with all the essentials to teach the digital and hands-on (offline) lessons.
5. The **lesson objective and offline instructional materials** provide structure and support hands-on learning.
6. Science4Us includes embedded pedagogical supports and **extensive professional development**.

Science4Us Dashboard Teaching Tools Favorites Student Demo Manage Users B

Dashboard / Life / Balance In Nature / Food Webs Module Info

Food Webs

All living things need energy to live and grow. Most plants get their energy from sunlight whereas people and other animals get their energy from the food they eat. This module explores the relationships between living things and the energy sources they need to thrive.

[Core Concept and Essential Vocabulary](#) 1. Science Content Overview: PDF Video 6.

DAILY SESSIONS

2. Engage	Explore	Explain	Elaborate	Elaborate	Elaborate	Elaborate	Evaluate
			Literacy Skills	Literacy Arts	STEM Skills	Investigate	

Engage

3. The Engage session activates students' prior knowledge of food webs. In this session students use their digital Notebooks to record their thoughts and then watch an animated video that gets them thinking about the topic. Students also participate in a teacher-led discussion of the foods people and other animals eat for energy. To complete the session, students collaborate with peers offline and continue to unpack their prior knowledge of food webs.

Group Activity 30 min

4. [Quick Walkthrough](#) [Teacher Guide](#) [Engage Session Guide](#)

5. **Objective** Students will provide examples of the different foods they eat and describe what they think a food web is.

Offline Materials


- [Prior Knowledge Activity \(Kindergarten\)](#)
- [Prior Knowledge Activity \(1st Grade\)](#)
- [Prior Knowledge Activity \(2nd Grade\)](#)
- [Prior Knowledge Activity \(3rd-5th\)](#)



➤ The 5E Model

1. **ENGAGE** sessions introduce new concepts by accessing students' prior knowledge and experiences. Engage is all about "unpacking" what students already know and discussing it with their teachers and peers to reveal concepts and possible misconceptions.
2. **EXPLORE** sessions guide students to "play" as they identify and explore their current understanding of the concept while generating new ideas, making connections, and asking questions to further activate curiosity and inquiry.
3. **EXPLAIN** sessions provide clear and concise explanations and descriptions of the new concept, including any formal science terminology and relevant vocabulary.
4. **ELABORATE** sessions facilitate in-depth learning experiences to enhance and reinforce students' understanding of the concept. Elaborate consists of four different sessions: literacy skills (focuses on vocabulary); literacy and the arts (uses artistic formats like poems and songs); math and STEM (applies process skills); and investigate (presents a science experiment).
5. **EVALUATE** sessions are designed to assess student understanding of the lesson concepts and their progress toward learning objectives.

Food Webs









[Class Reports & Assignments](#)


All living things need energy to live and grow. Most plants get their energy from sunlight whereas people and other animals get their energy from the food they eat. This module explores the relationships between living things and the energy sources they need to thrive.

[Core Concept and Essential Vocabulary](#)

Science Content Overview: [PDF](#) [Video](#)

