



SALEM LUTHERAN MIDDLE SCHOOL

2017 SCIENCE FAIR PACKET

Tuesday, May 16th, 2017

Name: _____

Grade: _____

Project Overview

For this project you will:

- create a question that you will answer through experimentation
- gather background research on the topic related to your question
- write your question in the approved scientific method format and hypothesis with an independent and dependent variable
- design and conduct a scientific investigation of your hypothesis
- collect, record, and analyze data
- draw conclusions based on your research and results
- communicate your results by writing a formal, scientific paper with your results and conclusions
- present your information in a final, typed **research report** AND **display board** at the Salem Lutheran School 2017 Science Fair.

Final Requirements

The first product will be a formal, scientific paper with the following components:

- ✓ Title (Purpose/Question)
- ✓ Hypothesis
- ✓ Procedure
- ✓ Analysis
- ✓ Works Cited Page
- ✓ Research (Background Information)
- ✓ Materials
- ✓ Data – Charts and Graphs
- ✓ Conclusion
- ✓ How your ESLR supports your topic
- ✓ Acknowledgements

The second product will be a Poster/Trifold that must include the following information:

- ✓ Title (Purpose/Question) AND Name
- ✓ Hypothesis
- ✓ Procedure
- ✓ Data Table
- ✓ Data Graph (Visual)
- ✓ Conclusions (Bullet point format is acceptable)
- ✓ Background Information
- ✓ Materials List
- ✓ AT LEAST one picture of students conducting their experiment!
- ✓ ESLR
- ✓ Acknowledgements

Grading

You will be graded both on the individual steps in the process of completing this project AND on the final products. Your science fair project reflects your year of work as a middle school scientist and will count as your final assessment. If you do not complete a science fair project you **WILL NOT** pass Science.

Plagiarism of any sort, whether from a source or from another student, will not be accepted and will result in a zero for the section or your entire project depending on the extent and severity of the plagiarism.

This packet includes the grading rubric for both your research paper and presentation display board. As we work through each part of the science fair project you will be provided with support in and outside of class, this includes clear directions, further grading rubric information if necessary and feedback for completing advanced (A+) work.

Late Work

Any part of your science fair project that is not submitted in class when it is due will be considered **late**. Every day that an assignment is late, you will lose 10% of the points for that assignment. For example, if you turn in your Conclusion 2 days late, 20% will be taken off of the grade **you earn**. If you are submitting work through the Google Class and you do not submit the item before class begins, it will be considered late and 10% will be taken off the grade. Any technical difficulties must be reported to Mrs. Alba **before** the due date by email or phone. **NO EXCEPTIONS.**

Keeping Track of Your Work

A. I advise you save ALL of your work in **TWO** places –

(1) on your personal flash drive

AND

(2) on  Drive

B. Create a folder on your flash drive for your science fair materials. The following instructions will help you create this folder after you have plugged in your drive:

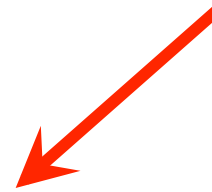
1. Click on the “Start” menu and then click on “My Computer”.
2. Find your flash drive – it is usually the (E:) or (F:) drive and should be called “Removable Drive” or what other name you have created for your flash drive - and double click on it.
3. Click on File. Slide the cursor down to “New”.
4. Select “Folder”.
5. Name the folder: Last Name_First Name, Science Project (Ex: Alba_Erika Science Project)
6. You will save all your work in this folder.

C. As you work on different parts of your project, you need to save your work. As you create word and excel files, save your work using the following procedure:

1. Click on the “File” menu.
2. Click on “Save As”.
3. Click on “My Computer” and then on your drive.
4. Click on the folder you created for your files.
5. Name your file in the following format; **Last Name_First Name What the item is**

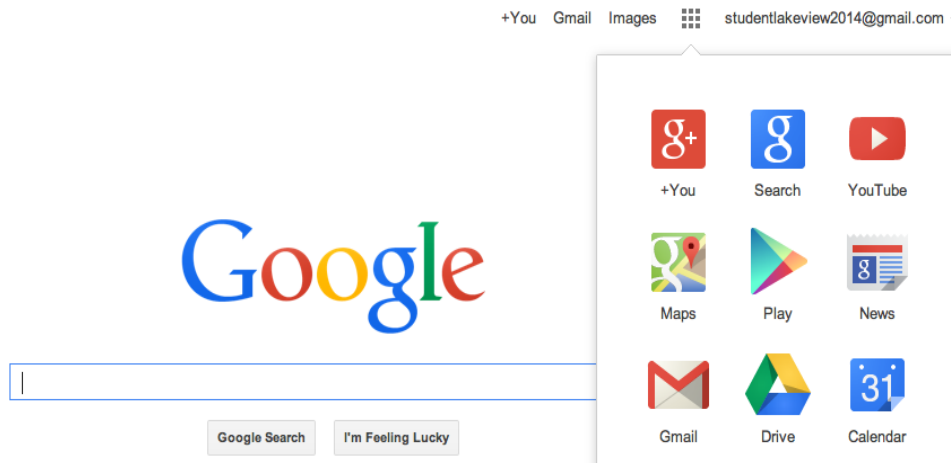
Examples:

