Exploreelearning®

Science4Us®

Idaho State Department of Education Curricular Materials Adoption 24-25

Reviewer Guide

What Science4Us?

It's never too early to learn science!

Give kids a head start in STEM.

Critical foundational science topics and skills are introduced through literacy-infused lessons with interactive games, songs, virtual notebooks, hands-on experiments, and more.

Designed for your youngest learners, Science4Us features 28 modules (covering topics in physical, life, and earth/space science) full of online activities that take as little as ten minutes to complete.

Table of Contents

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

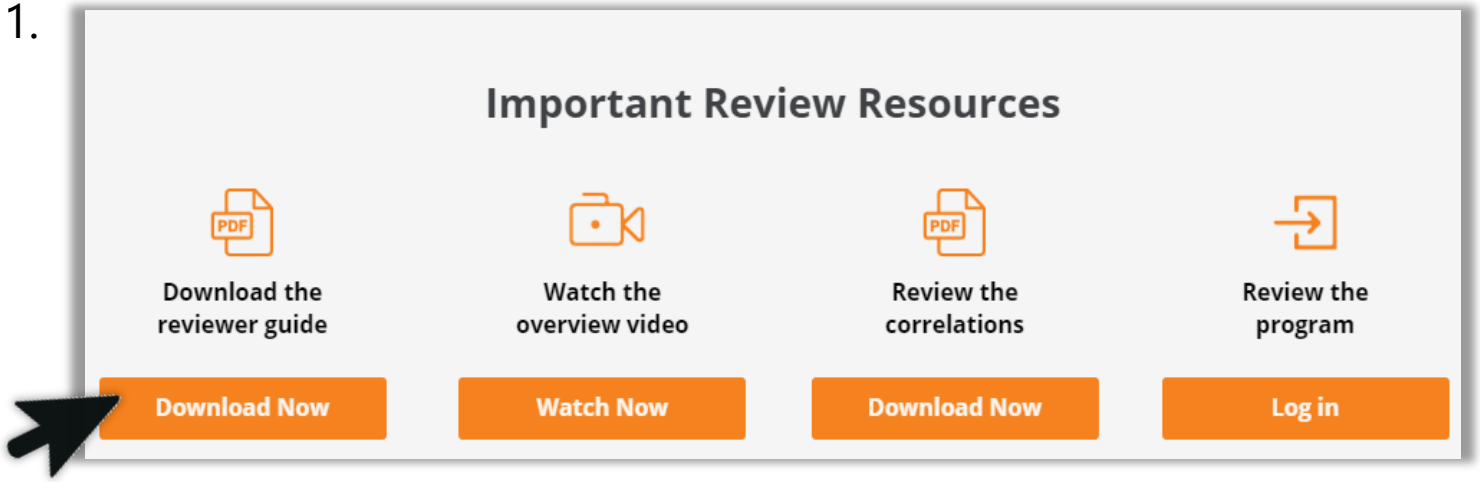
The button on the top-right corner of the page will bring you back to the Table of Contents.

Download the Reviewer Guide

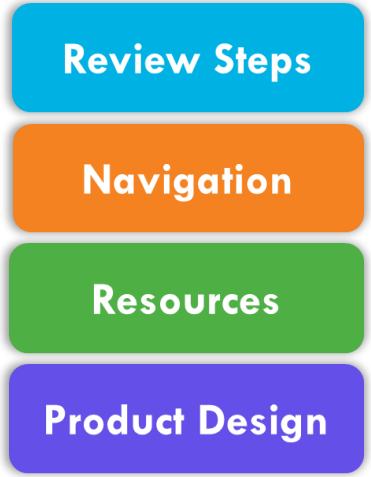
This reviewer guide will take you through an intuitive, step-by-step process for understanding the **1000s of online and offline science activities included in Science4Us**, including the review steps, navigation, instruction, and pedagogy.

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.



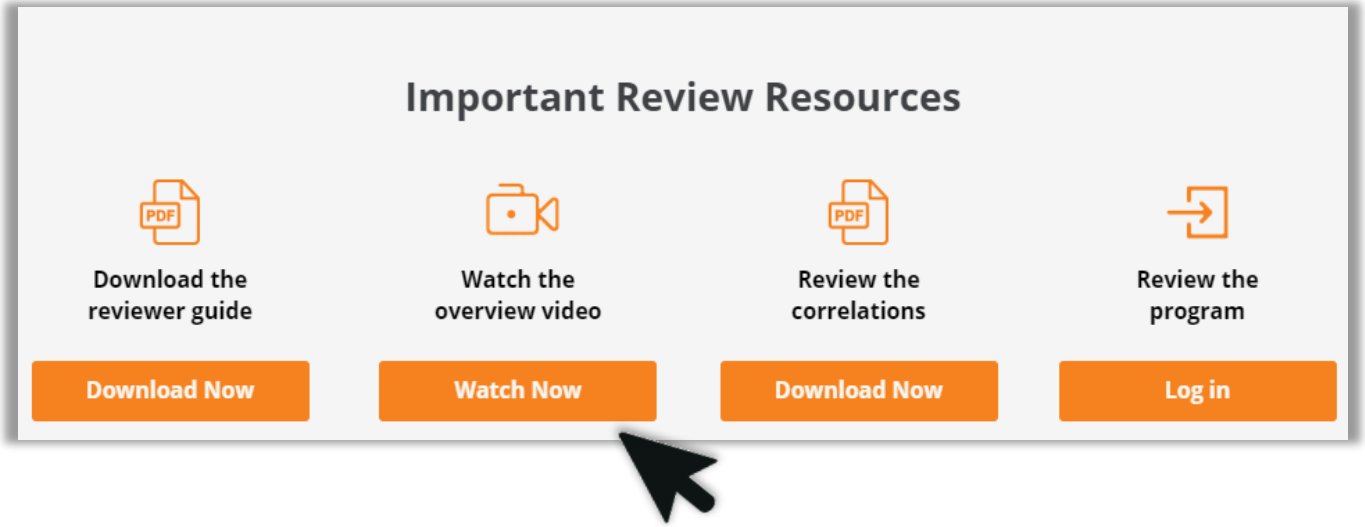
2.



