



STUDENT GUIDE

SMART SCIENCE



Smart Science Student Guide

Welcome to the Student Manual for Smart Science® Lessons

The first step to accessing Smart Science® Lessons is to open a browser window. Any browser that supports HTML5 will work, we prefer Chrome.

Before you actually log into the program, note that Smart Science® lessons have an informational website, www.smartscience.net (or smartsciencelearning.com) with helpful information and a form you can fill out to ask questions of our team.

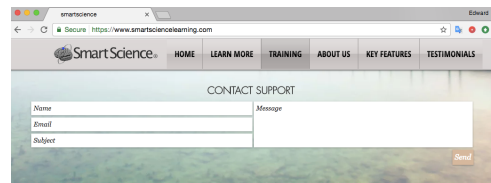
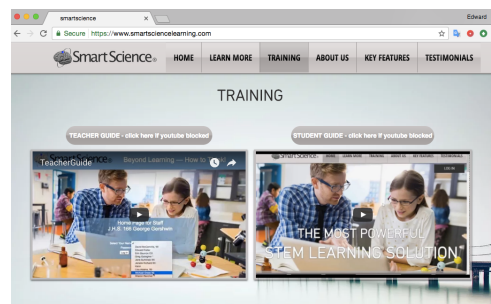
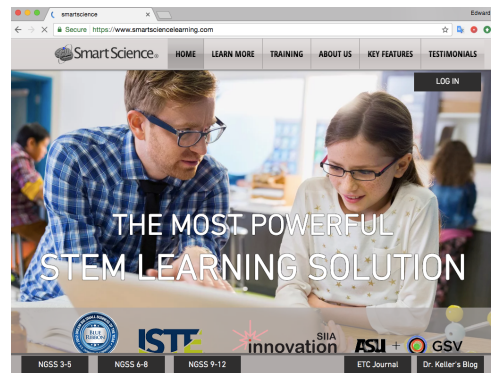
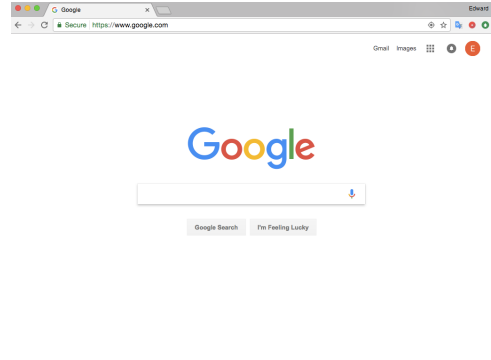
And if you click the training button at the top of the page you will have access to a student guide video and teacher guide video, each around 10 minutes in length. If youtube is blocked at your site, press the button just above the video for the alternate link to the videos.

Below the training videos is a feedback form to ask questions from the Smart Science® team members. Please feel free to ask us anything to make your Smart Science® experience more enjoyable or easier to understand.

Now, let's log into Smart Science® Lessons.

www.smartsciencelab.com is the portal that students log into to access their lessons.

Note, Staff members might press the "homepage for staff" button to access their portal from here.

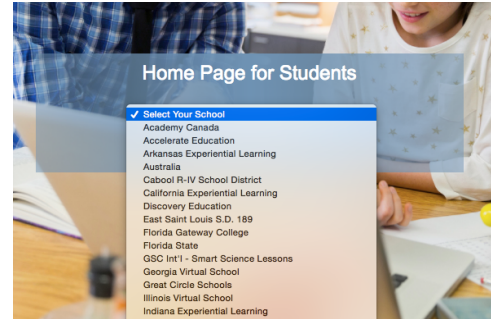


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If you don't have a direct link to your school use the following steps:

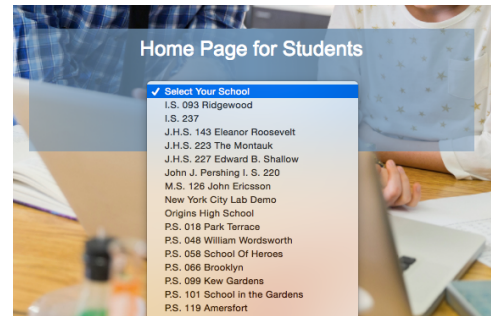
First, select your school or school district from the drop down menu.

For example, New York City Department of Education.



Then, once you are in the school district, if you need to select a school do so now from the next menu.

