

# Florida K-12 Science 10-Step Navigation Guide

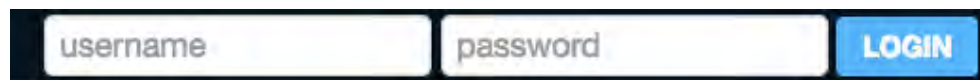


# Navigating Science Techbook in 10 Easy Steps

## STEP 1

### Log In

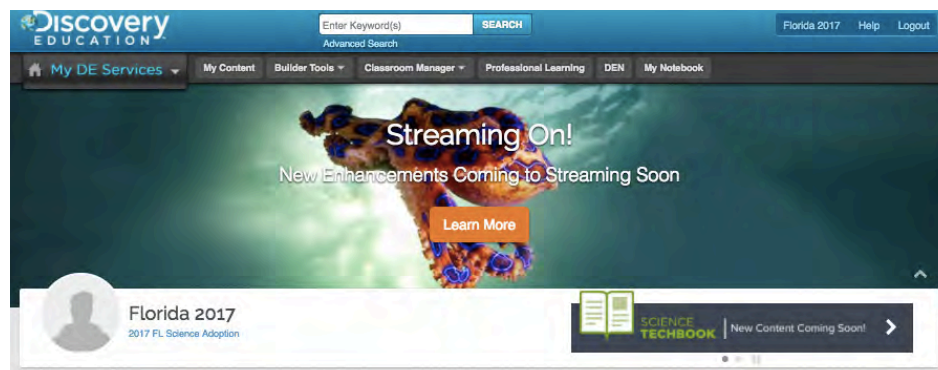
From any browser that supports HTML5, navigate to DiscoveryEducation.com. Input the username and password that was provided to you and click LOGIN.



## STEP 2

### Select Science Techbook

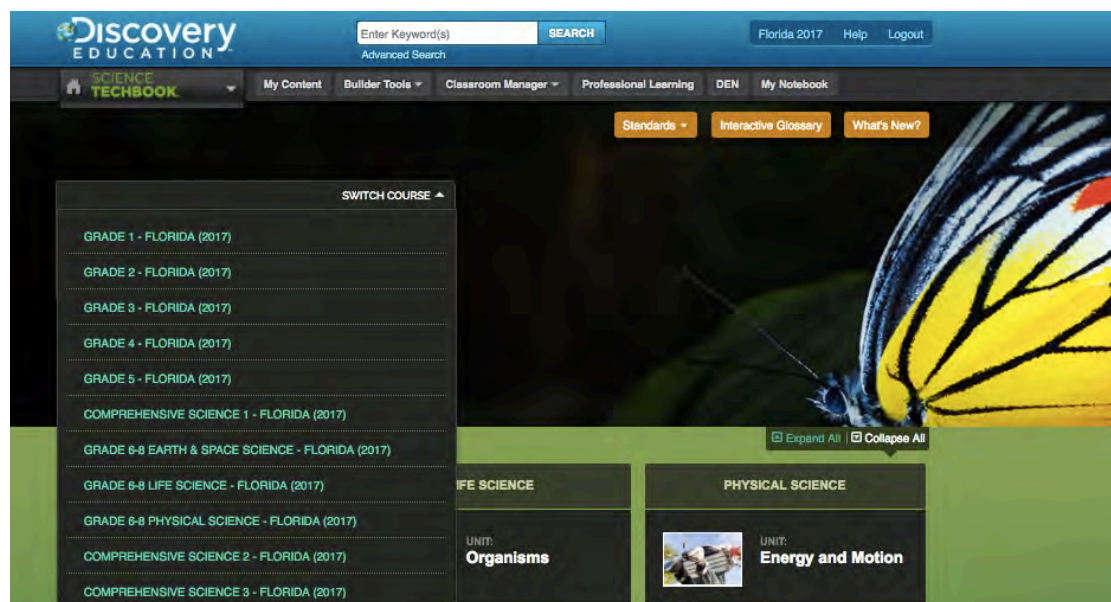
Select "Science Techbook" under the "My DE Services" drop down menu.



## STEP 3

### Navigate to Your Desired Science Techbook

If your school or district has access to more than one Science Techbook, you will need to select the specific Techbook under the "Switch Course" drop down menu.



