



Creekside 9th Annual Virtual Science Fair



The 2020-2021 Science Fair will be ONLINE and will be hosted on the Creekside PTA website. The science fair is open to all Creekside students.

Read this packet carefully for deadlines, guidelines for science projects, and instructions for submitting your project to our Virtual Science Fair. All classes will have the opportunity to view all projects virtually from the Creekside PTA website.

Step 1: Send in your REGISTRATION FORM using this link <https://forms.gle/XUNCNWmzrX6qjihX6> Registration deadline February 26, 2021.

Step 2: Choose and complete a science project using the guidelines in this packet.

Step 3: Make your virtual presentation. You have TWO OPTIONS for your virtual presentation. No other submissions will be accepted.

Virtual Option 1	Virtual Option 2
<p data-bbox="289 1241 615 1281">Google Slides Only</p> <p data-bbox="126 1409 777 1520">Make an online slideshow of pictures, text, and video about your project using Google Slides, and send us the link in the Submission Form below.</p>	<p data-bbox="1052 1140 1284 1276">Google Slides *PLUS* Loom Video</p> <p data-bbox="833 1331 1507 1520">Use Loom to record your slide presentation as you talk about your project. This recording can be up to 5 minutes in length.. When your recording is finished, send us your Loom link in the submission form below.</p> <p data-bbox="833 1530 1507 1640">(Loom is a platform which records your computer screen as well as a video/audio of you talking about your project.)</p>

Step 4: Complete the SUBMISSION FORM including the link to your Loom or Google Slide presentation here: <https://forms.gle/tQ6DWmfUmk35jgpR9>. Submission deadline is, April 30, 2021. The website address to view our virtual science fair will be sent out to Creekside families soon after April 30th, 2021.



READ THIS ENTIRE PACKET CAREFULLY FOR INFORMATION.

If you still have questions after reading these instructions, please contact GeckoScienceFair@gmail.com. Have fun!

Science Fair Presentation Rules

- Instead of making a poster this year, you will make a slideshow within Google Slides. A slide is like one small piece of a large poster. All of your slides together will represent your whole poster.
- **Slide 1 will be your project title, Your First Name Only, your teacher, and your grade.**
- TITLES ARE IMPORTANT! **Give your slides headings.** Your headings may be “Purpose”, “Hypothesis”, “Background Research”, “Materials”, “Procedures”, “Results”, “Charts”, “Conclusion and Discussion”, or something similar. Remember to take pictures and include them in your slides! Stick to no more than 1-4 pictures per slide. You may have more than one slide per heading if necessary.
- Projects should be completed by the student. Parent support and engagement is welcome as long as the learning and work that takes place in the project is that of the student. For the youngest students, children can dictate to parents about the project while a parent types the child’s words. (Please see the Guidelines for Parent Involvement section.)
- Students may work in pairs if each makes an equal contribution. Siblings may work together on a project for 2020-2021, but only those who are Creekside TK-5 students.



What is the Scientific Method?

Scientists use the Scientific Method to uncover new information.

It's like a recipe for making a good experiment from start to finish.

The Scientific Method has 4 steps:

Problem

Hypothesis

Experimental Observations

Results

1. **State the problem.** What is it that you want to find out? *Example: Do plants need sunlight?*
2. **State your hypothesis.** An hypothesis is a statement that can be tested. You will perform your experiment to test out your hypothesis. How will you find out whether light is important to plants? *Sample hypothesis: Light is important to plants; without light, they will not be able to grow.*
3. **Conduct your experiment and observe.** Decide how to conduct your experiment. Write down and/or take pictures of what happens during your experiment. *Example: Two daisy plants were purchased. One was kept in the window; the other was kept inside a toy box. Each plant was watered every other day. Each plant was measured weekly. After four weeks, the plant in the window grew an inch and made three flowers. The other plant shriveled and almost died.*
4. **State your results.** Was your hypothesis correct or incorrect? What did you learn? Your results tell us what you learned from your experiment and observations. *Example: Light is very important for the health of a plant.*