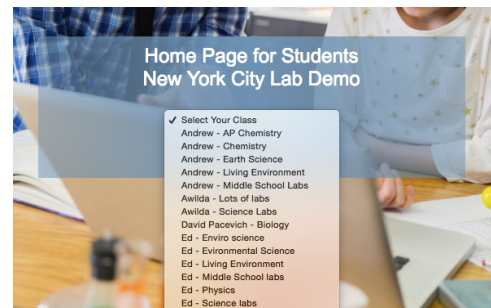
For example, I have selected the “New York City Lab Demo”



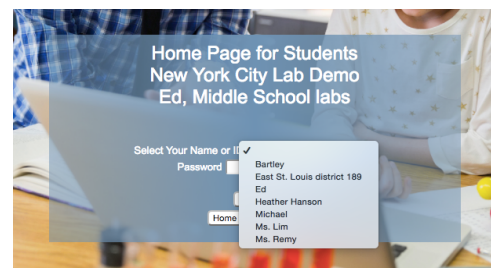
Once you have picked your school, there are 2 ways to log in.

- If you have log in by ID, type your ID in and press Submit, then select your class, type your password and press Log In.

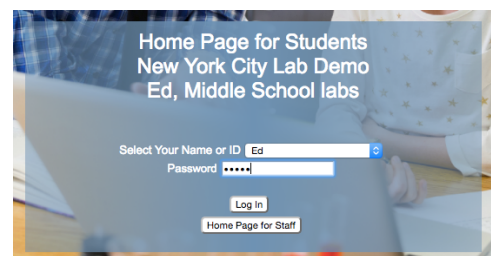
- If you have select your name and class, pick your class from the menu,



Then pick your name from the next menu



Last, type your password and press Log in.



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Once you have logged in, you will either have a long list of topics you can enter, or a short list that the teacher has assigned you. Pick the topic you have been asked to do by your teacher.

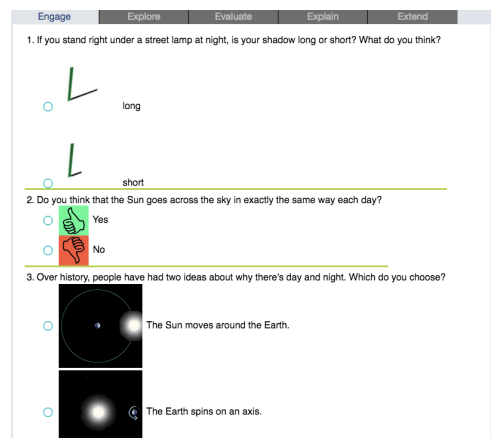
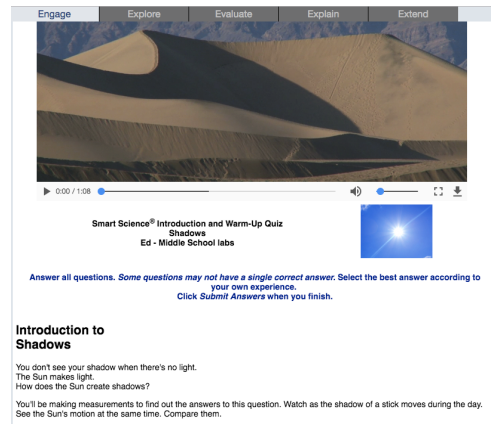
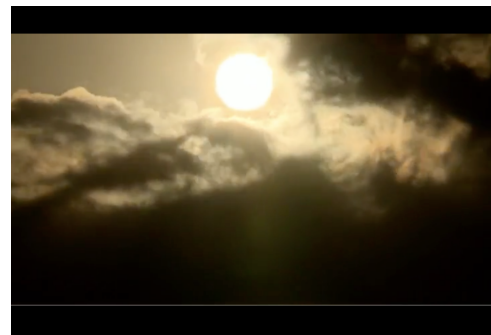
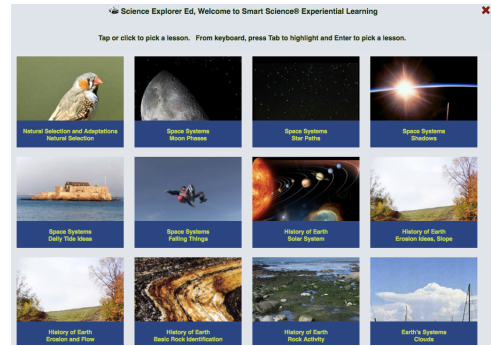
The first thing you will see in most cases is an engaging video about the topic you picked.

Watch the video until it ends.

Then start the lesson. Read the background information below the video window.

If you need to, you can translate the lesson using the Google Translate browser extension (works in most browsers) in over 100 languages.

Now answer the warm up questions below the reading. Each question asks for your opinion on a certain idea so try your best even though you may not know much about this topic yet.



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Once finished with the warm-up questions, press the Submit button and notice the yellow confirmation box that appears at the top.

Press Submit again to confirm you are ready to move on.

You will see the results of your quiz after you Submit.

