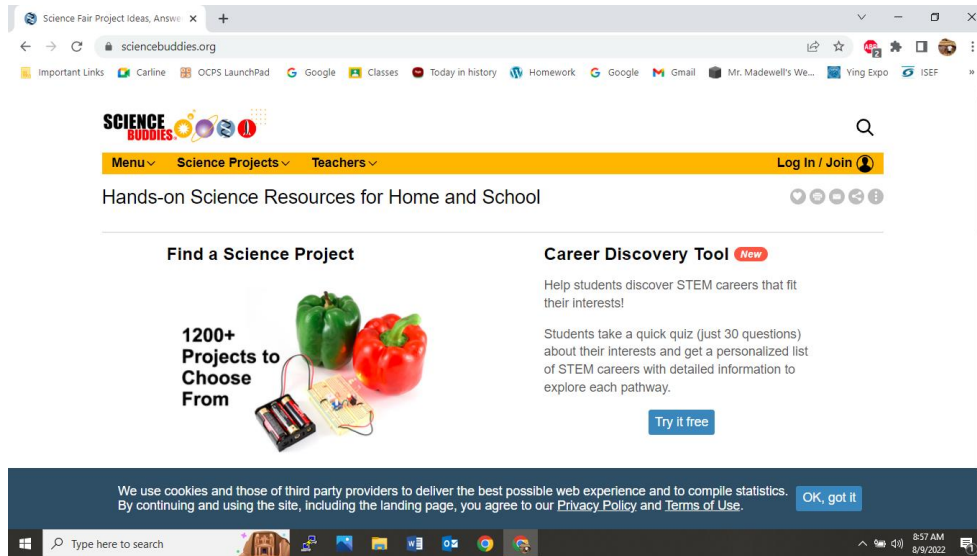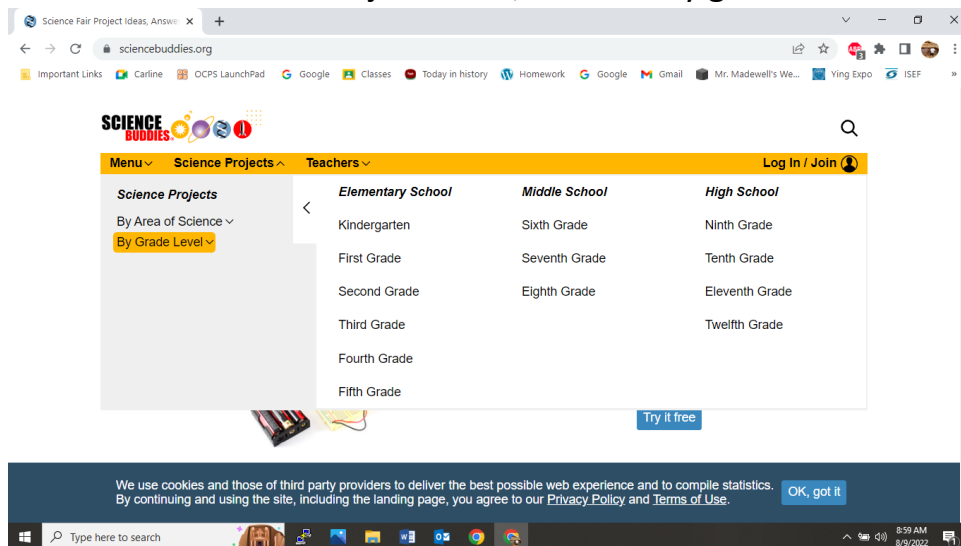# How to use Science Buddies in 10 easy steps!

1. Log onto sciencebuddies.org

2. Under the "Science Projects" tab, choose "by grade level".

If you are new to science fair, you might want to look at projects under your current grade level. If you have done science fair before, I suggest you choose a higher grade level than your current grade level.