- Alba_Erika Works Cited
- Alba_Erika Materials and Procedure
- Alba_Erika Hypothesis
- Alba_Erika Data Table
- Alba_Erika Graph
- Alba_Erika Analysis
- Alba_Erika Conclusion
- Alba_Erika Final Written Report



D. When you save an item electronically on  Drive, you need follow these steps:

1. Log into your Salem Google account
2. Click the Google Drive Icon



3. Save your item by using the correct file name format:
[**Last Name_First Name What the item is**]

Rename document ✕

Enter a new document name:

4. Click on "OK".

Name _____

Grade _____

Experimental Question: _____

Below is an outline of all required assignments to complete over the course of our science fair projects. Due dates are listed below for each item. Make sure to record all due dates in your agenda and submit your work by each due date. We will be using this packet to track your progress and ensure you successfully conduct and document a controlled scientific experiment for the Sale Lutheran School Science Fair.

Assignment	Student Initials to indicate this item is done.	Parent Initials to show this item is done.	Teacher stamp to indicate this item is done and accepted.	Due Date
<p>✓ Submit your proposal to Mrs. Alba</p> <p>1 testable question must be submitted for approval before you start your project.</p> <p><i>This is the experimental question that will be what your entire science fair project is based on and must be approved by Mrs. Alba</i></p>				<p>Tuesday 04/11/17</p>
<p>✓ Research</p> <p>Gather research about your topic. You will need to use at least THREE valid resources for your project. All sources must be printed (or photocopied) and show that you actively read (shows hi-lighting and annotations) the text for important information for your project. Write a summary of what you have learned from each of your sources.</p>				<p>Friday 04/14/17</p>
<p>✓ Works Cited Page</p> <p>A list of sources, written according to MLA format, in alphabetical order and typed.</p>				<p>Friday 04/14/17</p>

<p>Source Requirement: Minimum of three sources.</p>				
<p>✓ Introduction (1 paragraph = at least 5 sentences) -What is your testable question? -What field of science is your project based on? -Why did you choose this topic or why are you interested in this topic? ✓ -What is the purpose of your experiment? -How does your ESLR support your topic?</p>				<p><i>Complete during Spring Break</i> Monday 04/24/17</p>
<p>✓ <u>Variables and Hypothesis</u> -The independent -The dependent variable -Your hypothesis (*Must be written in the <i>If _____, then _____ because _____</i> format.)</p>				<p>Wednesday 04/26/17</p>
<p>✓ <u>Materials and Procedure</u> Materials: A detailed list of the materials that will be used to in your experiment. Procedure: The specific and clear steps that will be followed to conduct your experiment.</p>				<p>Friday 04/28/17</p>
<p>✓ <u>Data Table</u> A blank table labeled clearly with independent and dependent variables as well as a space for observations. You must collect at least 1 form of quantitative data that can be represented by a graph.</p>				<p>Friday 04/28/17</p>
<p>✓ <u>Conduct Experiment/Data Collected.</u> All experiments will need to be completed outside of school unless an appointment is made with Mrs. Alba or you have received permission from Mrs. Alba to collect data with your classmates as the participants.</p>				<p>Monday 5/01/17</p>

<p>✓ Data Charts and Graphs</p> <p>The results of the experiment must be typed in a data table. Your project must also include a graph to show your data results</p>				<p>Tuesday 05/02/17</p>
<p>✓ Analysis (1 paragraph = at least 5 sentences)</p> <ul style="list-style-type: none"> -Describe the data you collected from your experiment -Describe any patterns you noticed from your data 				<p>Wednesday 05/03/17</p>
<p>✓ Conclusion (1 paragraph = at least 5 sentences)</p> <ul style="list-style-type: none"> -Restate your testable question and hypothesis -Explain if your hypothesis was correct or incorrect. -Describe how you would improve your experiment if you were to do it again. -Explain how your experiment will impact the community 				<p>Friday 05/5/17</p>
<p>Final Written Report.</p> <p>You final research paper that has all of the above written assignments in one place.</p>				<p>Monday 05/8/17</p>
<p>Final Poster/Trifold.</p> <p>Completed poster with the required information and images. *Look at the list of section on Pg.1.</p>				<p>Monday 05/15/17</p>
<p>Professional Science Fair Clothing</p> <p>By this date you need to have your professional attire approved by Mrs. Alba.</p>				<p>Monday 05/15/17</p>

Science Fair Mock Presentations

Students will present their posters and projects to their classmates.

**Monday
(05/15) &
Tuesday
(05/16)**