DAILY SESSIONS

 Engage	 Explore	 Explain	 Elaborate Literacy Skills	 Elaborate Literacy Arts	 Elaborate STEM Skills	 Elaborate Investigate	 Evaluate
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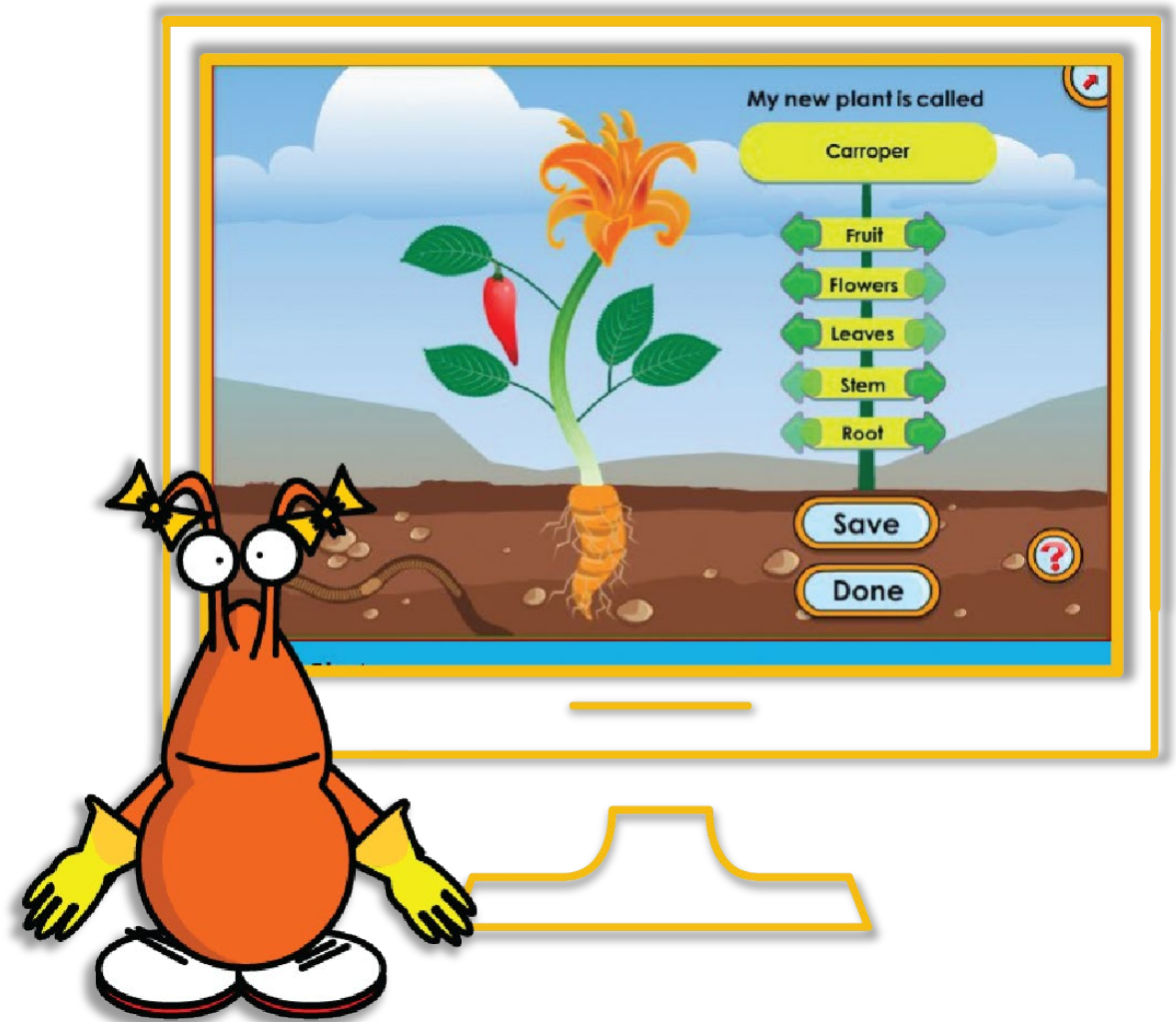


➤ Assessment

Science4Us integrates assessment with instruction, which allows teachers multiple opportunities to observe students during inquiry-based lessons. Assessments help teachers identify students' capabilities and needs, **provide immediate feedback**, and **monitor students' progress**.

Each of the 28 modules has an **online summative assessment** in session 8 and an **online formative assessment** (in sessions 4 and 7). These are scored immediately, showing student mastery of the core concepts.

Each module has **five offline, grade-level-specific assessments** in addition to a **standardized test prep** option. Teachers can print the assessments as an alternative to online administration.





Reporting

Science4Us includes **automated, real-time reports** to track student progress and activity participation. Reports are available for account administrators, teachers, and students and parents from the blue **Class Reports & Assignments** link at the top right of every module page.

1. **Teachers:** Teacher reports display student progress summary information, which includes last login date, total logins, total time spent per activity, activity scores and competitions, total completed Notebook prompts, and overall average.
2. **Students and Parents:** Student reports show assignment progress, which includes time spent (in minutes), Notebook entries, activity completion date, and scores (when applicable). Students can view all their saved Notebook entries and view comments and notes from their teachers.

Home / Reports / Modules

UAT Class ▾ Lesson Plans Assignments **Reports** Notebook Academic Standards

Review and monitor module progress [All Student Usage Report](#)

Activities	Student(s)	Avg. Score (%)	Complete (%)	Time Spent
Science Tools Explore, Engage...+1 more	UAT1 S., UAT2 S. +3 more	87	60	315
Motion Motion Song	UAT2 S.	0	0	0
Observing Matter Evaluate	UAT1 S., UAT2 S. +3 more	80	40	70
Light Energy Trivia Time, Light Energy Song...+2 more	UAT1 S., UAT2 S. +3 more	83	30	210
Materials Engage, Take a Note...+9 more	UAT1 S., UAT2 S. +3 more	0	0	0