3. Select a grade level and answer the three questions and submit.

4. For demonstration, I selected 8th grade and find 700 projects!

On the left side you can "filter" your choices. You can select a specific area of interest, you can set a cost limit, you can set a time constraint on your project. I suggest you avoid short and very short term projects. Science Fair projects should take you weeks to do, not days!

5. I chose long (2-4 weeks) and came up with 114 project ideas.
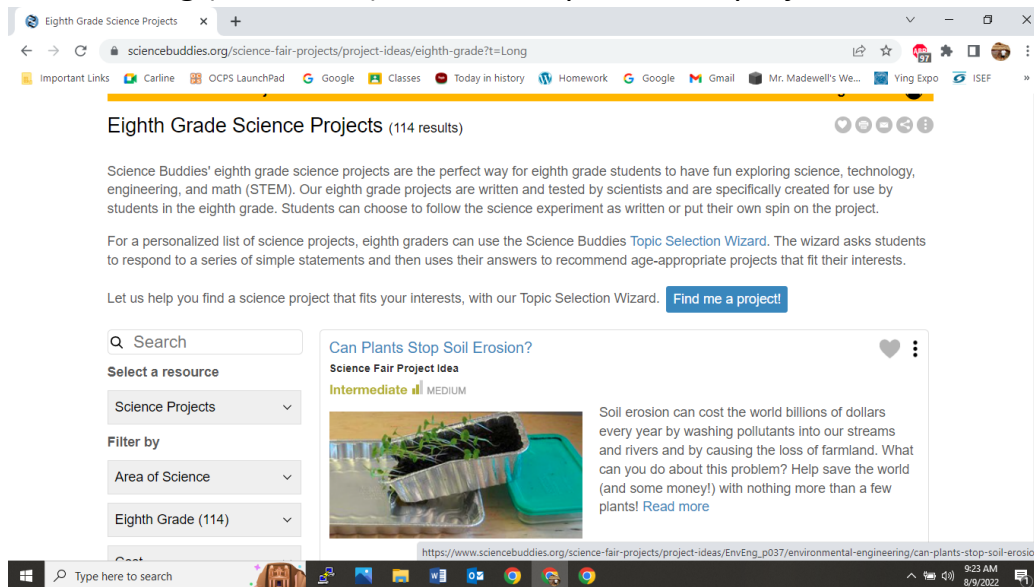
You can still use the filter on the left side to select a specific area of science you like, set your cost limits, see if the materials needed are readily available or need to be ordered (some projects have kits you can purchase).

6. As you scroll through the projects you will notice that they are listed as Intermediate or Advanced, Easy, Medium and Hard. You should avoid Beginner projects, even if you have never done a science fair project before!
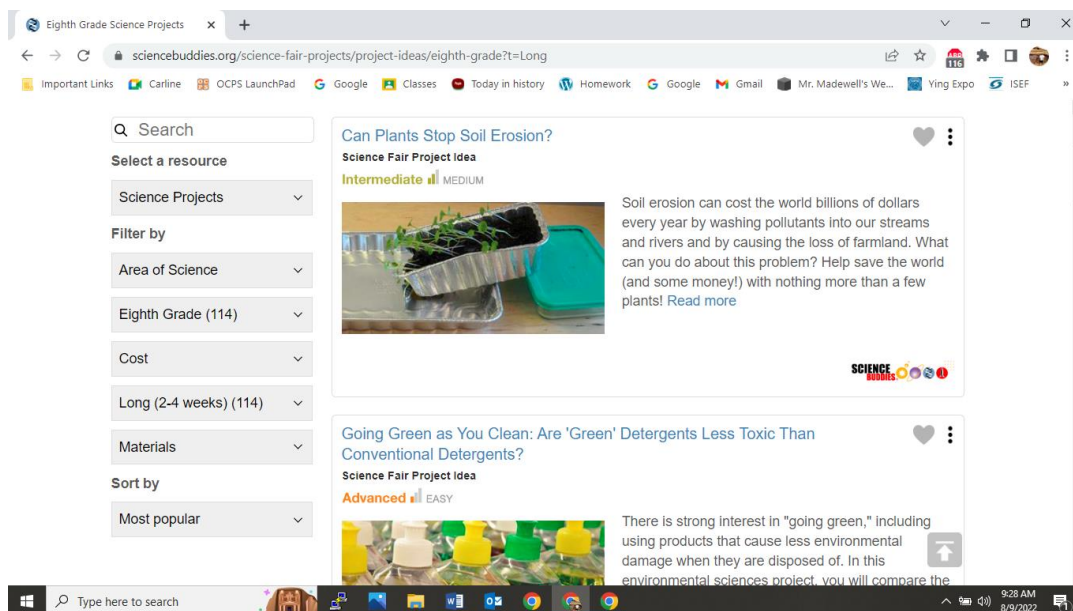
7. Scroll through the projects and look for one that seems interesting to you. When you find one, click on the title to open the project details.