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, which encourages connections between new information and past knowledge.

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

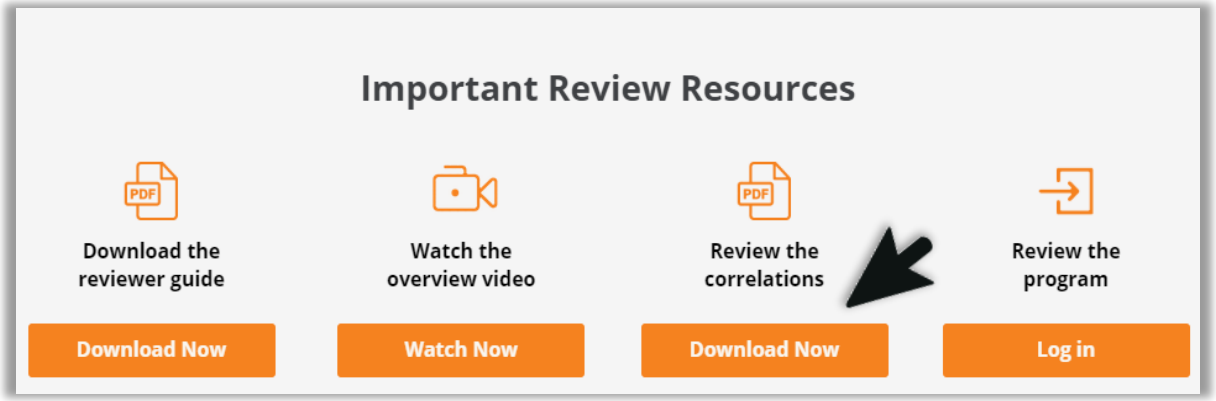


Review Gizmos Correlations to Academic Standards

Want to know how Science4Us aligns with the Idaho Content Standards?

