Science Fair Project

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Assigned: October 27th ___/200
Due: Nov 5th

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Due: Nov 17th

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Assigned: Nov 20th ___/100
Due: Dec 2nd

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Assigned: Dec.8th ___/200
Due: Dec 17 (Trial 1)
Jan 7th (Trial 2 & 3)

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Assigned: Jan.12th ___/100
Due: Jan.27th

Final Project - Display Board Report
Assigned: Jan.12th ___/100
Due: Jan 27th

Science Fair topics template

TITLE A

Step-: 2 Project Ideas Proposal

Assigned: 10/27

Deadline: 11/05

1st Idea: Topic water hydraulics

(Please circle one: engineering/science)

2nd Idea: Topic what kind of water boils fastest

(Please circle one: engineering/science)

My Final idea water hydraulics

Question: how is water able to like a 10 pound weight with only 5 pounds put on the other end?

Resource(s): wikipedia, and testing

Science Fair Topics - Draft

Write down the topic you chose:

I chose Water hydraulics

What made you want to pick this topic?

Because my dad was showing it to me and i thought it would be interesting to test

Do you find these topics interesting? Why?

Yes i do because i find it very interesting how if u put pressure on the other end of air tight tube and there is something connecting it to another tube with a 10 pound weight, if you put only 5 pounds on it, it is able to lift up.

Science Fair Topic and Question - Final

Which topic did you choose?

I chose Water hydraulics

What question(s) are you testing?

If you fill two air tight tubes with water and there is a tube connecting it and one side has a 10 pound weight and you put five pounds of pressure on the other end how is it able to lift the 10 pound weight?

How are you going to test your hypothesis?

By testing it at home with a model.

Background Summary

Find information and record the sources you use that help you make an educated guess to your testable question.

Write a 1 paragraph summary for each of your sources.

Tip: Make your hypothesis after this is done

This law was made by Blaise Pascal. And the hypothesis is If you fill two air tight tubes with water and there is a tube connecting it and one side has a 10 pound weight and you put five pounds of pressure on the other end it is able to lift the 10 pound weight.

Step 3 Background Research Source 1

TITLE B

Source 1

Title: water Hydrolica

Summary: Water hydraulics is where if you put a weight in an air tight tube and put enough weight on the other end you are able to lift the weight even if you put less weight on the other end.

In complete sentences, describe a few details (who, what, where, when, why, and how)

The water hydraulic theory was described by Blaise Pascal in 1648.

Source 1 Bibliography

If the source is a book, Title of the book:		
Author's Name:		
Date Published:		
Place Published:	Publisher:	Date Published:
Edition: (if applicable)		
Page Number(s):		

Background Research Source 2

If this source is a: _____ Magazine _____ Newspaper _____yes__ Other
Title of the publication: wikipida

Title of Article:

Water hydraulics

Author's Name:

Just wikipida

Date Published:
It doesnt say

Edition: Volume Number: Page Number(s):

(if applicable) (periodicals or encyclopedias)

This source is a: _____yes_ Website _____ Other

The URL is http://
https://en.wikipedia.org/wiki/Hydraulics

Last Date of Access: Nov 5

Title of Article: hydraulics

Author's Name: It doesnt have one
[=

Date of Article: it also doesnt say

Science Fair Hypothesis

TITLE B

Hypothesis: Use your background research to help you create a HYPOTHESIS that predicts the outcome of your experiment

What is your Hypothesis? My hypothesis is "is the brachistrone curve faster than a straight line.

Tip: Make your Hypothesis after the background research

My hypothesis is If you fill two air tight tubes with water and there is a tube connecting it and one side has a 10 pound weight and you put five pounds of pressure on the other end it is able to lift the 10 pound weight.

Materials

Make a list of all the Materials you used for this experiment

One large syringe, one small syringe, a wooden board, and a small clear tube

Make a list of all the Materials you used for this experiment

Procedure

What are the steps you followed during this experiment?

Write all of them down. Make sure they are exactly what you followed while doing the experiment.

I put 2 syringes (one big one small) on a wooden stand, the syringes were connected by an airtight tube on the opening of both syringes. Water is in each one and we will put weight on the small tube then put the same amount of weight on the other larger syringe.

Variables

What are the Variables of your experiment?

Dependent Variable? Displacement of water syringe plunger

Independent Variable? The volume of water in the syringe

Control Variable? The connecting tube, pressure and temperature in the room

Testing the Hypothesis - Experiment

EXPERIMENT Collect and record data. Take pictures. Write everything in your science fair notebook, even mistakes and problems! Conduct your experiment multiple times to see if anything changes.