Correct answers are marked in Green and wrong answers are marked in Red, with an explanation to each question below the question in a blue box.

Press the close button at the bottom to move into the explore page, where the virtual lab is.

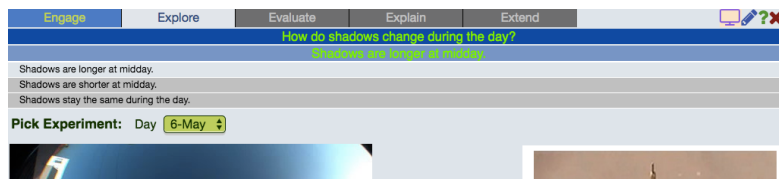
Upon entering the Explore page, you should see an instructional video automatically play.

This video will last about 2 minutes and teach you how to pick a hypothesis and test in in the virtual lab. Watch closely and listen to important science concepts within each lesson.

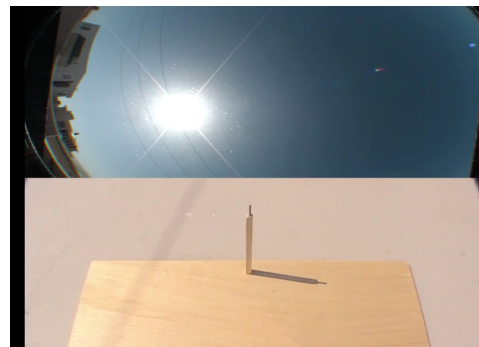
Once the video is over, you will see the virtual lab screen, the Explore page.

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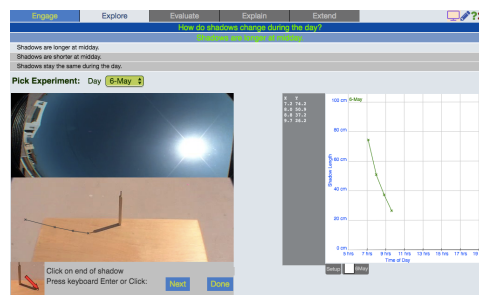
Look to the top of the screen to choose or write a hypothesis you will be testing. Consider the science of the lab and pick one by clicking it.



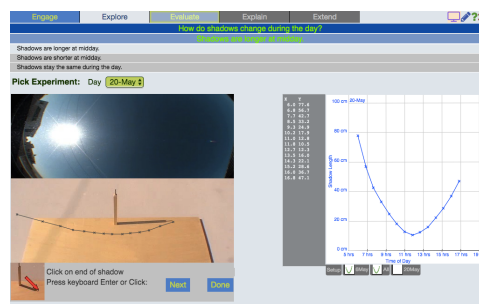
Then just below the hypothesis area, pick the experiment you will run to try and test the hypothesis and click the green play button to watch the experiment video. Notice the video plays full screen.



After the video has finished playing, you will see a box with instructions below the video frame. Follow the measurement instructions to click to make data points, or in some cases type in the data. **Every Smart Science topic is different so make sure you follow the directions here.**

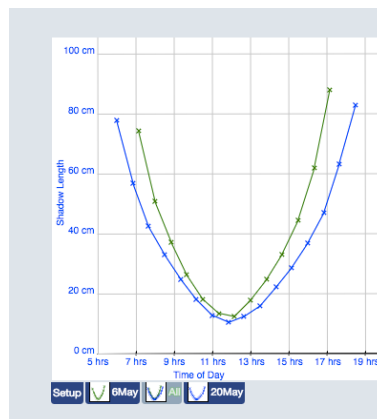


You may need to measure several different experiment videos to make sure you understand the results of the lab. In general do as many experiments as you can and think about the graphs you make as they relate to your hypothesis.



How does the picture of the graph support or not support your hypothesis?

You can use the All button tab below the graphs to show all the graphs at once and compare your data sets. This will add more understanding to what is happening in each lab. Comparing graphs leads to a deeper understanding of the science in the lab.

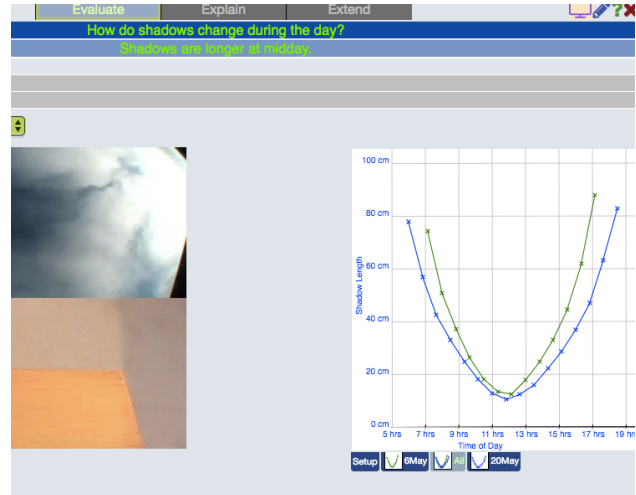


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Now let's examine some extra help areas available in every topic.