## STEP 4

### Select a Unit and Concept

Click the “Table of Contents” tab to review all of the available units of study and corresponding concepts for the course. Click on the “Five E’s” for the desired concept to continue.

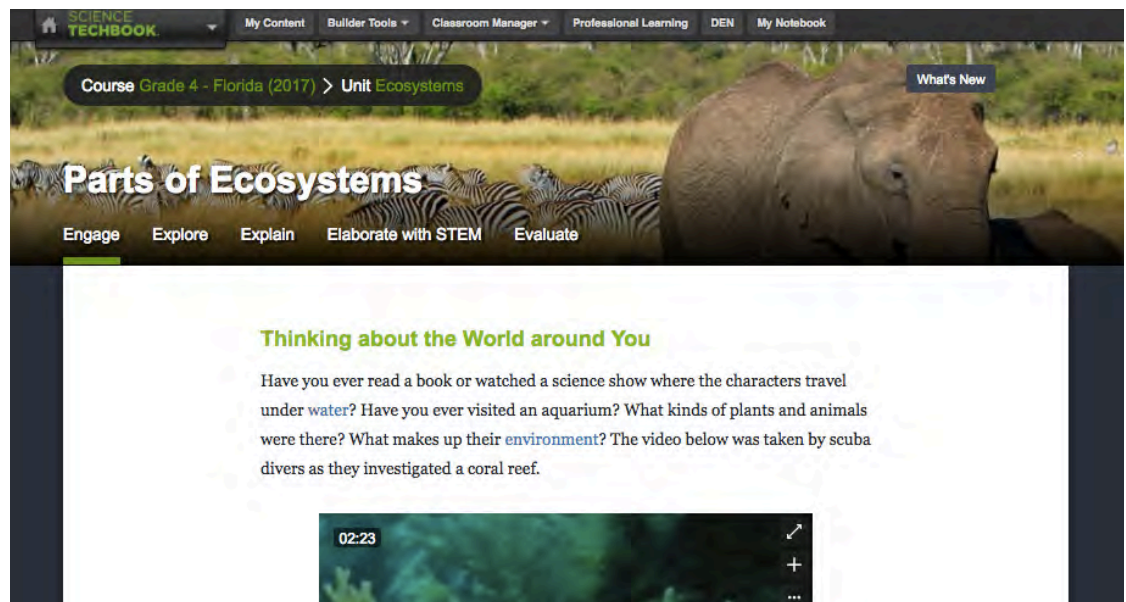


The screenshot shows the Discovery Education Science Techbook interface for Grade 4 - Florida (2017). The page is titled "Grade 4 - Florida (2017)" and has a "Table of Contents" tab selected. The interface is divided into three main columns: Earth and Space Science, Life Science, and Physical Science. Under Earth and Space Science, there are units for "Earth Materials" and "Exploring Space". Under Life Science, there is a unit for "Ecosystems" which is expanded to show concepts: "Parts of Ecosystems", "Interactions in Ecosystems", and "Long-Term Changes in Ecosystems". Under Physical Science, there are units for "Energy" and "Motion".

## STEP 5

### Begin with the Engage Tab

The “Engage” tab provides students with the “core interactive text.” The text, and corresponding media, introduce students to real world phenomena connected to the science concept. Several “technology enhanced items” on the “Engage” tabs allow students to provide data to the teacher, related to common misconceptions, in order for the teacher to design the appropriate learning progression.