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

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



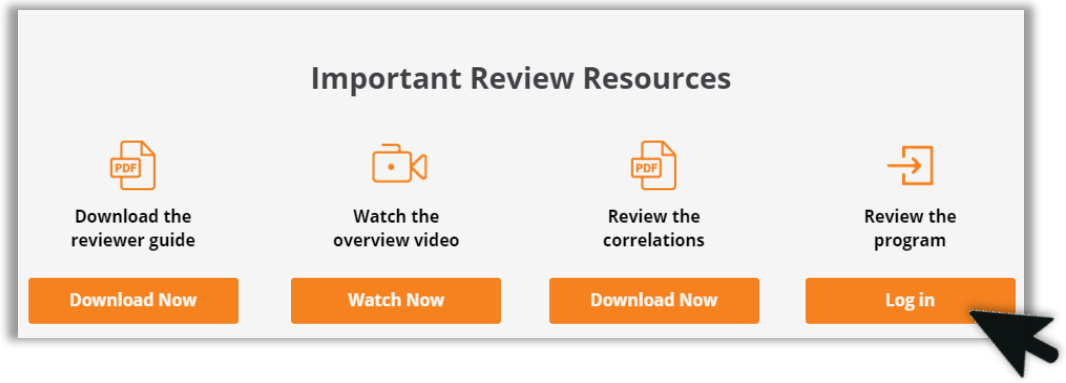
Review Steps

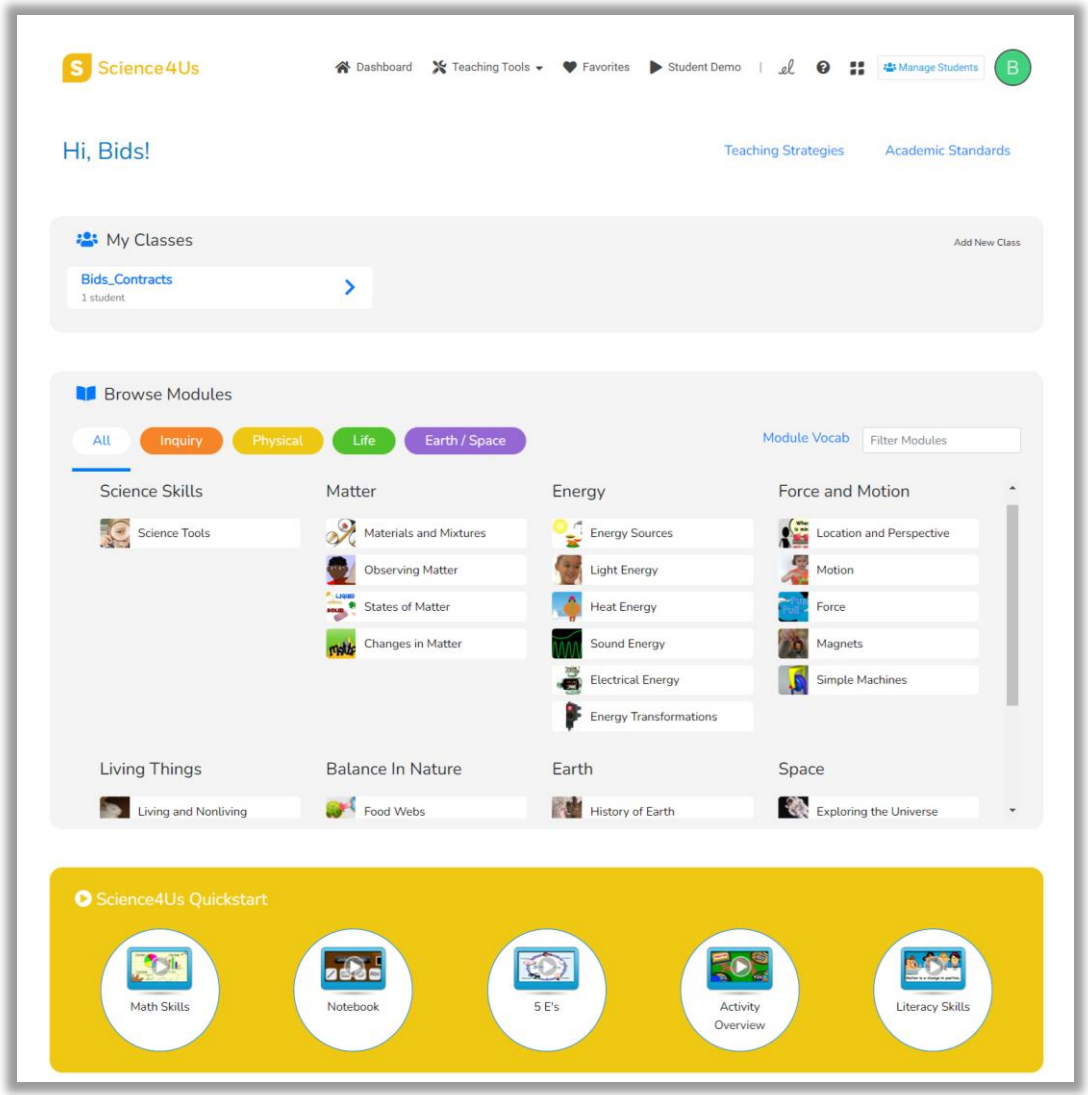
Review the Program

Click the **Log In** button below **Review the Program** to go to the Science4Us 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: Science4Us is web-based.
There are no print student texts or teacher editions.





Science4Us website homepage

Getting to Know the Science4Us Features

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

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

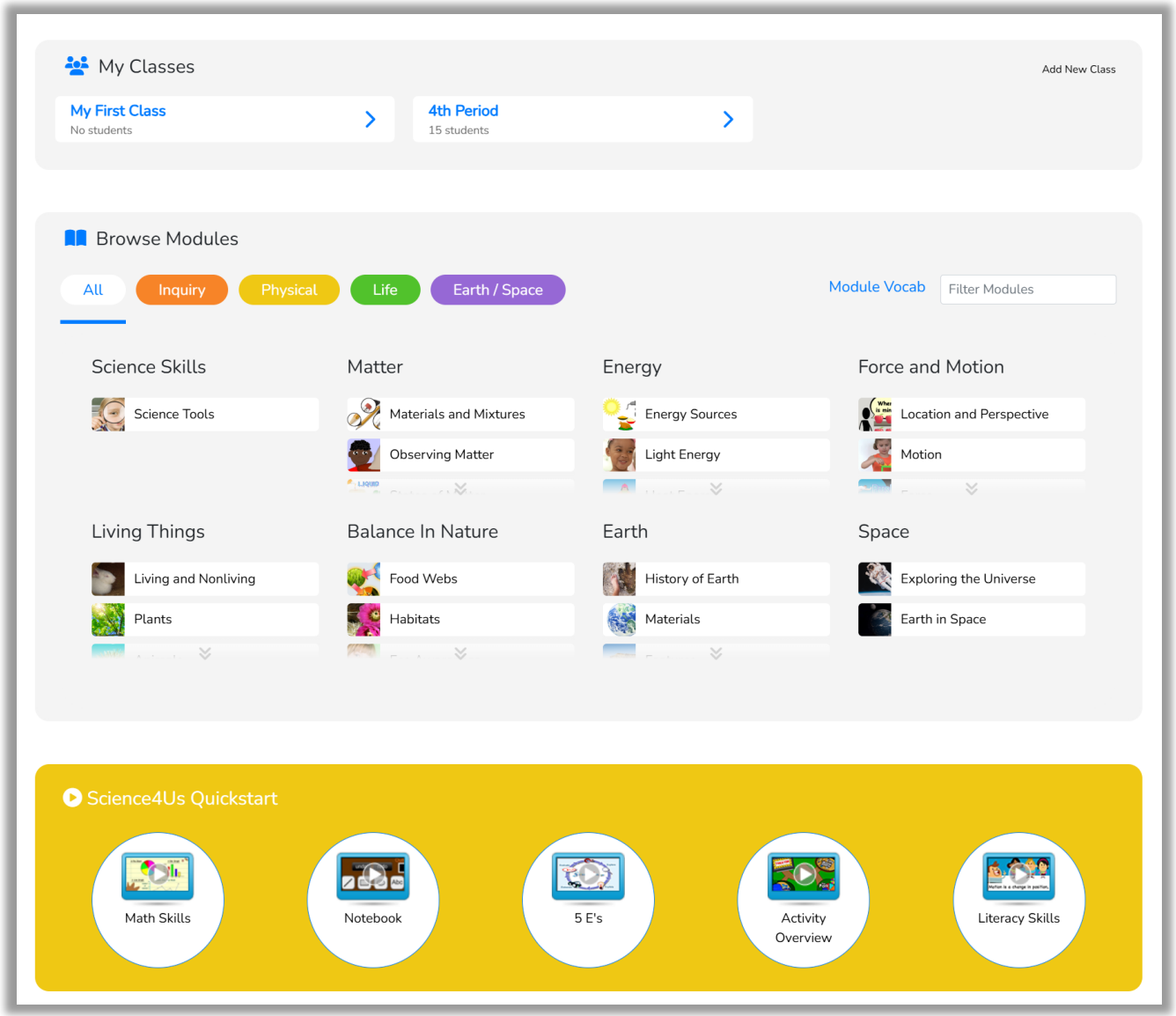
Product Design

1. Literacy and Math In Science
2. Three-Dimensional Learning
3. Real-World, Inquiry-Based Lessons
4. Scaffolding & Differentiation

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, all available from each module's lesson plan pages.