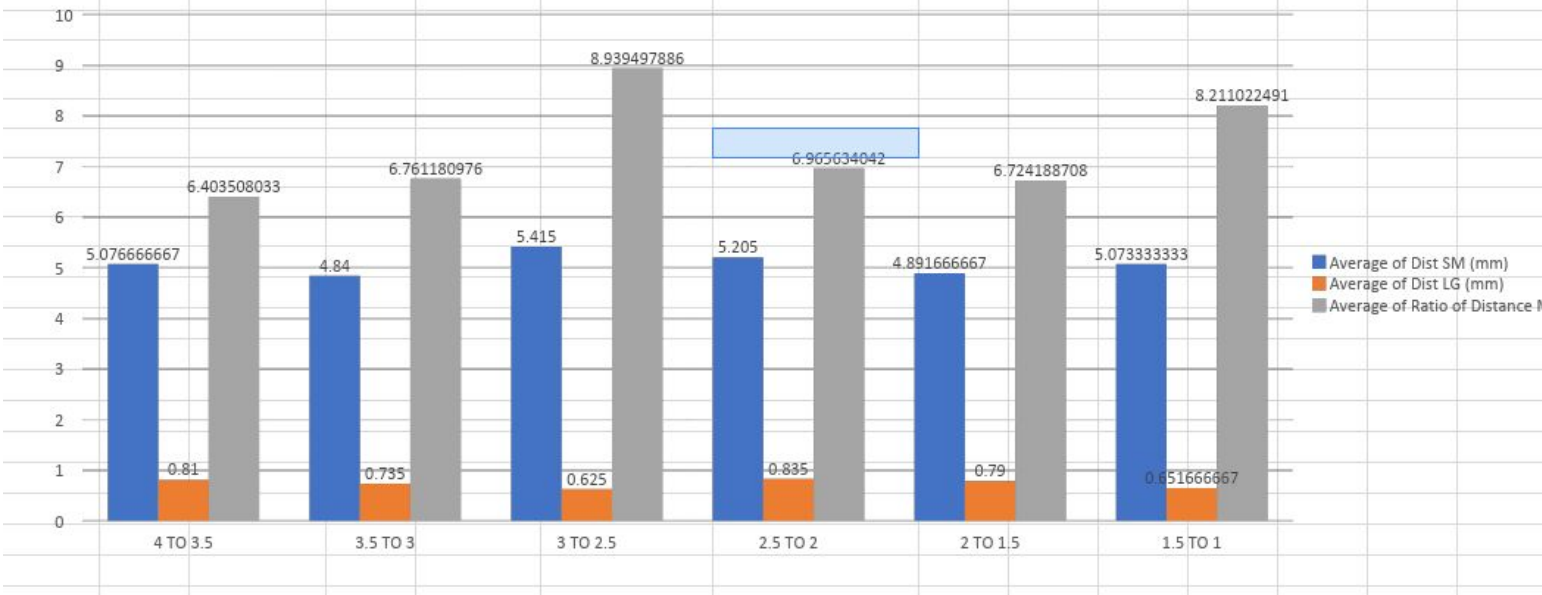
So i moves the smaller syringe down by half of a ml and then measure how much the bigger syringe went up. Then i did 6 trials and got the average. At first i was measuring it wrong so i had to redo the frist few but luckly i caught it in time.

TITLE D

Results

Put your data into graph form and study you graph to see what kinds of trends you notice.

RATIO OF PLUNGER AREAS	7.37
% Difference calculated to actual	100.5%



Conclusion

Based on your results, what was the outcome? Our prediction was over 100 procent correct

Does your data show that your hypothesis was correct? yes

What kinds of problems did you have? I was measuring it wrong

What would you do differently next time? Nothing

Rough Draft Report

Over the past few months I have been researching, testing and analyzing my own water hydraulic system model. I ran 6 tests on it, then analyzed the data. Today I will show my hypothesis, process, data, and results. I chose this because my dad is an engineer and he thought it would be interesting for for science fair.

My hypothesis is: if you fill two air-tight tubes with water, connect them, and place a 10-pound weight on one side, then applying 5 pounds of pressure on the other end can lift the 10-pound weight.

My materials were one large syringe, one small syringe, a wooden board, and a small clear tube. My method was, I put 2 syringes (one big one small) on a wooden stand, the syringes were connected by an airtight tube on the opening of both syringes. Water is in each one and we will put weight on the small tube then put the same amount of weight on the other larger syringe.

I was correct, I had ended up testing it differently, though. I was planning on measuring it with how much weight you have to put on it, but instead I measured it by pushing one down by half an ml and recording how much it went up. After I got all my data I organized it to be neat and readable.

