

Creating Your Scientific Poster

The guidelines below were created for 3rd-6th grade students to help them create a scientific poster in Microsoft Office (PowerPoint) 2017.

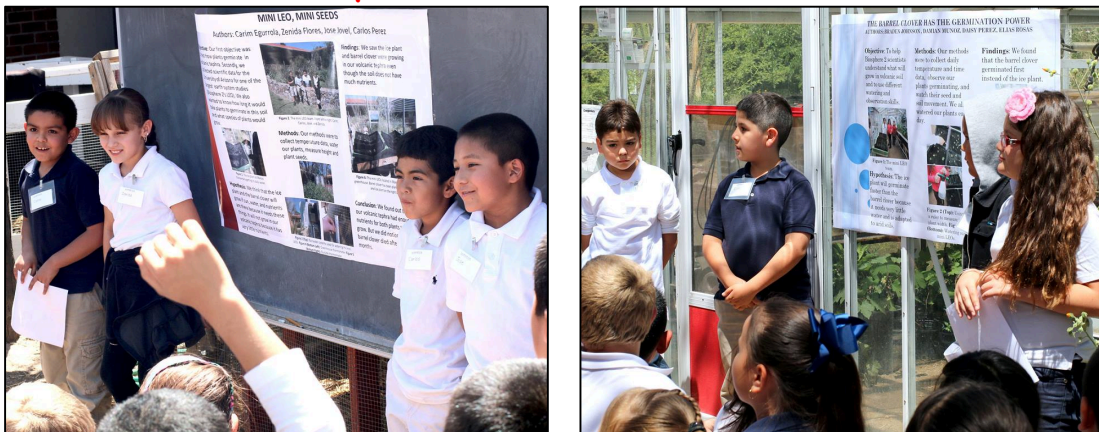


Photo Credit: Manzo Elementary 3rd grade students presenting their scientific posters in the garden. Photos taken by Moses Thompson, May 2013.

Introduction

Think of your poster as a story that describes the research you have worked so hard on throughout the school year. Use this poster to explain a few major points in your research process. Make it interesting! Give people enough information so that they want to know more but can understand the main concepts and findings of your work. There will be time for people to ask you about the small details, personal process, and challenges of your work after you present the poster.

We will be creating posters using Microsoft PowerPoint 2016. By creating a poster in PowerPoint rather than on paper, we can print large posters that can be laminated, shown at presentations, and more. Creating a poster in PowerPoint means that we will use only one slide. Once you follow the instructions to set up your poster, you will discover that all of your graphs, pictures, and words will fit onto this one slide. Each science team will be creating one poster. Working together, listening, and being respectful of each other's ideas will be essential for the success of not only your poster, but of your presentation.

Setting Up Your Slide

Step 1: Open *PowerPoint*, choose *Blank Presentation* and click *OK*.

Step 2: Choose the *Blank slide layout* and click *OK*. **Optional:** if you would like to add a background, it cannot be full color. There can be pops of color or a small design in the corner, but we cannot print a poster that does not have a white background can use a lot of ink and get to be very expensive.

Step 3: Go to *Design* in the toolbar and click *Customize*. From the dropdown menu, click *Slide Size* and then *Page Setup*.

Step 4: Enter the *Height* and *Width* of your poster. Height is 36 inches. Width is 48 inches. Click *OK*.

Step 5: Add text boxes to describe your work. Go to *Insert*, and click on *Text Box*. Draw (hold down the mouse and drag) the outline of your text box in the place and shape that you want your words to go on your poster. Imagine someone is reading your poster. Make sure you have added your text boxes and descriptions in a clear order that is easy for someone to follow.

Creating Your Scientific Poster

Creating Your Story

Poster Title: Come up with a title that will describe your project well. Make this interesting! This is the first thing people will see. Make sure the point (how large the letters are) is at least 60.

Authors: This is the first and last names of each student in your science team. Place these names in alphabetical order based on the first letter of each person's last name. Place a comma between each person. Make sure the point (how large the letters are) is at least 45.

Objective: Using complete sentences, write about what you wanted to discover. What was your main research question? Why do you find this question important for humans or the environment? Make sure the point (how large the letters are) is at least 24.

Hypothesis: Using complete sentences, write what your original hypothesis was *before* you began your research. What did you predict would be the answer to your research question? Why did you predict that this would be the answer? Make sure the point (how large the letters are) is at least 24.

Methods: Using complete sentences, describe how you collected information to answer your research question and test your hypothesis. What information did you collect? What tools did you use? How often did you collect data? Why did you use these tools and methods over other options? Make sure the point (how large the letters are) is at least 24.

Findings: Here is your opportunity to use charts, graphs, pictures, and more. Use the information you collected all year to summarize (*giving a brief statement of the main points*) your findings. What do you want people to know about your research question? What were the most interesting points, the most common findings, and the findings that helped you answer your main question? Make sure the point (how large the letters are) is at least 24.

Conclusion: Using complete sentences, tell your audience how you would answer your main question knowing what you know now. Was your original hypothesis correct, or did you find out something new? Why is your research important and how does it help us understand pollinators, plants, humans or the environment?