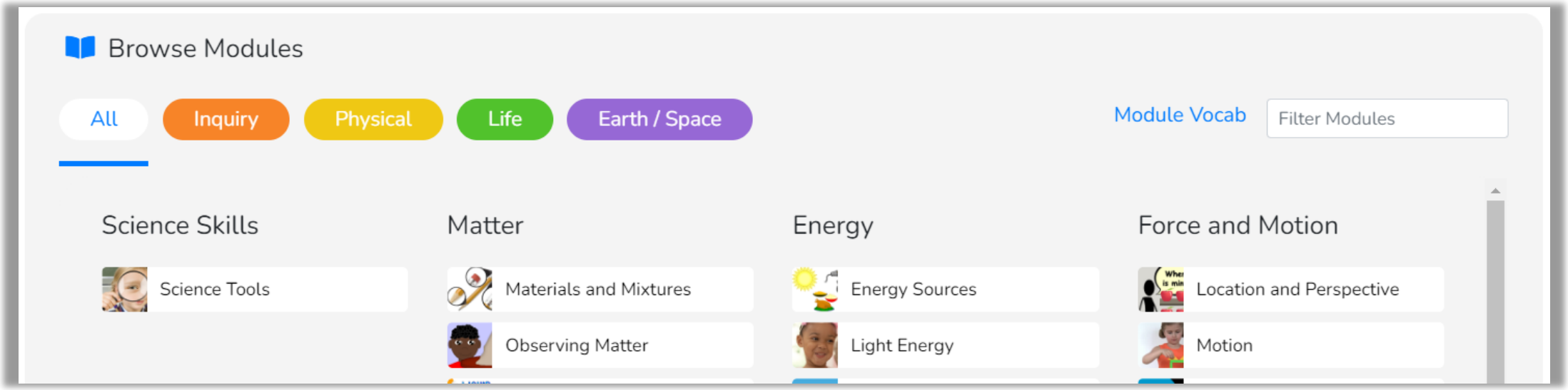
1. **Take a visual tour of the page** to familiarize yourself with Science4Us components and features.
2. **Start on the top navigation bar,** noticing the dropdown options within each of these main tabs: Teaching Strategies, Standards, Demos, etc.
3. **Watch the short teaching resources videos** at 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

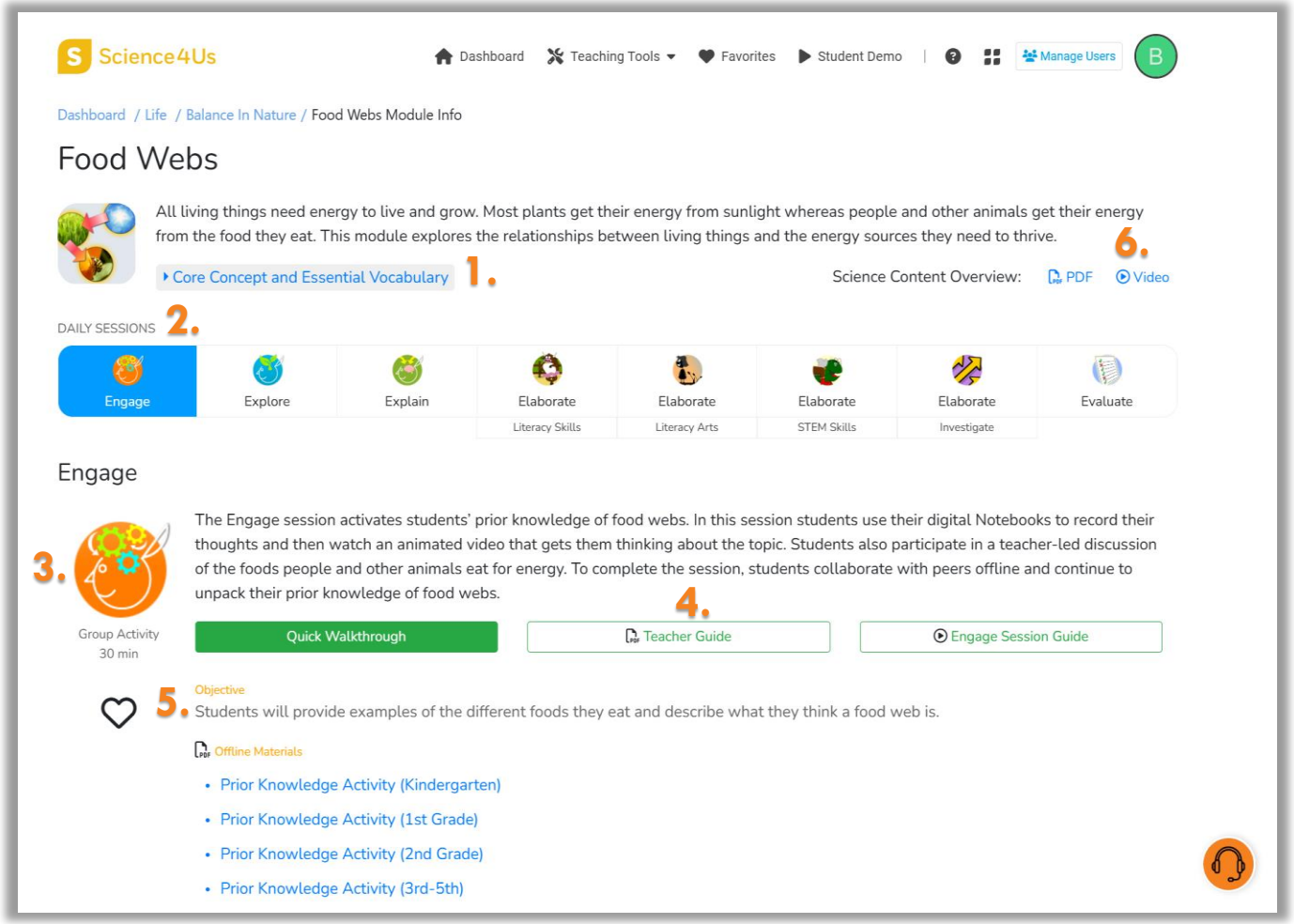
Science4Us supports teachers of all experience levels in addressing the key foundational science skills across four science disciplines, or "books," which include Physical Science, Life Science, and Earth/Space Science.