In conclusion, this was a very fun experiment, and I enjoyed doing it and learning about it. My hypothesis was correct, with a 10-pound weight on one side, then applying 5 pounds of pressure on the other end can lift the 10-pound weight. Thank you for listening to my report.

Final Draft Report

Over the past few months I have been researching, testing and analyzing my own water hydraulic system model. I ran 6 tests on it, then analyzed the data. Today I will show my hypothesis, process, data, and results. I chose this because my dad is an engineer and he thought it would be interesting for for science fair.

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My materials were one large syringe, one small syringe, a wooden board, and a small clear tube. My method was, I put 2 syringes (one big one small) on a wooden stand, the syringes were connected by an airtight tube on the opening of both syringes. Water is in each one and we will put weight on the small tube then put the same amount of weight on the other larger syringe.

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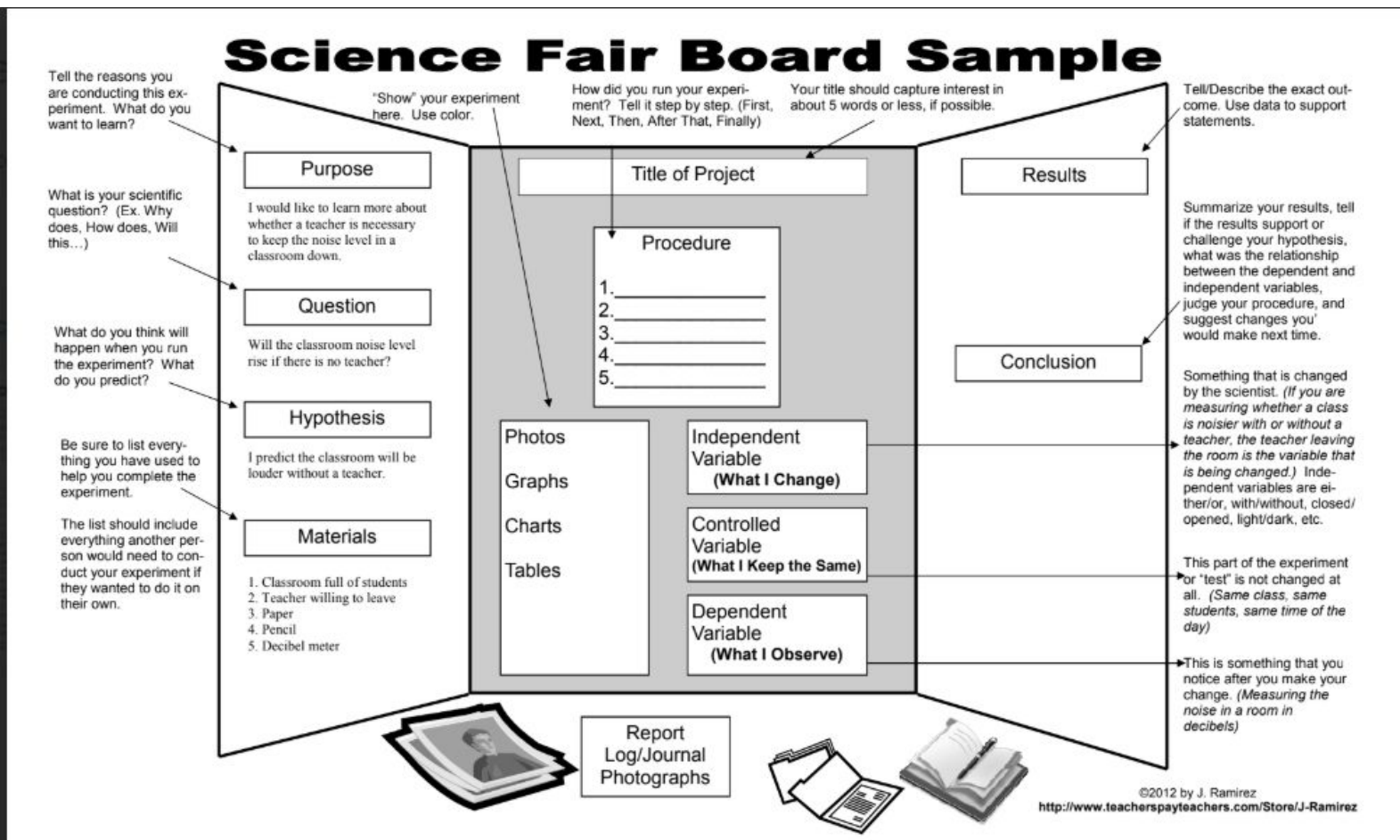
Final Project - Display Board Report

Make a Trifold Poster Board

Have it include all the components you have included in this Binder so far.

Your Finished Poster Board should look something like this: