

November 12, 2018

Dear Parents,

Our science fair will be held on Thursday, February 28, 2019. Prior to our school fair, a classroom fair will be held beginning on February 21, 2019. The students will receive several grades for the science projects. Included in this packet is a time line showing dates and which parts the students will receive grades. Please feel free to contact your child's teacher if you have any questions or concerns. The attached Science Fair Handbook should prove to be a valuable source of information to you. We expect adult help on science projects but only parts that a student cannot do without assistance.

**Experiments with human test subjects or live animals will NOT be accepted in the Bayou Academy Science Fair.**

**A complete list of the Science Fair rules as well as this packet can be found on our website under "Academics" and then "Bayou Academy Elementary" on the right hand side under the "Downloads" section.**

Sincerely,

Katie Herbison  
Amy Maggio  
Keith Aycock

**Please keep this packet. It contains all the important dates and information you will need to complete the science project.**

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**Please detach the bottom portion of this letter and return to school tomorrow, November 13<sup>th</sup> for a Daily Grade.**

I have received the science fair packet and understand that my child will be responsible for completing the project and turning in the required information on the set due dates.

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Parent's Signature

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Student's Signature

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Date

## Science Fair Timeline

Due Date	Document
November 14, 2018	Signed Parent letter – <b><u>Daily Grade</u></b>
November 29, 2018	Project Proposal form – <b><u>Daily Grade</u></b>
December/January	<b><u>After given approval by the teacher of the Proposal Form,</u></b> during this time you should be performing the experiment and preparing the information to go on the project board.
February 20, 2019	You should be completed with the display board.
February 20, 2019	<b><u>Use the information from display board</u></b> and complete the Abstract. (No more than 250 words) See Appendix E in Science Fair rules on Bayou Academy website under “Academics” then click Bayou Academy Elementary.
February 21, 2019	Science Projects <b><u>Display Boards only</u></b> brought to school. <b><u>Do not bring any objects except the display board. If the student has items to display, they will bring them to the school fair on February 28th.</u></b>
February 21, 2019	Turn in Abstract (no more than 250 words) – <b><u>Daily Grade</u></b>
February 21, 2019	Classroom Science Fair will begin – <b><u>Test Grade</u></b> <b><u>(see Grade Sheet rubric on Bayou Academy website under “Academics” then click Bayou Academy Elementary.)</u></b>
February 28, 2019	School Science Fair

All projects must have an index card attached with the following information. The index card should be located on the **back** of the **middle section** at the top of the trifold board.

Name: Grade: Age: Bayou Academy Category Name:
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Please do not display a name so that it is visible on the front of the project. Each project will be assigned a number for use by the judges.

Winners will be announced as soon as the results are available. Winning projects will remain at school, all other projects need to go home the same day.

### **Guidelines to help complete your Science Fair Project**

1. **Select your topic:** Choose something you are interested in and something you want to learn more about. Talk to teachers, parents, or librarians for ideas. A hobby might lead you to a good topic. Don't forget to look through your science textbook, magazines or visit zoos, museums, or state parks for ideas.
2. **Research your topic:** Use various sources to learn as much as you can about your topic.
3. **Make a time table:** Develop a timeline to manage your time efficiently. Allow plenty of time to experiment and collect data. You will also need time to compose an abstract and put together a display board.
4. **Problem:** Why are you doing this investigation and what are you trying to prove?
5. **Hypothesis:** Evaluate possible solutions and make an educated guess as to what the results of your experiment will be. This should be done before the experiment takes place. It is your opinion and should not be changed.
6. **Materials:** Gather and record all materials used in your investigation. Include what, how much, and what kinds of materials you used
7. **Experiment:** Develop a research plan to organize your experiment. Perform the experiment. Keep careful records in a notebook or journal that is only used for this project. Use data tables and charts. Record all measurements and observations.
8. **Procedure:** This is a step- by- step explanation of what you did. This is like a recipe. Anyone who reads your experiment will be able to duplicate your experiment and get the same results. Drawings and photographs can be used to help explain your procedure.
9. **Results:** Describe what happened in your experiment. Graphs and pictures can be used to illustrate your findings. These are the facts that occurred during and at the end of the experiment.
10. **Conclusion:** State the scientific facts that you have learned from your investigation. What conclusion can you make? Use your results to accept or reject your hypothesis. Never alter results to fit a theory. If your results do not support your hypothesis, that is okay and in some cases good. Try to explain why you obtained the results you did. Think of how the experiment could be used in the real world. Finally, explain how you would improve the experiment in the future.
11. **Abstract:** Each student who completes a science fair project must write an abstract to be displayed with the project. An abstract is a one page summary that gives the essence of the project in a brief but complete form- it should not exceed 250 words. Judges should have a fairly accurate idea of the project after reading the abstract. The abstract form can be found at [www.bayouacademy.net](http://www.bayouacademy.net) and click the Academics tab then Bayou Academy Elementary. Look on the right under the "Downloads" bar.
12. **Display:** Complete the display board and practice your presentation for judging.
13. **Project size requirements:** See the MAIS rules found on the Bayou Academy website under Academics and Bayou Academy Elementary.
14. **Items not allowed at the project booth:** See the MAIS rules found on the Bayou Academy website under Academics and Bayou Academy Elementary.