Scroll down through the details and read all about the project. The abstract is a very brief overview of what the project is about. Further down you will find the "objective", or the problem, if you will. Next is the Introduction, or the background information about the project.

8. Further down you will find very detailed, step-by-step experimental procedures. In many cases, there are pictures as well!

If while you are reading you decide you don't like the idea or are no really interested, stop and go back to the other projects. But, if you think you really like this idea and are really interested, you come to the tricky part! You see, you can't just copy this project and procedures and turn it in as "your own" project. That is PLAGIARISM! Scroll down to "Variations"! Here you will find a list of ideas on how you can take this project and make it your own. Some projects have lots of variations and some don't have any! Regardless, you must vary the project listed here to make it YOUR project.

9. So, take a look at the variations and see if one of them might work for you, or come up with your own!

Variations

• Try the experiment with different types of plants, or let the radish seeds grow for longer. Are some plants better at reducing soil erosion than others?

• Try the experiment with different types of soil. Are some types of soil more susceptible to erosion than others?

• Try the experiment with mushrooms instead of plants. Can mushrooms help reduce soil erosion?

• Do a larger-scale version of the experiment using larger containers, like plastic storage bins.

• If possible, try doing the experiment outside on an actual hillside. You may need garden tools and help from an adult to do this. Clear any existing vegetation (like grass) from two equally sized patches of soil on a hillside. Leave one patch of bare dirt, and plant seeds in the other patch. Figure out a way to measure soil erosion; for example, by digging holes downhill from each patch of soil and placing a bucket or large bin in the hole to catch the eroded soil.

• Use a video camera to record your experiments. Look up the different types of soil erosion due to water (sheet, rill, gully, and splash—see the references in the Bibliography). What type of erosion do you see during your experiment?

• Do your results change depending on whether the soil is dry at the beginning of your experiment, or if it is already saturated?

Careers

If you like this project, you might enjoy exploring these related careers:

Soil and Water Conservationist In Demand
Career Profile

10. Be sure to copy the citation at the bottom of the webpage. Paste it into your bibliography and that's it!

Note: A computerized matching algorithm suggests the above articles. It's not as smart as you are, and it may occasionally give humorous, ridiculous, or even annoying results! Learn more about the News Feed

Cite This Page

General citation information is provided here. Be sure to check the formatting, including capitalization, for the method you are using and update your citation, as needed.

MLA Style

Finio, Ben. "Can Plants Stop Soil Erosion?" *Science Buddies*, 20 Nov. 2020, https://www.sciencebuddies.org/science-fair-projects/project-ideas/EnvEng_p037/environmental-engineering/can-plants-stop-soil-erosion. Accessed 9 Aug. 2022.

APA Style

Finio, B. (2020, November 20). *Can Plants Stop Soil Erosion?* Retrieved from https://www.sciencebuddies.org/science-fair-projects/project-ideas/EnvEng_p037/environmental-engineering/can-plants-stop-soil-erosion

Please Give Us Feedback!

Please rate the overall *quality* of this Project Idea

○ Excellent
○ Very Good

Do you think that you will do a project similar to this one?

○ Yes
○ Maybe