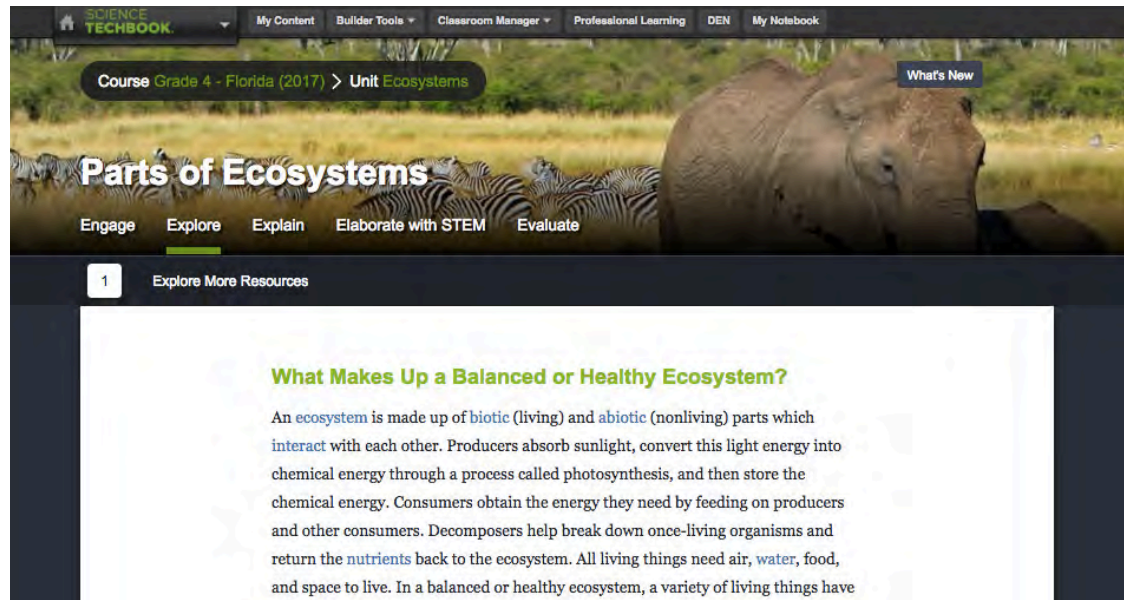


The screenshot shows the Discovery Education Science Techbook interface for the "Engage" tab of the "Parts of Ecosystems" unit. The page is titled "Parts of Ecosystems" and has an "Engage" tab selected. Below the title, there is a section titled "Thinking about the World around You" with a paragraph of text: "Have you ever read a book or watched a science show where the characters travel under water? Have you ever visited an aquarium? What kinds of plants and animals were there? What makes up their environment? The video below was taken by scuba divers as they investigated a coral reef." Below the text is a video player showing a coral reef. The video player has a duration of 02:23 and a play button.

## STEP 6

### Click on the Explore Tab

The “Explore” tab provides students with the “core interactive text.” The text for all pages includes multiple differentiation options that can be found in the right-hand tool bar. These include text size, reading level, print features, individual and class assignment options, and the ability to toggle to a Spanish language version. Additionally, the “Explore More Resources” section contains videos, reading passages, hands-on labs and activities, and interactive simulations to deepen students understanding of the science concept.




The screenshot shows the Science Techbook interface for the unit "Parts of Ecosystems". The navigation bar at the top includes "My Content", "Builder Tools", "Classroom Manager", "Professional Learning", "DEN", and "My Notebook". The course path is "Course Grade 4 - Florida (2017) > Unit Ecosystems". The main title is "Parts of Ecosystems" with a "What's New" button. Below the title are tabs for "Engage", "Explore", "Explain", "Elaborate with STEM", and "Evaluate". The "Explore" tab is selected, and a sub-tab "1 Explore More Resources" is visible. The main content area displays the heading "What Makes Up a Balanced or Healthy Ecosystem?" followed by a paragraph: "An ecosystem is made up of biotic (living) and abiotic (nonliving) parts which interact with each other. Producers absorb sunlight, convert this light energy into chemical energy through a process called photosynthesis, and then store the chemical energy. Consumers obtain the energy they need by feeding on producers and other consumers. Decomposers help break down once-living organisms and return the nutrients back to the ecosystem. All living things need air, water, food, and space to live. In a balanced or healthy ecosystem, a variety of living things have

## STEP 7

### Click the Explain Tab

The “Explain” tab provides students with opportunities to communicate their self-constructed scientific explanation, generated from evidence collected from the “Explore” tab. Students can use multiple means of representation for their scientific explanation, such as an online Boardbuilder or uploading media files, to meet their learning style.