In the upper right area, notice a few icons you can click for help.

The first icon looks like a TV and will replay the instructional video.



The second icon looks like a pencil or pen and this opens the online lab notebook.

Take notes here and when you hand in your lab they will be sent to the teacher. Any questions, thoughts, or interesting ideas you can put in here and the teacher can give you feedback and answers after you finish the lesson.

Shadows
Write notes here for this lesson. All your notes will be saved and shown here and in your report for your instructor and your archive.

Close

Within the green question mark are a few help areas for every topic.

Notice Goals, Procedure, Scientist, Dictionary, Vocabulary and Lesson Help.

Access each of these and see if they can help you understand the science behind each topic.

Engage Explore Evaluate Explain Extend

How do shadows change during the day?
Shadows are longer at midday.

Pick Experiment: Day 20-May

Goals
Procedure
Scientist
SI Units
Dictionary
Vocabulary
Lesson Help

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Now you are ready to try the post-lab quiz by pressing the Evaluate button at the top of the screen.

Each quiz has between 3 and 10 questions depending on your grade level and other factors. Answer each question based on the science you learned in the lesson, and use all the help pages under the green question mark to refer to important procedure and vocabulary items.

Just like the warm-up quiz, when you are finished, press Submit and confirm the Submit. Then results will display for you with correct answers marked in green and wrong answers marked in red. Worked out explanations will be below each question.

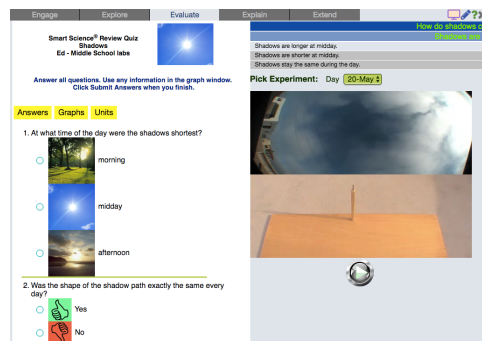
If you do not see the results, your instructor has made a minimum grade required to move on and you may take the quiz up to 3 total times to try and get the passing grade.

When finished press the Close button to move on.

The last part of each lesson that is required to get full credit is the Explain page. Press the explain button at the top of the screen once it is active to begin to write your lab report.

Each report consists of several writing areas you will fill in using the prompts above the box. It follows a standard process for a science lab report.

Write at least a few sentences in each box and follow any instructions your teacher gives you.



4. Is the Sun always directly overhead in the middle of the day?



Yes



No

No. The Sun is rarely directly overhead. If you lived above the arctic circle, it would never be directly overhead.

5. Which date had the shortest shadow?

6-May



20-May

20-May has a shorter shadow at the middle of the day than 6-May does.

6. Is the path before midday approximately a mirror image of the path afterward?



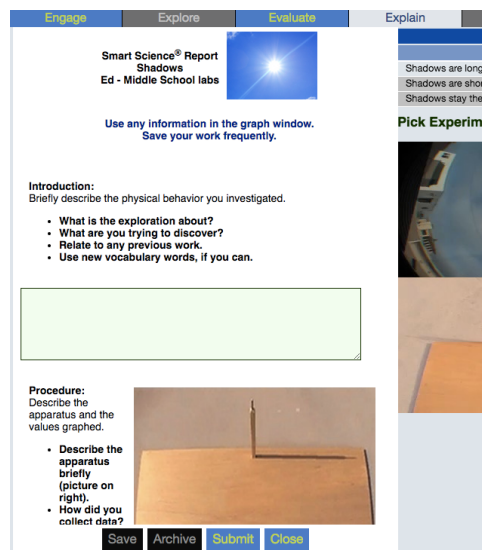
Yes



No

Yes. You should see an approximate symmetry between the morning and afternoon paths of the Sun.

Close



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When done writing, make sure and press Submit to hand in the report. Press Save button any time to save your work but this won't send it to the teacher. Close the report when finished with the close button.

The last part of the lab which is generally optional is the Extend page. Do this if your teacher asks you or if you just want to learn more about the topic you are learning.

This concludes the student guide for Smart Science® lessons. Thanks and Enjoy!

Smart Science® Extra Exploration
Shadows
Ed - Middle School labs



[Find help in the graph window.](#)

Further Explorations
How can you find out which month has the Sun highest in the sky? Write a description of experiments you could do.

