

IT'S SCIENCE FAIR PROJECT TIME
Here is your Science Fair Project Timeline

| Due Date | Description | Available Points | Points Received |
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| 2/14/2014 | Packet Received | | |
| 2/16/17 for 7 th & 8 th Grade 2/17/17 for 6 th grade | Choose a topic and brainstorm a minimum of 2 a maximum of 5 scientific questions you can research, plan and create an experiment around. Use the project question brainstorm sheet to list your main topic and your 2-5 questions to get teacher approval on. | 10 | |
| 2/24/2017 | Research your topic and turn in 3-5 key science terms that are related to your topic and scientific question. Turn in Terms project research with bibliography information to teacher. | 10 | |
| 3/3/2017 | <u>Parent Signature Sheet</u> lists your title, at least four research sources you have used, and your hypothesis, along with your signature and your parent's signature. | 30 | |
| 3/3/2017 | Begin writing your research paper from your research done so far and starting out using the terms you researched. If necessary, continue your research. | | |
| 3/10/17 | Your step by step procedure and complete materials list should be completed and turned in. | 30 | |
| Suggested to be done between 3/13/17 - 3/27/17 | Begin the experimentation part of your project, being sure to observe and record each step of the way. Keep a record of all trials in your journal. | | |
| 03/23/2017 | Your research paper is due. | 100 (TEST) | |
| 03/27/2017 | Continue working on your experimentation. Begin deciding how to chart or graph your data. | | |
| 03/30/2017 | Your project should be completed and your backboard should be coming together. Begin your abstract. | | |
| 04/04/2017 | Your abstract is due. It MUST be typed. | 30 | |
| 04/11/2017 Science Fair Day | You must check in with your Science Teacher in the gym before school, with your completed project. I will be grading your final notebook, backboard and presentation. | 100 (TEST) | |

IT'S SCIENCE FAIR PROJECT TIME

Here's how to make it as easy and fun as possible. First of all, plan ahead and follow the time guideline. This will ensure you are on the right track and will allow ample time to complete your project. Secondly, do your very best. Thirdly, have fun with it...pick a topic you are interested in and a question you really want to know more about. You will learn some things and enjoy yourself in the process. **Keep copies of everything you do, so you will have them for your notebook, which you will include with your project.**

To the parents of our participants: *Many of the skills needed to complete portions of your child's project are explicitly taught during class time. It is your student's responsibility to work hard in class to obtain these skills, so that they can use them properly in their project. There will also be a times students can request to meet with me for help. I am available usually on Monday and Fridays during lunch and recess time and Thursdays after school. Please make sure your child takes advantage of the time I am available and not wait till the week before the Science Fair 😊*

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| Lab Book | <p>A lab book is MANDATORY and must be used as part of the science fair project.</p> <ul style="list-style-type: none"> • This lab book could serve as a place for you to make journal entries, record research, insert printed pages of research, take notes and a place to collect data. Be sure to keep track of sources too. • EVERYTIME you do something related to your project, you can record it and <u>include the date</u>. • You may use any of the following for a lab book: composition book, 3 ring binder, or a 3-prong folder with brads. If you choose to use a binder or folder, start by placing several sheets of paper in them. |
| Topic | <p>Begin thinking about the general topic on which you'd like to do your science project. Think of some things you find interesting and would like to know more about.</p> <ul style="list-style-type: none"> • <u>Read about them, look them up online, talk to people about them, and get some ideas flowing by journaling.</u> (These things should be recorded and dated in your lab book.) • You may NOT do your project on disposable diapers, paper towels, popcorn, or weapons. • You may NOT do a project which kills or harms any vertebrate animal, or which involves any type of explosives or poisonous materials. • You may NOT do a project you have done before unless you are doing a two or three year study. That means you build on your previous project by extending your tests to something new, do not repeat it. • <i>Your goal is to come up with an <u>original</u> question to test. You may use science fair project websites to get ideas, but try to come up with something that you want to test, so that you can create an original experiment.</i> |
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| Research | <p>Now you begin looking up specific information about your topic.</p> <ul style="list-style-type: none"> • This is a searching process where you do some reading on your topic, checking in periodicals, talking to people, maybe looking on the history or discovery channel, and begin to narrow down exactly what question you want to ask and answer in your project. • You may decide to change your topic while doing your research, and that's fine. • Be certain to take notes on everything you read, so you can properly document it later. • Using index cards works very well, because you can shuffle them later and put them in order to use while writing your research paper. <u>Be certain to begin your bibliography</u> (use http://citation.jsarkis.com/ for proper citation format) , listing everything you read, every website you visit, and everyone you talk to about your project possibly in a science journal. • 6th graders must have at least 3 sources for your bibliography, and at least one of them must be a book. • 7th graders must have at least 4 sources for your bibliography, and at least one of them from a book. • 8th graders must have at least 5 sources for your bibliography and at least one of them must be books. • Be certain you have an accurate address for each website you used. If I cannot access the website, you will not get credit for it. <i>Reminder: Everything you find related to research must be recorded and dated in your lab book.</i> |
| Title | <p>Once you have decided exactly what you want to test, formulate your title.</p> <ul style="list-style-type: none"> • Remember it must be a question, which can be answered by experimentation. • You cannot ask how something works; it must be something you can personally test and discover for yourself. |
| Hypothesis | <p>Based on what you know so far, begin to form a hypothesis.</p> <ul style="list-style-type: none"> • A hypothesis is a statement regarding what you believe will happen based on your prior knowledge. • Your hypothesis should generally be about one sentence and MUST be an If...Then... statement. (This is a skill taught explicitly in class.) • When stating an If...then... statement the Independent (test) variable and the dependent (outcome) variable MUST be stated. →If (independent variable) then (dependent variable). • The hypothesis cannot be an “I think” or “I believe” statement. |

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| <p>Research Paper</p> | <p>See the attached form at the back of this packet for additional information and examples. A sample research paper is available on Edline for your viewing. Grade levels have different requirements, so please be check carefully what you are required to complete.</p> <ul style="list-style-type: none"> • An electronic copy and a hard copy of your research paper are required. Failure to turn in an electronic copy will result in a 25point deduction off of your grade. • You should begin writing your research paper by organizing your index cards or notes you have taken. Put them in whatever order works for you, so you can plan your paper or make an outline with an opening section, body section, and closing section. • You will probably start with an interesting introduction to your topic, and then what you have learned about it, then conclude your information with a brief summary that makes sense and pulls together all the information you have acquired. • This is where making an outline and thinking of good topic or conclusion sentences can help. • A research paper is about research. <i>This is NOT the place for your hypothesis, your procedure, your testing, or your results.</i> The paper is about what you learned before you did those things. • It is factual. • Be very careful to not plagiarize information. You will use the information you learned, but not in the same words. • <u>Plagiarism will be cause for a zero on your paper.</u> Don't do it! • Your research paper is worth 100 points, with 25 points off for each day it is late. THIS A TEST GRADE. • Don't wait until the last minute to begin this very important part of your project! • SEE ATTACHED DOCUMENT ON SPECIFICATIONS FOR PAPER AND HOW TO SITE RESEARCH PROPERLY. |
| <p>Procedure</p> | <p>You may begin your procedure as soon as you are ready.</p> <ul style="list-style-type: none"> • Start by listing in order, the steps you will take to test your project. • You must be specific enough so that someone else can follow your directions and do exactly what you have done. • A typed copy of your procedure, and a complete list of the materials you will be using for your project (not for your backboard), must be turned in on 3/10/17. • Once you have your procedure written, you may start your experiment. • Be certain to accurately observe and record your data, and do it often. • Be certain you are making observations, both quantitative and qualitative, as your procedure progresses. • Your <u>observations should be kept in your lab book or in a safe place where you have your notes for the project and should dated</u>, not on loose pieces of paper, which can be lost. Your notes will be critical to your conclusion. • Make sure to take photos as your project is progressing. |

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| <p>Data</p> | <p>All data you collect must be recorded and dated in your lab book.</p> <ul style="list-style-type: none"> • Data must include Qualitative and Quantitative Data. (This information is covered in the science textbooks; use the index to search for it if you need more information.) • All data should be presented in table and/or graph form. • The following website is very good to use to help you create graphs: http://nces.ed.gov/nceskids/graphing/classic/ |
| <p>Conclusion</p> | <p>What did you learn from this project? If your hypothesis was not correct, did you learn something new? What overall conclusion can you make about your project?</p> <ul style="list-style-type: none"> • The conclusion MUST be use the terminology: <u>My hypothesis was/was not supported by my data.</u> • Then, you must use your data to show why is was/was not supported. Remember: your hypothesis does not have to be proven to be accurate, but you must show evidence one way or the other as to how you came to your conclusion. • Do not use numbers or percentages if you cannot mathematically come up with them. |
| <p>Abstract</p> | <p>Your abstract is the most important single piece of paper in your project. It is basically a summary, in 250 words or less, of what you were trying to find out, how you went about it, and what you learned.</p> <ul style="list-style-type: none"> • It must be typed, in times new roman 12-point font and have a proper heading. • It needs to be displayed with your science fair backboard. • You can either <ul style="list-style-type: none"> a) paste it to the bottom left panel of your backboard or b) place it in a document photo frame and stand it in front of your project board. |
| <p>Notebook <u>(different than lab book)</u></p> | <p>Your notebook should contain the following items:</p> <ol style="list-style-type: none"> 1. Title page including your name, period, and date 2. A clean copy of your research paper 3. Hypothesis 4. Materials list (only include those materials that were used) 5. Procedure 6. Quantitative and qualitative observations in the form of charts, graphs, or photos. 7. Conclusion 8. A copy of the Abstract. The original should be on your backboard or in a frame. |
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| <p>Backboard</p> | <p>Your backboard should be a three-sided display, which is self-supporting. Your notebook or any items you have to display may be placed on the table in front of the backboard.</p> <p>The following are the parts that must be included on your backboard. I do not care how you set it up but should look neat and professional.</p> <ol style="list-style-type: none"> 1. problem – if your title names your problem, it is not necessary to repeat it 2. hypothesis – this is your educated guess about the outcome of your testing and should not be changed to correlate to your results - use your original hypothesis 3. abstract – the most important document on your backboard, the abstract is an 8.5"x11" synopsis of 75-250 words which addresses issues – what you were trying to find out, how you went about it, and what you learned 4. data – information you observed during your testing – quantitative data should be shown in chart or graph form. Wherever you have charts or graphs you must have a label under them saying: <i>Graphs and Data Tables Created by: _____</i>; Wherever you have photographs you must have a label under them saying: <i>Photos taken by: _____</i> 5. pictures – selected photographs of your testing and results can be displayed with captions 6. procedure – the steps you followed in testing should be outlined so that observers can understand fully how you worked your problem and arrived at your conclusion 7. conclusion – the results of your testing and what you actually learned |
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Science Fair Research Paper Requirements

PAPER: (There is a sample paper available to view on Edline.)

- Turn in a paper (hard) copy
- Turn in an electronic copy
- 12 Point Font, Times New Roman
- 1" margins on all sides
- Double Space
- Indent Paragraphs
- Cover page (project title in center of page, and a full heading in the lower right hand corner. Full heading includes Your full name, teacher's name, grade and class section)
- Length requirements do not include your cover page or bibliography page(s)
 - 6th grade: 1-2 Full Pages of research required
 - 7th grade: 2-5 Full Pages of research required
 - 8th grade: 3-6 Full Pages of research required
- All of the resources listed on your bibliography page **MUST** be cited in your paper. If you do not use a source, then do not include it on the bibliography. Be sure to cite information that you did not previously know. If you quote someone directly use quotation marks and the citation in parenthesis. Cite using the first word of that source that is on your bibliography page.
 - Example of citing within a paper:

According to evidence collected by anthropologist, like stone arrowheads in Africa, that date back to 50,000BC, scientists have concluded that archery has been around for survival for thousands of years (Jeffrey).

BE VERY CAREFUL!!!! DO NOT COMMIT PLAGIARISM ON MATERIAL THAT OTHERS HAVE WRITTEN. IT IS ILLEGAL AND WILL EARN YOU A ZERO FOR THE ASSIGNMENT. IF YOU USE IT, PUT IT IN YOUR OWN WORDS AND GIVE THEM CREDIT OR QUOTE IT!!! IF YOU ARE NOT SURE, CITE IT OR ASK!

RESOURCES:

- NO WIKIPEDIA!!
- GOOGLE **IS NOT** a website.... It is a search engine! You cannot cite it!
- For interviews, you must include a phone number and address for the person you interviewed.
- 6th graders: 3 sources are required and one of them **MUST** be a book.
- 7th graders: 4 sources are required and one of them **MUST** be a book.
- 8th graders: 5 sources are required and one of them **MUST** be books.
- Examples of resources are: books, magazines, journals, websites, interviews, videos, etc.
- Create an annotated bibliography page in Alphabetical order. In order to put sources into the correct format use <http://citation.jsarkis.com/> to help you with this. Type in the information for whatever kind of source you are using, hit the cite button, copy the text in the purple box, then paste it onto your Bibliography page. (Annotated means tell some basic information you gathered from this site, book, etc. It is only a sentence or two.)
 - Example of correct citation and annotation:

Jeffrey, Graeme. "Archery History "A Shot in Time"." Century Archers Club. 14 Nov. 2010.

Centenary Archers Club. 1999 <http://www.centenaryarchers.gil.com.au/Default.htm>.

Information: From this source I found out the history of archery and when materials were changed that arrows were made of.

1. Title and Question (if not the same as my title)

2. Resources

a. _____
Information from this source:

b. _____
Information from this source:

a. _____
Information from this source:

b. _____
Information from this source:

8. Your hypothesis (If...Then...)

I understand that it is my responsibility to turn in all parts of the science fair project, done correctly, and on time.

Your signature _____

I have seen the science fair packet and timeline and understand it is my student's responsibility to turn in all parts of the project, done correctly, and on time.

Parent Signature _____