Within the four books are 28 modules/units that include more than 350 animated online activities and over 1,000 interactive offline activities.



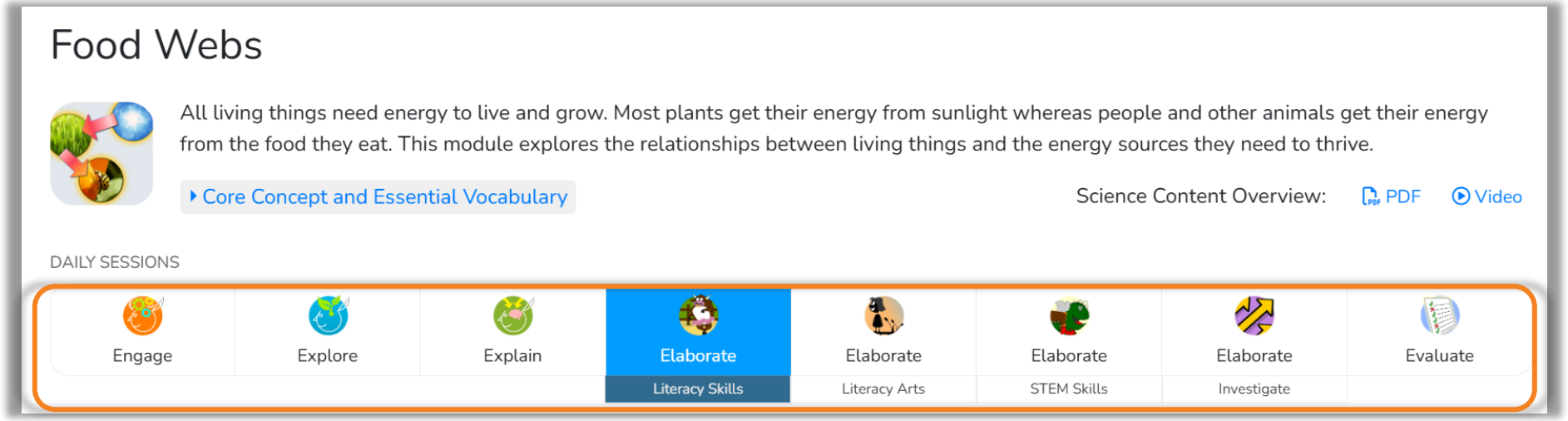
Instructional Features

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** are provided to get students hands-on with science.
6. Science4Us includes embedded pedagogical supports and **extensive professional development.**



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 concept and progress toward learning objectives.