Pictures: In order to make your story more visual, you may add up to 4 pictures and several graphs, as needed. Pictures need to improve your story and be on topic. For example, if you focused on a certain species of bee, you may want to include a picture of it. Pictures must be labeled with a **caption** (a short, 1 sentence description of what the picture is) by placing a small text box below the picture. This label needs to be less than 24 point. Make sure to say where the picture is from if it is not your own. This is called citing your source. And finally, make sure that all pictures are a high resolution so that when they are printed they do not become blurry.

Remember!

Throughout the research process, ***you did not fail***. Just because something did not go the way you had planned, or you didn't get all of the data you wanted, or you didn't have enough time to do more...**YOU DID GREAT!** This was all part of the learning process *and* of being a scientist. Tell people about this process in your poster, they will want to know your experience.

Creating Your Scientific Poster

Which Plant Is Taller? Manzo's Mini LEO Project

Authors: Julian Archer, Estevan Godoy, Nayeli Tautimez

Objective: Our objective was to study how the ice plant and barrel clover germinate in volcanic soil. Also, our objective was to think and act like Biosphere 2 scientists. We wanted to see how changes on our mini LEO landscape looked in real landscapes.



Hypothesis: Our hypothesis is that the ice plant can grow 3-4 inches tall. Also, the water will push the seeds down the slope.

Methods: Our methods were to collect temperature data, water our plants, and observe our plants and soil. We measured plant height and width, did background research on our plants, and recorded daily temperatures.



Figure 3(Top): Watering our mini LEO. Figure 4 (Bottom left): Comparing our volcanic soil to Figure 5 (Bottom right): regular composting soil at Manzo that has much more nutrients.

Findings: We noticed that the ice plant did not grow 3-4 inches tall but grew 2-3 inches wide. We also saw that the seeds and soil barely moved down the slope.

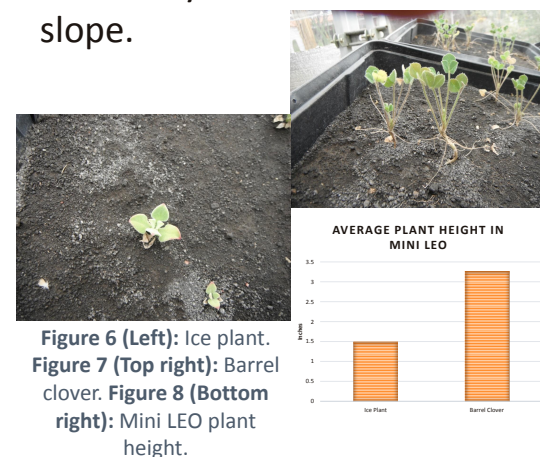


Figure 6 (Left): Ice plant. Figure 7 (Top right): Barrel clover. Figure 8 (Bottom right): Mini LEO plant height.

Conclusion: The big LEO at Biosphere 2 helps scientists study plant growth on landscapes. Our mini LEO helps those scientists by knowing which plants can grow in volcanic tephra.

POSTER LAYOUT TEMPLATE

PICTURES

Use pictures to support your information.

PICTURES

Use pictures to support your information.

POSTER TITLE

Come up with a title that describes your project well.

PICTURES

Use pictures to support your information.

PICTURES

Use pictures to support your information.

AUTHORS

Place the first and last names of each student in your science team here.
Place names in alphabetical order based on the first letter of each person's last name.
Place a comma between each person.

OBJECTIVE

Write about what you wanted to discover. What was your main research topic and what did you want to find out? Why is this topic important to humans and the environment?

METHODS

Describe how you collected information to answer your research question and test your hypothesis. What information did you collect? What tools did you use? How often did you do this? Why did you use these methods over others?

FINDINGS

Use charts, graphs, and pictures to summarize what you found out during your research. Summarize the most interesting points.

HYPOTHESIS

What did you predict would be the answer to your research question? Why did you predict this over other answers?

CONCLUSION

Was your hypothesis correct, or did you find something new? Why is your work important and how does it help us understand humans and the environment?

PICTURES

Use pictures to support your information.

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POSTER GRADING & PARTICIPATION SHEET

	Criteria	Points Possible	Self-Review/ Self -Score	Points Earned (Teacher Score)
Poster	Accuracy of Data Amount of Data/ Quality of Evidence Representing Consistent Data Topic Matches Poster Text Information Displayed is on Topic	10		
	Directions Followed Finished on Time (Deadline _____) Formatting/Punctuation Neatness of Poster Layout	10		
	Organization of Poster Includes: Title/Authors Objective/Hypothesis Methods Findings Conclusion	10		
	Includes Data/Tables Includes Results Drawings /Pictures/Visual Data Details/Numbers/Measurements/Units	10		
Presentation	Speaking clearly Eye contact Loud voice	10		
	Each Group Member Presents Presentation is Rehearsed Group Members Work Together	15		
	Students can answer questions about research, results, methods, conclusion, etc.	10		
	Group Stays on Topic to Explain Research States Importance of Topic Audience Understands What is Said	10		
	Demonstrate Understanding of Information Referencing Poster in Presentation	10		
	Total Score	100		

Score sheet created by Barbara Hurley, Rincon High School