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.

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" tab allow students to provide data to the teacher, related to common misconceptions, in order for the teacher to design the appropriate learning progression.
Click on the Explore Tab
The “Explore” tab provides students with the “core interactive text.” The text, for all pages, includes multiple differentiation options found in the right hand tool bar, including 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.

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.
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.

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.
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.

Teacher Preparation

Background for the Teacher

Through the process of adaptation, species develop traits that make them better suited for survival in their environment. This process happens over many generations. For example, present-day giraffes have long necks which allow them to eat leaves from the tops of trees. Earlier forms of giraffes did not have such long necks. Over many generations, the giraffe population shifted in the direction of the longer-necked trait because longer-necked individuals were more successful at surviving and reproducing. This type of adaptation is a structural adaptation.

There are two types of adaptations that can occur in organisms. Structural adaptations occur when the physical characteristics of an organism change in order for the organism to better survive in its environment. The other type of adaptation that can occur is a behavior adaptation. Behavioral adaptations are occur when there are changes in behavior in order to better survive. Examples of this type of