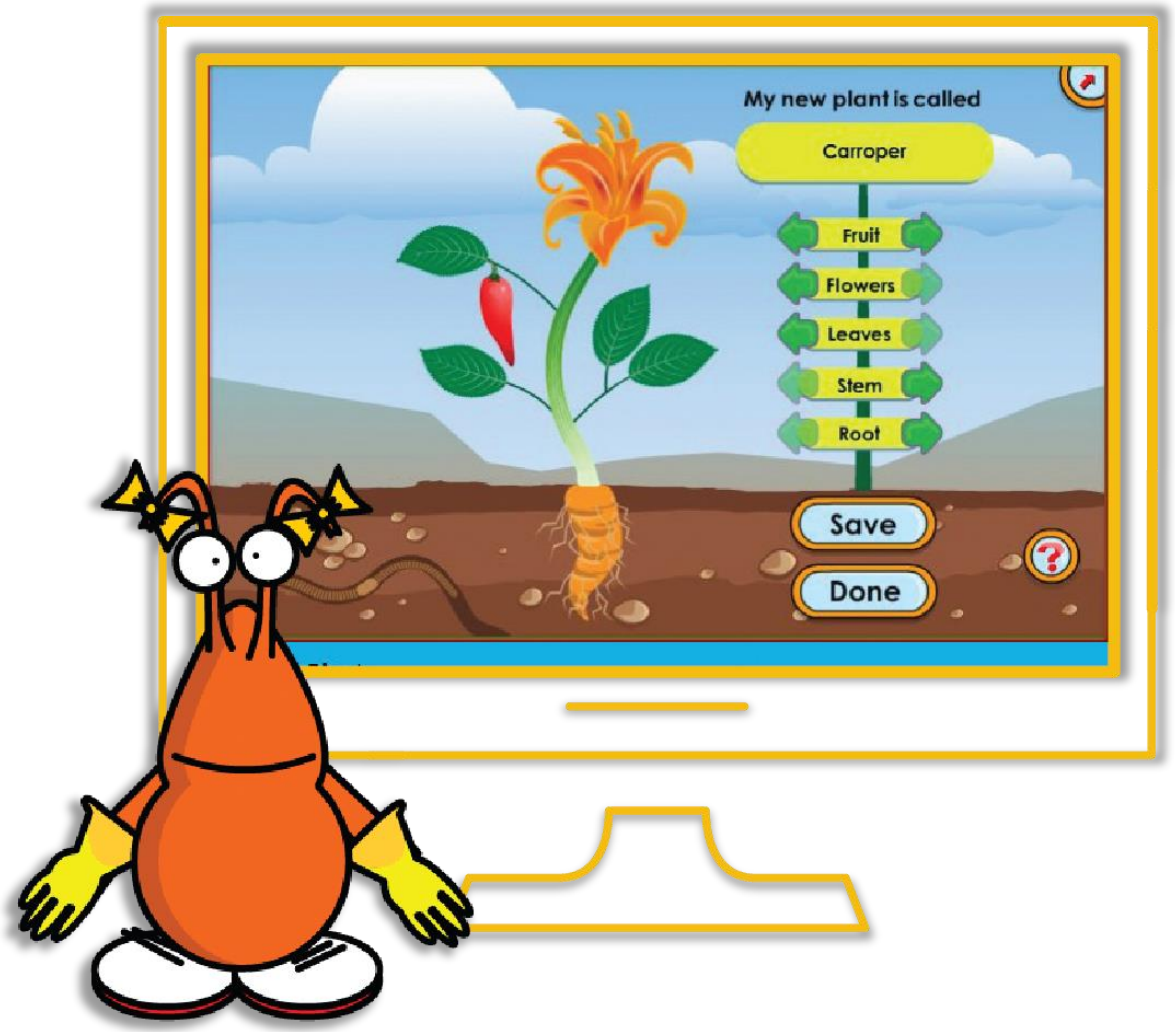


Assessment

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) that are scored immediately, showing student mastery of core concepts.

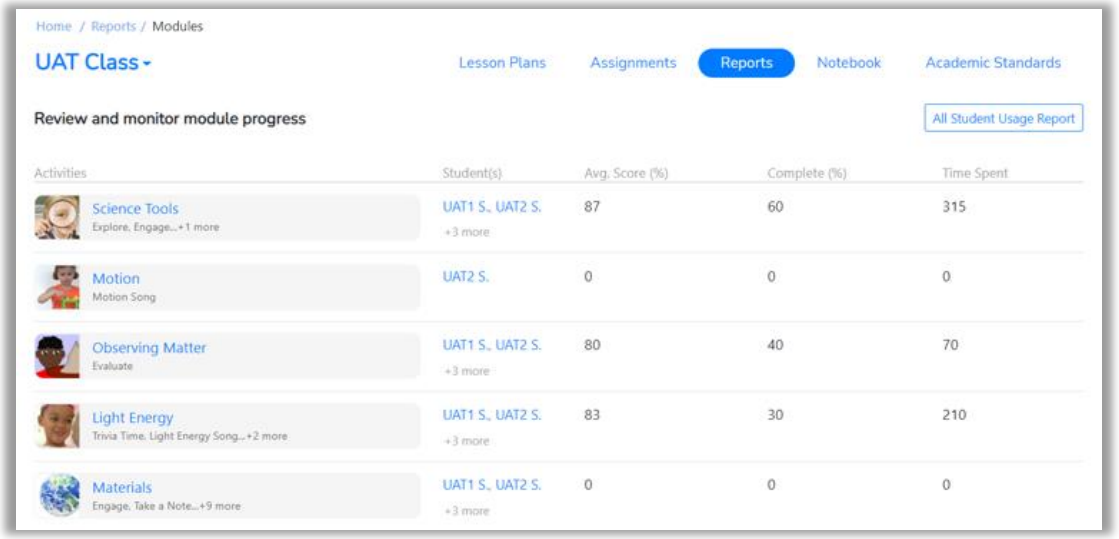
Each module has **five offline, grade-level-specific assessments**, in addition to **a standardized test prep** option. Teachers can print the assessments as an alternative to online administration.



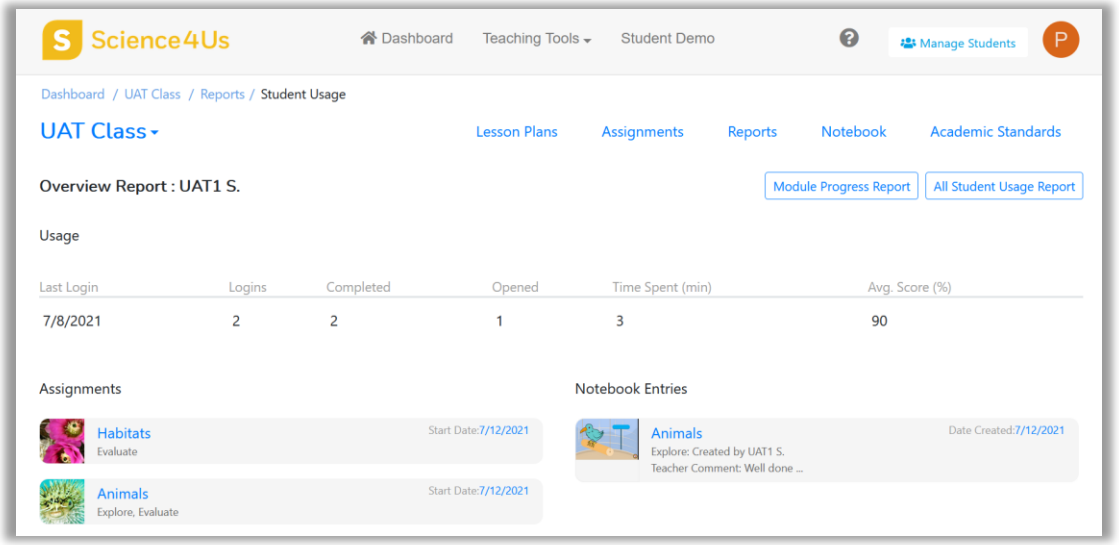
Reporting

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 Student Reports and 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.