Teacher Report: Module Overview

Science4Us Dashboard Teaching Tools ▾ Student Demo ? Manage Students P

Dashboard / UAT Class / Reports / Student Usage

UAT Class ▾ Lesson Plans Assignments **Reports** Notebook Academic Standards

Overview Report : UAT1 S. [Module Progress Report](#) [All Student Usage Report](#)

Usage

Last Login	Logins	Completed	Opened	Time Spent (min)	Avg. Score (%)
7/8/2021	2	2	1	3	90

Assignments

Habitats Evaluate	Start Date: 7/12/2021
Animals Explore, Evaluate	Start Date: 7/12/2021

Notebook Entries

Animals Explore: Created by UAT1 S. Teacher Comment: Well done ...	Date Created: 7/12/2021
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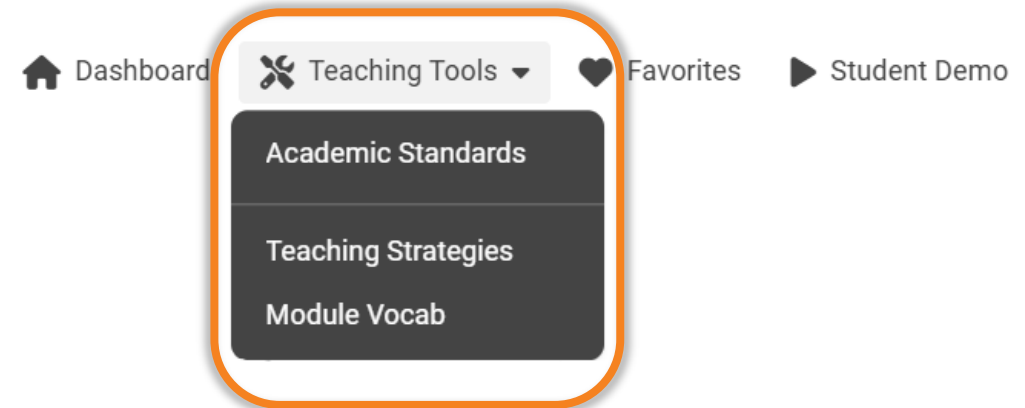
Teacher Report: Student Overview

➤ Implementation and Teaching Supports

Visit the **Teaching Tools** tab in the middle of the top navigation bar for academic standards, teaching strategies, and module vocabulary.

On each lesson plan page, you can find a Teacher Guide, a video 5E Session Guide, Offline Material lesson plans, and video guides to support the implementation of Science4Us with fidelity.

The teaching strategies help teachers activate students' prior knowledge, reinforce various literacy skills, and allow students to self-assess at the end of an activity or investigation. These teaching supports are available to supplement all 5E activities and lessons and help teachers incorporate literacy and math instruction into the science lessons.



Literacy Skills Strategies
Fluency | Main Idea and Supporting Details | Cause and Effect | Writing Skills
Compare and Contrast | Categorize and Classify | Vocabulary

Fluency [To The Top ↑](#)
Practice and Recite
Students choose a short passage, poem, or riddle related to a unit of study and practice reading it out loud independently. Students recite their piece of literature to the teacher or the whole class as appropriate.

Main Idea and Supporting Details [To The Top ↑](#)
Main Idea & Word Match
Write 2-3 related main ideas from a passage or unit of study and several supporting vocabulary words for each. Students sort vocabulary words and match them to the appropriate main idea.



➤ Embedded Literacy & Math

Literacy and mathematics skills essential to early learners' academic growth are incorporated into the weekly lessons.

Science4Us lessons provide explicit instruction in key literacy skills, including making inferences, determining cause and effect, comparing/contrasting, speaking and listening, and sequencing, as well as direct instruction on a variety of strategies for vocabulary acquisition.

Students learn using the following strategies: cloze, sentence, and paragraph frames; diagrams; tables and graphs; and graphic organizers such as Frayer Models, dichotomous keys, and Venn Diagrams.

Mathematics skills addressed include basic computations practice; nonstandard and standard units of measurement; tool use; and reading and constructing a variety of graphs such as tally charts, bar graphs, pie charts, and line graphs.



Instructional Tip

Every Science4Us module provides ample opportunity for students to sharpen their writing skills. Students reflect on lessons through note-taking, writing summaries, narrative writing, expository writing, and letter writing. Science4Us also shows how science is connected to the arts with activities like reader's theater; group skits; 3D and 2D art projects; and musical connections through song, dance, and playing instruments.