## Sample Display Board

<p><b><u>Problem</u></b> Why are you doing this project? What are you trying to find out? Where did you get the idea? The problem is often expressed as a question.</p> <p><b><u>Hypothesis</u></b> This is a guess based on knowledge and research of what the results of your experiment will be <b>before</b> you actually do it.</p> <p><b><u>Materials</u></b> This is a list of supplies used to complete the project. Include what, how much and what kind.</p>	<p><b><u>Title of the Project</u></b></p> <p><b><u>Procedure</u></b> This is a step-by-step explanation of what you did. Anyone reading your procedure should be able to duplicate your experiment and get the same results. Drawings and photographs can be used to help explain your procedure.</p>	<p><b><u>Results</u></b> Describe what happened in your experiment. Line, bar, and picture graphs can be used to illustrate your results. These are the facts of what happened during and at the end of the experiment. They may or may not support your hypothesis.</p> <p><b><u>Conclusion</u></b> State the scientific fact or facts you learned from your investigation. What conclusions can you make from your experiment? (did it work or not and why?) What would you do differently next time to make the experiment better?</p>
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### Websites as Resources

You may find the following websites helpful.

1. [www.discoverychannel.com](http://www.discoverychannel.com)
2. [www.animalplanet.com](http://www.animalplanet.com)
3. [www.nasa.com](http://www.nasa.com)
4. [www.nationalgeographic.com](http://www.nationalgeographic.com)
5. [www.science.glencoe.com](http://www.science.glencoe.com)
6. [www.sciencebuddies.com](http://www.sciencebuddies.com)
7. [www.education.com](http://www.education.com)
8. [www.about.com/chemistry](http://www.about.com/chemistry)
9. [www.sciencefair-projects.org](http://www.sciencefair-projects.org)

### Category Description

**Biochemistry** – study of chemical substances and vital process occurring in living things.

**Botany** – study of plant life

**Chemistry** – study of the composition, structure, properties, and reactions of matter.

**Earth, Space, & Environmental Sciences** – study of sciences related to the planet Earth, the condition of the environment, and the universe beyond the earth.

**Engineering, Computers, & Math** – application of scientific and mathematical principles to practical ends such as the design, manufacture, and operation of efficient and economical machines, structures, processes, and systems including information systems.

**Medicine & Health** – study of diseases and health of humans and animals – dentistry, pharmacology, nutrition, sanitation, allergies, speech and hearing are included.

**Microbiology** – study of micro-organisms including bacteria, viruses, protozoology, fungi, etc... and antibiotic substances.

**Physics** – study of matter and energy and the interactions between the two

**Zoology** – the study of animals and animal life including structure, physiology, and classification.

### **Tips for Parents**

Helping your child with their project

1. Give encouragement, support, and guidance.
2. Make sure your child feels it is his/her project. Make sure the work is primarily the work of the child
3. Realize the main goal of a science fair project is to help your child use and strengthen the skills he/she has learned and develop higher-level skills. The main goal should not be the ribbon or the prize.
4. Help your child design a project that is safe and properly supervised.
5. Help your child plan a mutually agreed upon timeline to prevent a last minute project.
6. Do not worry or get upset if your child does not win a prize at the science fair. The skills the child has gained are worth all the effort.
7. Feel a sense of pride and accomplishment when the science fair is over. You and your child have earned it!