Teacher Report: Module Overview



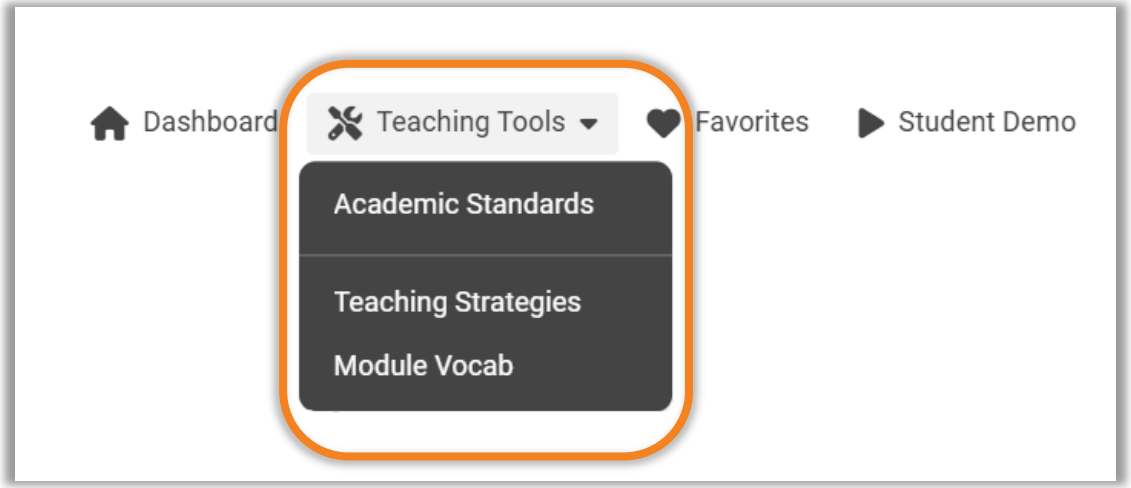
Teacher Report: Student Overview

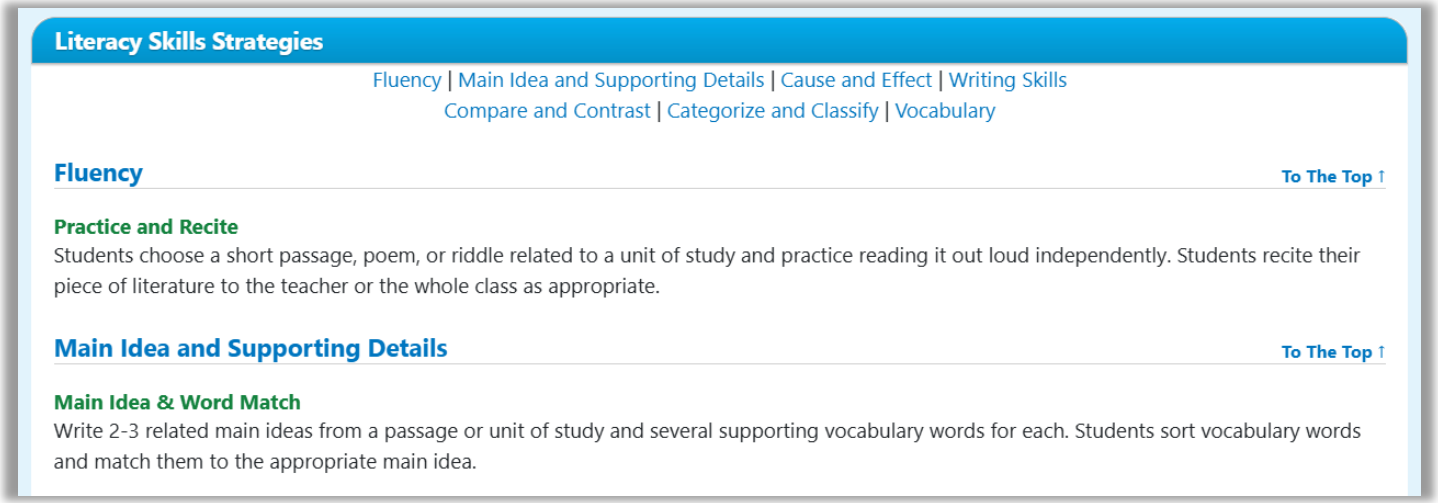
Implementation and Teaching Supports

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

On each of the lesson plans pages of the 28 modules, you can find a Teacher Guide, a video 5E Session Guide, Offline Materials 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 the 5E activities and lessons and help teachers incorporate literacy and math instruction into the science lessons.





Literacy & Math In Science

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

Science4Us lessons focus on the explicit instruction of 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; graphs; and graphic organizers such as Frayer Models, dichotomous keys, and Venn Diagrams.

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.

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.

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):** Science4Us incorporates Crosscutting Concepts such as Patterns, Cause and Effect, Scale, Proportionality and Quality, Systems and System Models, Energy and Matter, Structure and Function, as well as Stability and Change, throughout the 28 robust instructional models.

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.

