

Displaying a Science Experiment

Traditionally, the most common "Science Fair Project"

Title To Bean or not to Bean What happened / what you observed; charts, tables, graphs etc.

Purpose
To study the relationship between hours of light and plant growth. What did you want to find out

Hypothesis
Bean plants grown with 24 hours of light a day will grow two times as tall as plants given 12 hours of light a day. What you thought would happen

Background Information
Plants need light to grow etc. Latitude determines the hours of daylight available for garden vegetables etc. In the growing season in nothern British Columbia ... etc. What you learned before you started from library research etc.

Procedure
1. I planted 12 bush bean seeds (give details of how you did this).
2. I arranged the 12 pots under a grow light etc.
3. I left the grow light on for 24 hours a day & placed a light proof box over 6 pots for 12 hours each day.
4. I cared for all of the plants the same.
5. I observed plant growth, measured their heights, and recorded the results on a chart. What you did

Materials
• a grow light
• 12 bean plants
• 12 pots with soil
• water What materials and equipment you used

Results
Height of Plants

7 days	14 days	21 days	28 days
A B C D E F	G H I J K L		

12h light | 24h light

Photos of the two groups of plants during the experiment

Constants
- planting conditions
- growing conditions (except for light):
water, temperature

Variable
- hours of light given each day

Discussion of the Results
I found that the amount of light did make a difference in how tall my plants grow, but not as much as I expected. I thought that two times the light would make the plants grow twice as tall (etc.). Even so, my experiment showed me why vegetables grow so big up north. What did your observations tell you? Discuss anything interesting or unexpected that happened.

Conclusion
The number of hours of light does affect plant growth. More hours of light results in taller plants. However the relationship between hours of light and plant height was not linear. What you have shown

References
(Books and other resources) Where you found your information

Acknowledgments
I would like to thank... People and associations who helped you

What you kept the same, and the one thing you changed

Keeping a Logbook for a Science Fair Project

**A logbook should read like a diary or journal and tell about your project.
It should have day by day entries. Each entry should begin with the date and may include:**

What you did each day. For example:

I thought about _____ . I wondered whether _____ .
I talked to _____ .
I visited the library to find out _____ .
I looked at these books, magazines, web sites _____ .
I emailed _____ to ask _____ .
I visited _____ to learn about _____ .
I found out that _____ .

Difficulties you encountered and how you handled them. For example:

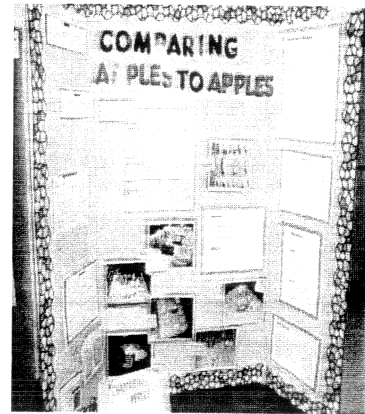
I wasn't able to _____ so I decided to _____ .
I couldn't get _____ to work so now I am going to do _____ .

Successes. For example:

At last! My _____ is working.
I did my experiment three times and it worked every time.
I finally found out _____ .

Details of the results of the day's work. For example:

Your designs
Notes you made during background research.
Data you gathered.
Measurements you made.
Sketches, drawings, and plans.
Rough layouts of your backboard.



The next thing you will do. For example:

Tomorrow I will _____ .
I need to go to the library and get more information about _____ .
I need to learn how to _____ .
I'm ready to lay out my backboard.