

Science Fair Project

Mr. Hawkins' Class, Team 7-1

Project Introduction

One of the best ways to see science in action is to participate in the science fair. Perhaps you participated in the science fair in a previous year of school. As a member of the very smart 7-1 Team, you are **required** to participate in the science fair. The science fair will count as a Test Grade and a series of assignments leading up to the science fair will also count as daily work grades. The science fair is only as difficult as you make it. If you do it right, it should be a lot of fun and you will learn a lot about science.

Checklist

There are a number of things you must do before you are ready for science fair. The following checklist is in order and will help you prepare.

- Understand the scientific method**
- Find a science project that interests you**
- Research that project topic**
- Develop a testable hypothesis**
- Write down all the steps, in order, necessary to do an experiment to test your hypothesis**
- Fill out the Science Fair Proposal Form and turn it in to Mr. Hawkins to review**
- Gather the materials to perform the experiment
- Perform the experiment
- Record data during the experiment
- Analyze the data and come to a conclusion
- Buy a poster board
- Neatly type, print and glue all the information about your assignment to the poster board
- Have your parent/guardian sign required paperwork
- Present your science fair project

The **bold** items are the things that must be completed first. I expect you to get these done in the next two weeks.

The Scientific Method

The scientific method describes a process scientists use to explore and understand the world around them. The steps are simple.

1. State the problem or question you want to investigate.
 - a. (Ex: *What time of day is the humidity the highest in Brownsville?*)
2. Perform Background Research
 - a. (Ex: *I would go to the library and research humidity records in Brownsville.*)
3. Formulate a Testable Hypothesis
 - a. A hypothesis is an educated guess that provides an answer to the problem/question.
 - b. (Ex: *Humidity is highest at 8:00 a.m. in Brownsville.*)
4. Perform an Experiment
 - a. (Ex: *Using a barometer and computer software, I will record the humidity at each hour of the day over the course of 1 month.*)
5. Analyze the Data
 - a. (Ex: *I would look at the results of my experiment and see what it means.*)
6. Come to a Conclusion
 - a. You will state whether or not your hypothesis was correct, by looking at the data from the experiment.
 - b. (Ex: *It turns out humidity is the highest at 7:00 p.m. My hypothesis was incorrect.*)

Name _____

Period _____

Date _____

Science Fair Proposal Form

Question/Problem

Testable Hypothesis

Reasons you believe your hypothesis is the solution to the question/problem

Step-by-step instructions for your experiment

Materials Needed

What assistance do you need to complete this project?

Good Places to Start Looking

<http://all-science-fair-projects.com/category0.html>

http://www.sciencebuddies.com/mentoring/project_ideas.shtml

<http://www.sciencefair-projects.org/>

<http://www.sciencefairadventure.com/>

<http://www.terimore.com/>

Guidelines

Remember, you are in 7th grade. That means your project needs to be 7th grade level or higher. A simple, elementary school type project will not cut it. If it seems too easy, it probably is. The more challenging your project is, the more likely the judges will be to give you extra points for doing it. Mr. Hawkins reserves final say on whether or not you can do the project.

Questions to Ask Yourself

Do you have all the resources to do this project?

If you don't have all the resources, does the school have these resources?

How long will this project take to complete?

What help do you need to complete this project?

Frequently Asked Questions**Do I have to do the Science Fair?**

Yes. It is required. It counts as a test grade and we will do many assignments.

Can I work with a partner?

No. You need to do an individual project.

When is it due?

The science fair is not until February, but we are going to finish early so we can choose the best projects and have plenty of time to improve the posters and get the paperwork done. The final dates will come later. For right now, the most important thing is to **find a project**.

Where do I look to find a project?

Look at the websites above.

Do I have to buy my own poster?

Yes.

What if I can't find a project?

You're not looking hard enough. There are thousands of good projects out there. Put in the time and effort to do it.

What do I need to do today?

You need to go to one of the websites above (the links are also on the class website, mrhawkinsclass.weebly.com) and find a science fair project you are interested in doing. You will fill out the Science Fair Proposal Form to help you plan your science fair project. I expect you to complete this worksheet by the end of the week.

Where should I keep my papers?

Keep your papers in your folder so you don't lose them.

Name _____

Period _____

Date _____

Source List

You need 5 sources for your science fair research.

1. Source Name _____

Source Type (book, website, video, etc) _____

Source Citation

Source Info

2. Source Name _____

Source Type (book, website, video, etc) _____

Source Citation

Source Info

3. Source Name _____

Source Type (book, website, video, etc) _____

Source Citation

Source Info

Name _____

Period _____

Date _____

4. Source Name _____

Source Type (book, website, video, etc) _____

Source Citation

Source Info

5. Source Name _____

Source Type (book, website, video, etc) _____

Source Citation

Source Info