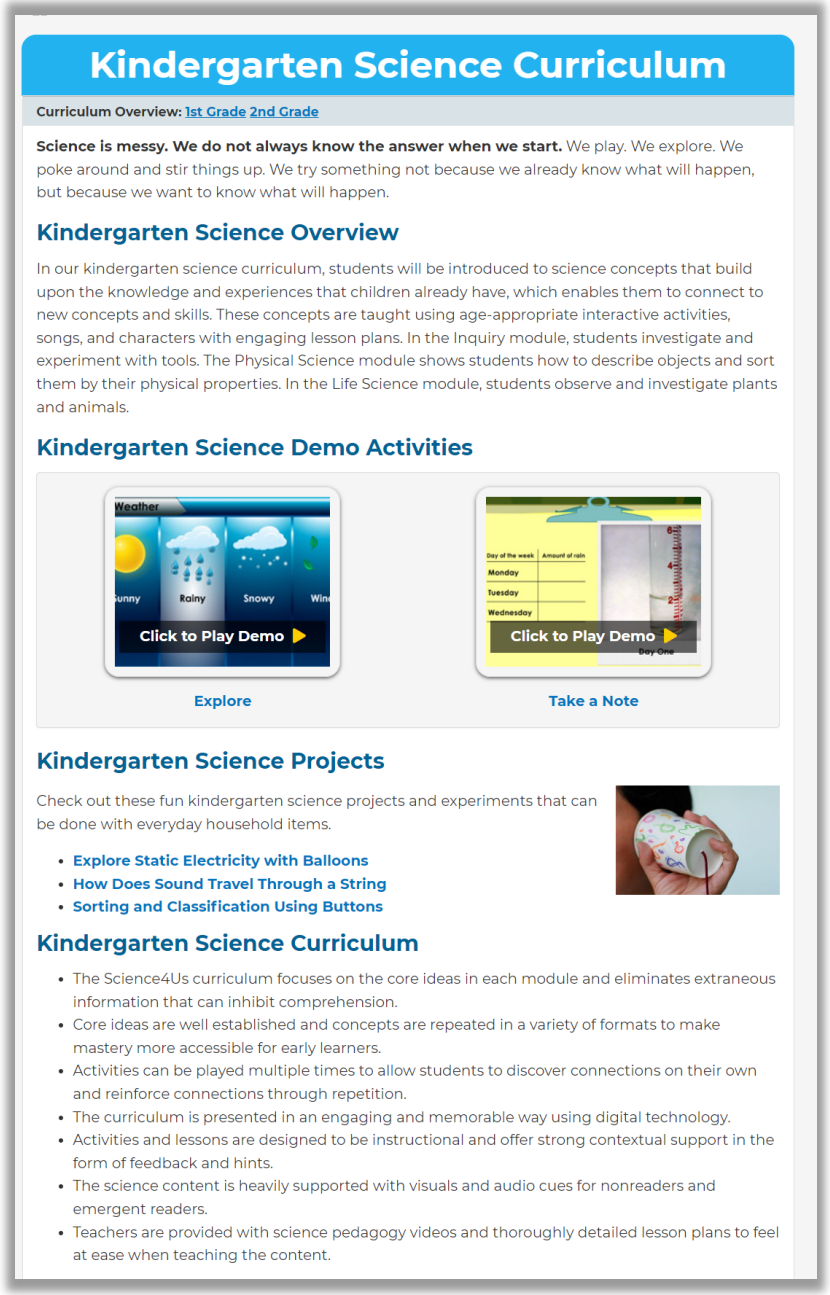
As an explicit strategy, Science4Us lessons routinely depict young children in real-world scenarios to highlight science concepts that occur around them every day. Students see how gravity comes into play at the playground, go shopping for the needs of a pet hamster, go on family outings and notice the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

Scaffolding & Differentiation

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. A wide array of activity examples is provided as clickable links throughout this overview document.

Our **K-2 STEM & Science Curriculum Overview** provides teachers with helpful supports and strategies to reach **all** students.



Kindergarten Science Curriculum

Curriculum Overview: 1st Grade 2nd Grade

Science is messy. We do not always know the answer when we start. We play. We explore. We poke around and stir things up. We try something not because we already know what will happen, but because we want to know what will happen.

Kindergarten Science Overview

In our kindergarten science curriculum, students will be introduced to science concepts that build upon the knowledge and experiences that children already have, which enables them to connect to new concepts and skills. These concepts are taught using age-appropriate interactive activities, songs, and characters with engaging lesson plans. In the Inquiry module, students investigate and experiment with tools. The Physical Science module shows students how to describe objects and sort them by their physical properties. In the Life Science module, students observe and investigate plants and animals.

Kindergarten Science Demo Activities

Explore | Take a Note

Kindergarten Science Projects

Check out these fun kindergarten science projects and experiments that can be done with everyday household items.

- Explore Static Electricity with Balloons
- How Does Sound Travel Through a String
- Sorting and Classification Using Buttons

Kindergarten Science Curriculum

- The Science4Us curriculum focuses on the core ideas in each module and eliminates extraneous information that can inhibit comprehension.
- Core ideas are well established and concepts are repeated in a variety of formats to make mastery more accessible for early learners.
- Activities can be played multiple times to allow students to discover connections on their own and reinforce connections through repetition.
- The curriculum is presented in an engaging and memorable way using digital technology.
- Activities and lessons are designed to be instructional and offer strong contextual support in the form of feedback and hints.
- The science content is heavily supported with visuals and audio cues for nonreaders and emergent readers.
- Teachers are provided with science pedagogy videos and thoroughly detailed lesson plans to feel at ease when teaching the content.

Thank you for reviewing ExploreLearning Science4Us®!

We hope you enjoyed a dive into our learning solution for early STEM foundations and exposure!

Please reach out to ELBids@explorelearning.com if you have any questions during your review. You can also reach us at 866.882.4141.