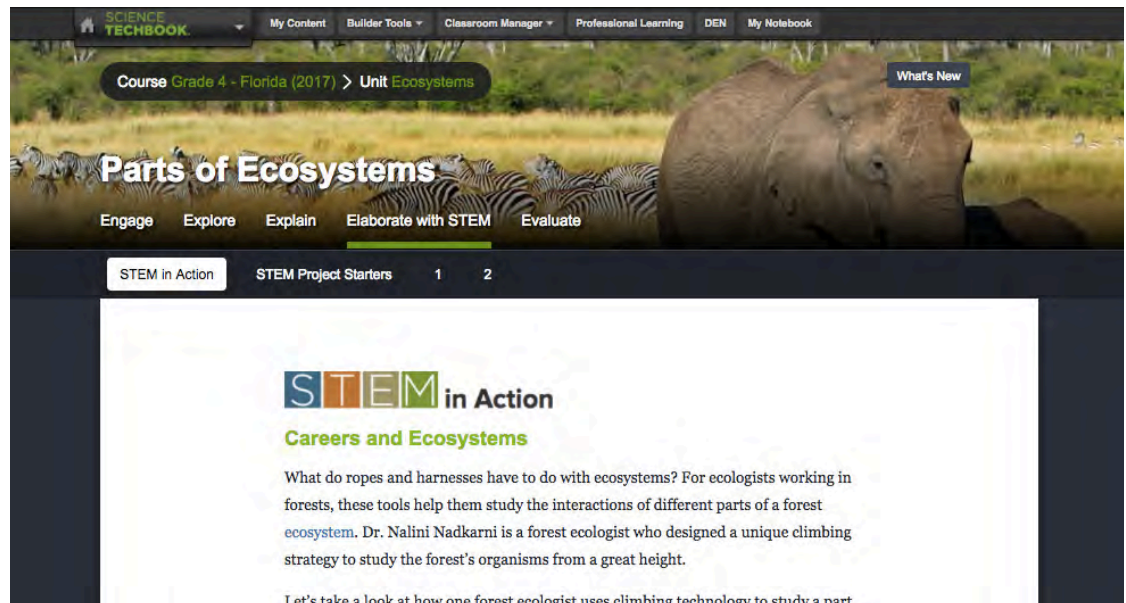
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## STEP 8

### Click on the Elaborate with STEM Tab

The “Elaborate with STEM” tab provides students with a “STEM in Action” section that connects real-world career opportunities related to the science content. “STEM Project Starters” allow for an extension of learning and student collaboration, as students are presented with authentic problems, which connect science, technology, engineering and mathematics, and expected to research and design solutions.

