

Name \_\_\_\_\_

Group \_\_\_\_\_

## Meyzeek Science Fair 2016-2017

Science fair is an opportunity for students to apply the scientific method to conduct independent research on something she/he is curious about. The following modules are designed to help you be successful.

2016-2017 Science Fair

Question and hypothesis

Research Plan

Progress Check #1

Progress Check #2

First Draft

Board Progress

Final Project

Science Share Fair

Regionals-March 11th

### 1) Module 1: Question and Hypothesis

- a. [http://www.sciencebuddies.org/science-fair-projects/project\\_guide\\_index.shtml](http://www.sciencebuddies.org/science-fair-projects/project_guide_index.shtml)
  - i. Getting Started
    - The Scientific Method
    - Your Question (worksheet)
    - Laboratory Notebook
  - ii. Doing Background Research
    - Background Research Plan (worksheet)
    - Finding Information
    - \*\*Bibliography (worksheet)
    - Research Paper
  - iii. Constructing a hypothesis
    - Variables
    - Variables for Beginners
    - Hypothesis
- b. Watch video clip <http://www.youtube.com/watch?v=CO8oENtHv-g>
- c. Watch video clip <http://www.youtube.com/watch?v=yuFDyjrK1hU>
- d. Watch video clip <http://www.youtube.com/watch?v=L6uOJX3dYPE>

### 2) Module 2: Research Plan

- a. [http://www.sciencebuddies.org/science-fair-projects/project\\_guide\\_index.shtml](http://www.sciencebuddies.org/science-fair-projects/project_guide_index.shtml)
  - i. Testing your Hypothesis by Doing an Experiment

- Experimental Procedure
    - Materials List
  - b. Watch video clip <http://www.youtube.com/watch?v=bAYhDfvsEFU>
  - c. Watch video clip <http://www.youtube.com/watch?v=PlOwEibOGco>
    - i. Go to [www.ruleswizard.com](http://www.ruleswizard.com)
- 3) Module 3: Conduct the Experiment
  - a. [http://www.sciencebuddies.org/science-fair-projects/project\\_guide\\_index.shtml](http://www.sciencebuddies.org/science-fair-projects/project_guide_index.shtml)
    - i. Testing your Hypothesis by Doing an Experiment
      - Conducting an Experiment
  - b. Watch the video clip <http://www.youtube.com/watch?v=rGunpqKpuH8>
- 4) Module 4: Data Analysis
  - a. [http://www.sciencebuddies.org/science-fair-projects/project\\_guide\\_index.shtml](http://www.sciencebuddies.org/science-fair-projects/project_guide_index.shtml)
    - i. Analyzing Your Data and Drawing a Conclusion
      - Data Analysis and Graphs
      - Conclusions
  - b. Watch the video clip <http://www.youtube.com/watch?v=DVrbmDDG8Zs>
- 5) Module 5: APA Formatting
  - a. [http://www.sciencebuddies.org/science-fair-projects/project\\_guide\\_index.shtml](http://www.sciencebuddies.org/science-fair-projects/project_guide_index.shtml)
    - i. Doing Background Research
      - Bibliography
      - Research Paper
- 6) Module 6: Writing the Paper
  - a. [http://www.sciencebuddies.org/science-fair-projects/project\\_guide\\_index.shtml](http://www.sciencebuddies.org/science-fair-projects/project_guide_index.shtml)
    - i. Doing Background Research
      - Bibliography
      - Research Paper
    - ii. Communicating Your Results
      - Final Report
      - Abstract
  - b. Writing the conclusion: [http://www.youtube.com/watch?v=6dCT\\_xC1qpM](http://www.youtube.com/watch?v=6dCT_xC1qpM)
  - c. Writing an abstract: <http://www.youtube.com/watch?v=LvzcvRVJ1bk>

Other Resources:

- i. <http://www.apastyle.org/>

- ii. <http://owl.english.purdue.edu/owl/resource/560/01/>
- iii. <http://citationmachine.net/index2.php>
- iv. Example Science Fair paper, handout

7) Module 7: Board and Presentation

- a. [http://www.sciencebuddies.org/science-fair-projects/project\\_guide\\_index.shtml](http://www.sciencebuddies.org/science-fair-projects/project_guide_index.shtml)
  - i. Communicating Your Results
    - Display Board
- b. <http://www.youtube.com/watch?v=G4L5i6dJzd0>

8) Module 8:

- a. Register on <http://meyzeek.stemwizard.com/>
- b. Scroll to the bottom of the page and register as a student

**Plagiarism:**

Plagiarism is defined as presenting someone else's work, including the work of other students, as one's own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered "common knowledge" may differ from course to course.

- a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment.
- b. A student must give credit to the originality of others and acknowledge indebtedness whenever:
  - 1. Directly quoting another person's actual words, whether oral or written;
  - 2. Using another person's ideas, opinions, or theories;
  - 3. Paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;
  - 4. Borrowing facts, statistics, or illustrative material; or
  - 5. Offering materials assembled or collected by others in the form of projects or collections without acknowledgment.

Student Signature\_\_\_\_\_

Date\_\_\_\_\_

Parent Signature\_\_\_\_\_

Date\_\_\_\_\_