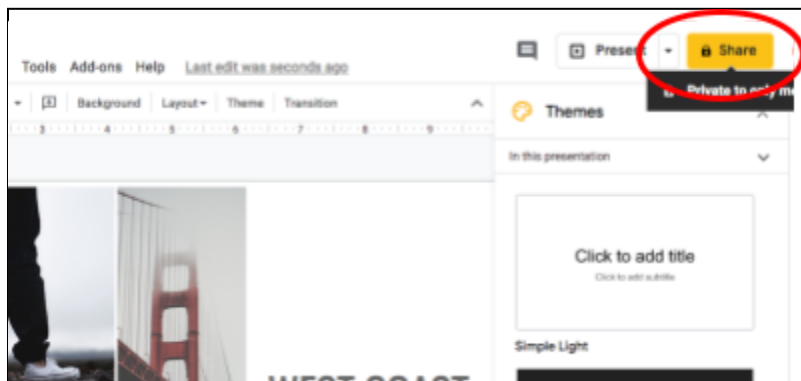


Google Slides Requirements

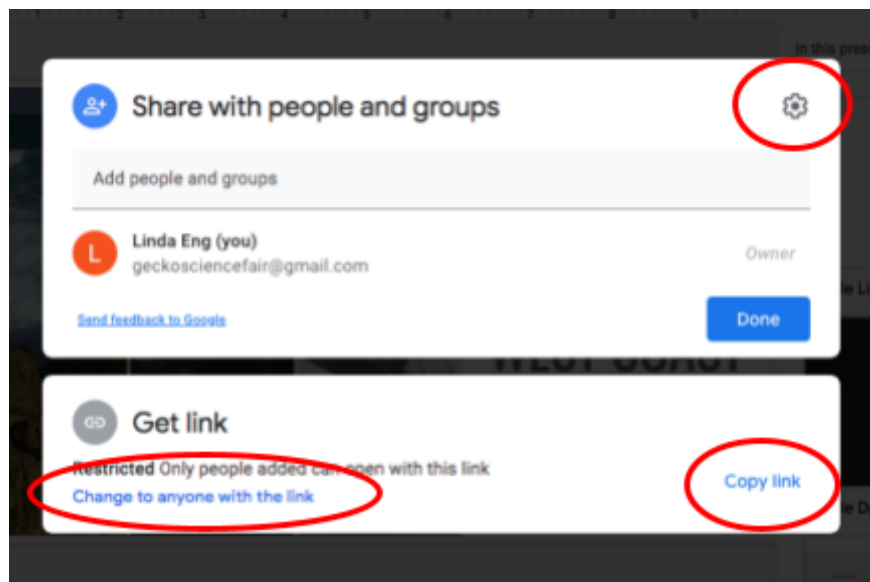
WATCH THIS KID-FRIENDLY TUTORIAL ON HOW TO USE GOOGLE SLIDES:

<https://www.youtube.com/watch?v=lfpnelqnXTE>

- Google Slides can be accessed through the Google suite found in MyPlan. Keep your slides simple. They do not have to have a lot of text, especially if you're going to do a Loom video and talk about your slides. Include pictures of your science project.
- **IMPORTANT!!!!** On Google Slides, click the Share menu from within your presentation



- **IMPORTANT!!!** Next, click “Change to Anyone who Has the Link” and then click “Copy Link”. This is the link you will paste into your Submission Form (see page 1).



- **IMPORTANT!!!** Click the Settings gear and UNCHECK “Viewers and commenters can see the option to download, print, and copy” so that no one can download or copy your presentation.

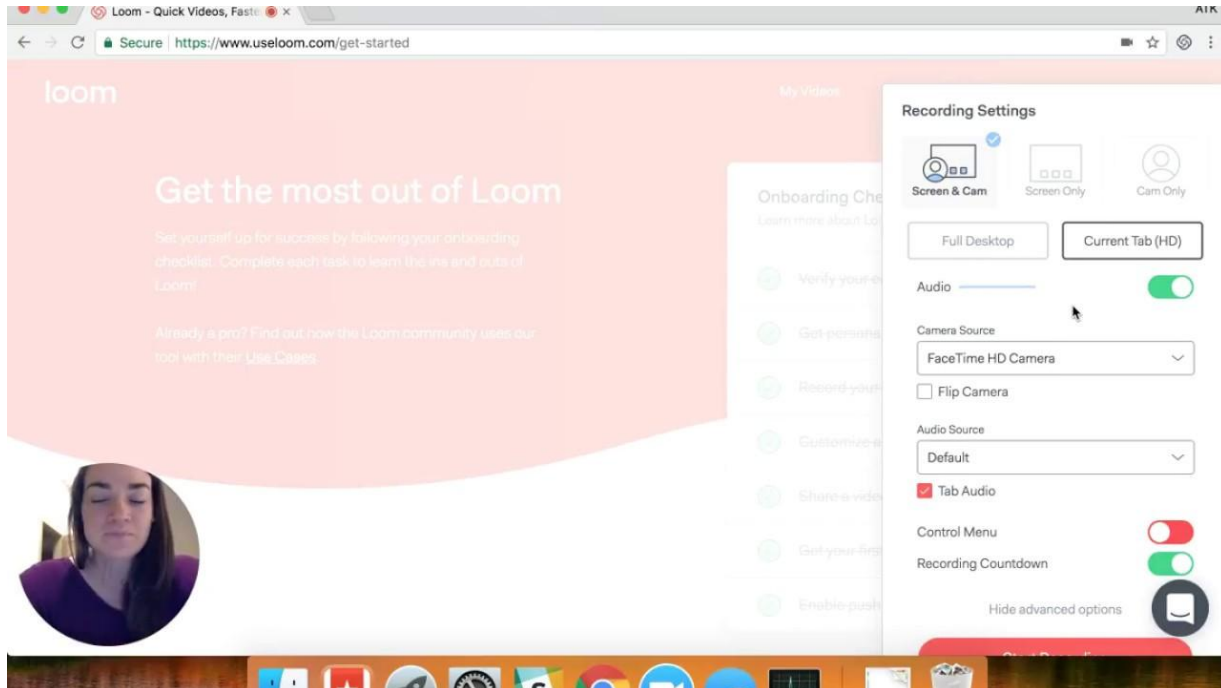


Loom Instructions

WATCH THIS TUTORIAL ON HOW TO MAKE A LOOM:

<https://www.youtube.com/watch?v=tL4OWGVE6o8>

- [Create your Loom video here.](#) Loom is a screen capturing program that also records a video of you talking about your screen. Whatever is on your screen will be seen in your Loom. If you are doing a Loom video, you do NOT have to show your face in the video if you do not want to.
- Finish your Google Slides presentation before you start your Loom. You will show your Google Slide show in your Loom while you talk about it.
- Practice talking about your Google Slideshow before you try to record your first Loom.
- **Speak loudly, clearly, and not too quickly.** You may write down your words and then read them, or you can speak off the cuff. Keep your Loom to 5 minutes or less.





Guidelines for Parent Involvement

The Science Fair is designed to help your child develop the ability to explore and investigate a scientific topic in depth and use the scientific method. The process will allow each student to integrate writing, math, science and other curriculum areas. We hope the Science Fair will be a fun and unique way for your child to engage in learning and to explore science in more depth. All science fair projects should be grade appropriate and should be authentic work of the student. While the Science Fair is designed for your child's benefit we wanted to share with you how much and what type of parental involvement and input is permitted.

- Parents may assist their child in creating a visually appealing Google Slides/ Loom. For example, parents may help students learn about slide transitions, or set up computer equipment for recording. For children who are in the youngest grades, parents may ask questions about the project and children may dictate to parents who may type the student's own responses. **The content of the project should be that of your child.**
- The research, design, and investigation should be completed primarily by the student. The parent's role is to provide the resources and direction necessary while also being a constant source of encouragement, questioning and support. While you are welcome to be involved we ask that you think about how much of the work is your child versus your work. Obviously, younger students need more support and help, and this is to be expected. Again, the goal is to get your child interested and engaged in science and experiments so use your judgment on the appropriate level of support.
- Topic selection should be that of your child, but parents are welcome to offer suggestions and encourage exploration of topics they might not consider. Again, please make sure the topic is grade appropriate.
- Parents are welcome to proofread a student's work, but corrections should be made by the child.



THE SEVEN SCIENCE PROJECT CATEGORIES

Choose a category for your project.

1. **Earth Science** is concerned with how our planet works and changes. It includes geology (the study of the earth's crust, rocks, fossils, etc.) and meteorology (the study of weather).
2. **Life Science** includes the study of living things on the earth and their life processes. Biology fits into this category, as does Botany (the study of plants) and Zoology (the science that deals with animals).
3. **Physical Science** includes Chemistry, Physics and Astronomy. These sciences function closely with mathematics. Physics includes the study of matter, motion, electricity, and magnetism. Astronomy is the study of planets and outer space. Chemistry is the study of properties and reactions of matter, particularly at the level of atoms and molecules.
4. **Inventions**- Combine scientific principles with your creativity to develop a new material, structure, device, or system to solve a problem or improve an existing solution. This also includes the development and evaluation of innovative devices, models, techniques or approaches in technology, engineering, or computers (hardware or software). An invention can be anything that solves a real problem. It is your original idea; it cannot be purchased in a store or found in a book. It can be something that no one has thought of before, or it can be an improvement to an existing invention. An invention must serve a purpose.
5. **Rube Goldberg**-is a contraption, invention, device or apparatus that is deliberately over-engineered to perform a simple task in a complicated fashion, usually including a chain reaction.
6. **Sequential Progression**

This type of entry requires a sequential progression of cause-and-effect steps.

- Starts with a single, simple initialization action
- Continues through multiple steps which may branch and then merge again
- Finally performs a clearly defined and (usually) simple task

7. **Simple Machines and Forces**

Entries in this category will make use of several types of simple machines and physical forces during the sequence of operation.

- Simple machines include lever, wheel and axle, pulley, incline plane, screw, and wedge.
- Physical forces include inertia, gravity, friction, stored energy, combustion, etc. (note that extreme care must be taken if using, but sure you have adult supervision).

Display (Diagram), Documentation, And Construction

- The entry should have a diagram (illustration) of the sequence from initial step to conclusion.
- The entry should include documentation of the building process.
- The sequence of operation, including direction of force should be clearly outlined.
- If the entire sequence is built, it is recommended that a video of a complete, successful run be shown in your presentation.