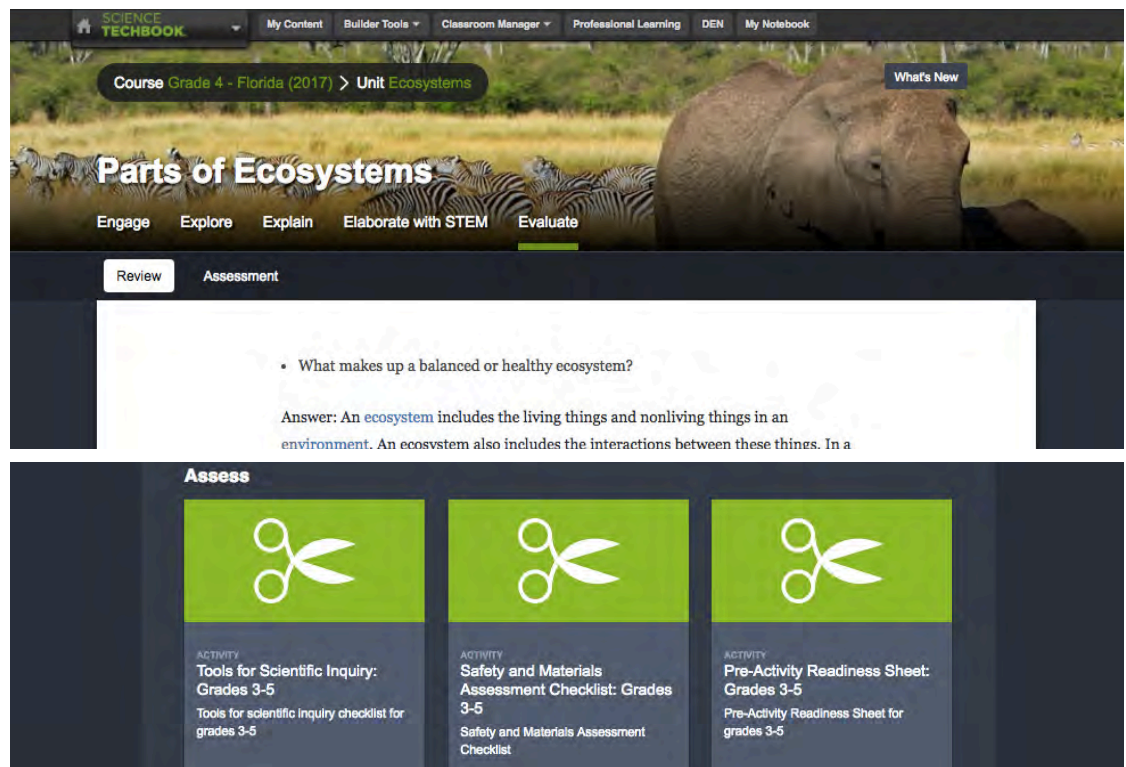


The screenshot shows the Science Techbook interface for the course "Grade 4 - Florida (2017) > Unit Ecosystems". The "Elaborate with STEM" tab is selected, and the "STEM in Action" section is displayed. The section title is "STEM in Action" with the subtitle "Careers and Ecosystems". The text describes how ropes and harnesses are used by ecologists to study forest interactions, mentioning Dr. Nalini Nadkarni. A "What's New" button is visible in the top right corner.

## STEP 9

### Click the Evaluate Tab

The “Evaluate” tab provides a review for students and multiple options for student assessment, including brief and extended constructed response items, and multiple choice questions. This section also includes a student self-assessment.



The screenshot shows the Science Techbook interface for the course "Grade 4 - Florida (2017) > Unit Ecosystems". The "Evaluate" tab is selected, and the "Assessment" section is displayed. A question is shown: "What makes up a balanced or healthy ecosystem?". The answer provided is: "An ecosystem includes the living things and nonliving things in an environment. An ecosystem also includes the interactions between these things. In a". Below the assessment, there are three activity cards, each with a scissors icon, representing assessment tools for scientific inquiry, safety and materials, and pre-activity readiness sheets for grades 3-5.

## STEP 10

### Click the Model Lesson Tab

Using the “Teacher Presentation Mode” button located in the bottom right hand corner, teachers can access point-of-use teacher notes within each Five E tab, as well as the Model Lesson. The Model Lesson provides curriculum alignment information, as well as strategies for instruction and a list of provided resources within the concept.

The screenshot shows the Science Techbook interface for the 'Parts of Ecosystems' unit. The 'Model Lesson' tab is selected in the navigation bar. The page content includes a sidebar with a table of contents and a main text area titled 'Teacher Preparation' with a sub-section 'Background for the Teacher'. The text describes ecosystems and energy flow.

Lesson Overview
Teacher Preparation
Materials to Prepare
Session 1
Session 2
Session 3
Session 4
Session 5
Assignments and Resources

### Teacher Preparation

#### Background for the Teacher

An ecosystem includes the living and nonliving things in an environment and their interactions. Nonliving things include rocks, soil, water, air, and the climate. Animals, plants, fungi, and bacteria are some living parts of an ecosystem. To survive animals and plants live in ecosystems that meet their needs (e.g. food, habitat). They also have their own niche, or role, in the ecosystem, and their adaptations help them survive.

Energy flows through all parts of an ecosystem through food webs. Producers use the sun's energy to make their own food. Consumers eat other living things for their energy.

## ADDITIONAL FEATURES

### Menu Bar

On the right of each page, there are two gray menu bars that allow additional features: assigning items to students, sharing to Learning Management Systems, printing, changing the lexile level and language, as well as accessing the Dashboard data, glossary, whiteboard, and graphing tools.

The screenshot shows the Science Techbook interface for the 'Parts of Ecosystems' unit. The 'Model Lesson' tab is selected in the navigation bar. The page content includes a sidebar with a table of contents and a main text area titled 'Thinking about the World around You'. The text discusses reading and watching science shows. Below the text is a video player showing a coral reef.

Lesson Overview
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### Thinking about the World around You

Have you ever read a book or watched a science show where the characters travel under water? Have you ever visited an aquarium? What kinds of plants and animals were there? What makes up their environment? The video below was taken by scuba divers as they investigated a coral reef.

02:23