➤ Three-Dimensional Learning

The blended approach of Science4Us provides many opportunities to engage in science and engineering practices and to experience disciplinary core ideas and crosscutting concepts in every lesson. The activities allow students to identify and create patterns, determine cause and effect, observe structures and systems, and more as they work through content.

- **Science and Engineering Practices (SEP):** Students need both knowledge and practice to succeed in STEM. Science4Us takes a hands-on approach to learning and includes structured opportunities for students to investigate, analyze, question, and more in every lesson.
- **Disciplinary Core Ideas (DCI):** Core Ideas provide the foundation students need to understand and investigate real-world concepts and problems in science. Science4Us teaches Core Ideas through student activities that are age-appropriate and fun.
- **Crosscutting Concepts (CCC):** Throughout the 28 robust instructional models, Science4Us incorporates Crosscutting Concepts such as Patterns, Cause and Effect, Scale, Proportionality and Quality, Systems and System Models, Energy and Matter, Structure and Function, and Stability and Change.

➤ Real-World, Inquiry-Based Lessons

An effective scientific inquiry lesson allows students to construct their own understanding of a topic by asking an authentic question, conducting an experiment to answer the question, collecting data using tools, analyzing the data, and formulating an explanation about the data that addresses the initial question. Inquiry lessons also include comparing and evaluating data based on the work of others and communicating results.

Each Science4Us instructional session includes numerous components to reinforce real-world and inquiry-based teaching.

As an explicit strategy, Science4Us lessons routinely depict young children in real-world scenarios to highlight science concepts that occur around them every day. Students see how gravity comes into play at the playground, go shopping for the needs of a pet hamster, go on family outings and notice the natural environment, and choose appropriate clothing to wear for the weather conditions of the day.



➤ Multimodal Practice

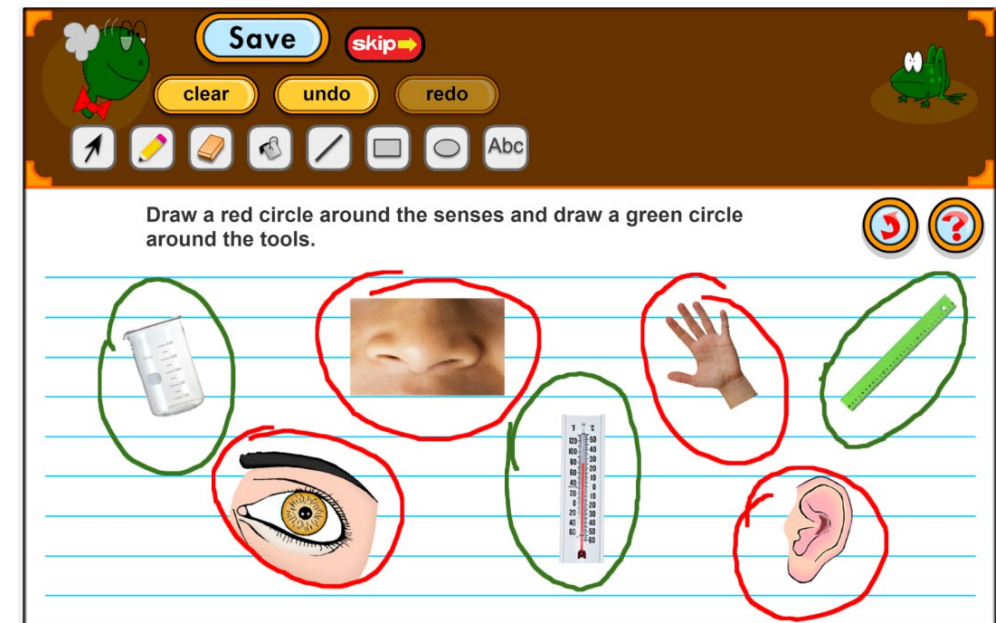
Science4Us activities are designed to reach learners of all styles and demographics—including those with disabilities, multilingual learners, and advanced students—to boost their academic performance and narrow achievement gaps.

A wide variety of activity types are available so that students can relate to the material in the manner that is best suited for them. Activity types include interactive games, group discussions and collaborative work, songs, narrative stories, skits, hands-on activities, informational text, graphic organizers, music and art activities, writing activities, and much more.



In one lesson example about the History of the Earth, students complete the following multimodal activities:

- **Arrange** syllables of lesson words
- **Alphabetize** content vocabulary
- **Match** fossil types
- **Fill-in-the-blank** science vocabulary



Students also have digital tools throughout each lesson to support engagement and reinforce learning.



WE MAKE MATH AND SCIENCE LEARNING

SERIOUS FUN



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**SERIOUS
FUN**