

## Honors Biology I Summer Assignment

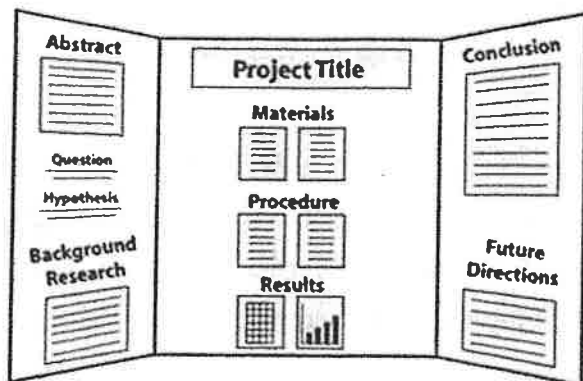
MCHS - Jennifer Hammock

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For your summer assignment in Honors Biology, you will complete a Science Experiment using the Scientific Method. You are required to utilize resources on ScienceBuddies.org to learn the steps of the Scientific Method to conduct a scientific experiment as well as how to create a presentation board. Upon your return to school in August, you should have completed your experiment and prepared a science tri fold board that you can present to your peers. If you are unable to create a display board, you may create a Google SlideShow that includes the same information. Below you will find the steps to help you complete this project.

1. Go to [www.sciencebuddies.org](http://www.sciencebuddies.org)
  - a. Select Menu then select Project Guides.
  - b. This will take you to a page called "Science Fair Project Guide" that will take you through each step of the Scientific Method.
  - c. Work through each of the steps using the links provided under each step.
2. Select your topic for your Science Experiment!
  - a. From the Science Buddies website "Menu," select "Topic Selection Wizard."
  - b. You will complete a short questionnaire on the website to help guide you to a project that should interest you. Please make sure that when selecting your project that you are selecting one that is on grade level of 9-12th.
  - c. Think you have a better idea of an experiment? You may decide on something that is not on Science Buddies. It is ok to do something not on the website, but please make sure that it is a testable question!!
3. Now that you have your experiment, you should work through ALL of the steps of the Scientific Method and create your tri fold presentation board. You are not required to write a research paper, only complete a tri fold board that you can present during the first week of school.
4. Tips for your Science Presentation - Display Board or Google SlideShow:
  - a. Three-panel display board that unfolds to be 36" tall by 48" wide.
  - b. Organize your information like a newspaper so that your audience can quickly follow the thread of your experiment by reading from top to bottom, then left to right. Include each step of your science fair project: Abstract, question, hypothesis, variables, background research, and so on.
  - c. If you have chosen to do a Google Slide presentation, you must still include all of the information required on the display board.

## Grading Rubric:



### Presentation Checklist:

- ☐ Title
- ☐ Abstract
- ☐ Question
- ☐ Variables & Hypothesis
- ☐ Background Research
- ☐ Materials List
- ☐ Experimental Procedure
- ☐ Data Analysis & Discussion Including Data Charts & Graphs
- ☐ Conclusions (Including ideas for future research)
- ☐ Acknowledgements
- ☐ Bibliography



## Grading Rubric: Display Board

Name:	Date:
0 = No Evidence    1 = Some Evidence    2 = Clearly Evident	
Does the display board include the following sections:	
o Title	0   1   2
o Abstract	0   1   2
o Question	0   1   2
o Variables and hypothesis	0   1   2
o Background research	0   1   2
o Materials list	0   1   2
o Experimental procedure	0   1   2
o Data analysis and discussion including data chart(s) & graph(s)	0   1   2
o Conclusions (including ideas for future research)	0   1   2
o Acknowledgements	0   1   2
o Bibliography	0   1   2
Are the sections on the display board organized like a newspaper so that they are easy to follow?	0   1   2
Is the text font large enough to be read easily (at least 16 points)?	0   1   2
Does the title catch people's attention, and is the title font large enough to be read from across the room?	0   1   2
Did the student use pictures and diagrams to effectively convey information about the science fair project?	0   1   2
Is the display board neat?	0   1   2
Has the proper spelling and capitalization been used on all elements on	0   1   2