### **Science Fair Set Up**

The Bayou Academy Science Fair will be held in the gym on Thursday, February 28<sup>th</sup>. We will send more information at a later date about project set up.

# Presentation to Judges

This is an important part of your project so take time to plan and practice the presentation you will make to the judges. Plan in advance what you want to say but don't memorize your presentation. Write key phrases or ideas on index cards and use them as a reference but don't depend heavily on them.

Here is an approach you may wish to use for making your oral presentation:

1. Greet the judges and introduce yourself.
2. Give the title of your project, your grade, school and teacher.
3. Tell how you became interested in the topic.
4. Give some background information about the topic.
5. State the purpose of your investigation.
6. Discuss your review of literature.
7. Describe in a step by step fashion the procedure you followed for conducting your investigation. Point to sections of your display and refer to charts, graphs, and photographs. If you have equipment on display allow the judges to examine it.
8. Explain the results of your experiment and be sure to discuss controls and variables. Remember to keep all measurements in metric units.
9. **Identify the conclusions that you could logically draw from the experiment.**
10. Discuss any future plans you may have to continue research or experimentation related to your topic. Include a few statements about any changes you made in your scientific approach during your early investigation.
11. Ask the judges if they have any questions. Remember, if you don't know an answer say so and indicate you will look it into it. If judges insist on asking questions in unrelated areas, redirect the conversation back to your specific topic.
12. Thank the judges for their time and any suggestions they may have offered to improve your project.

Good manners, nice clothes, and enthusiasm for what you're doing will help to impress the judges. Here are some tips.

1. Wear nice clothes.
2. Be polite and practice good manners.
3. Make good eye contact with the judges and be sure to give each judge your attention. Don't just look at one.
4. Stand up straight and to the side of your exhibit.
5. Speak with enthusiasm, clarity, and assurance.
6. Don't do anything to distract the judges such as shuffle your feet, chew gum, or look at the ground.
7. Relax, smile, and have FUN.

**Classroom  
Science Fair Grade Sheet**

Name: \_\_\_\_\_ Grade: \_\_\_\_\_

Title of Project: \_\_\_\_\_

<b>Project Display Board (35 pts)</b>	<b>Points taken off</b>
Title (3 pts)	_____
Problem (3 pts)	_____
Hypothesis (5 pts)	_____
Materials (2 pts)	_____
Procedure (5 pts)	_____
Results (5 pts)	_____
Conclusion (10 pts)	_____
Proper Order (2 pts)	_____

<b>Grammar (18 pts)</b>	
Spelling (9 pts)	_____
Sentence Structure (9 pts)	_____

<b>Neatness (7 pts)</b>	_____
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<b>Attractiveness (10 pts)</b>	
Graphics/Charts/Pictures (5 pts)	_____
Size (2 pts)	_____
Color (3 pts)	_____

<b>Creativity (5 pts)</b>	_____
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<b>Knowledge of Project (25 pts)</b>	_____
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**TOTAL** \_\_\_\_\_/100

**Science Fair Project Proposal  
Bayou Academy**

**Due: November 29, 2018**

**Student's Name:** \_\_\_\_\_ **Grade:** \_\_\_\_\_

**Parent's Signature:** \_\_\_\_\_

**Problem:**

**The big question: What is it you want to find out?** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Hypothesis:**

**A good guess as to what your results will be:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Procedure:**

**Steps of the Experiment or investigation design to test your hypothesis:** \_\_\_\_\_

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**Category Name:** \_\_\_\_\_

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**Category Names**

Botany  
Chemistry & Biochemistry  
Earth & Space  
Engineering  
Environmental Sciences

Mathematics & Computers  
Medicine & Health  
Microbiology  
Physics  
Zoology

## Appendix E



### MAIS-EA SCIENCE FAIR ABSTRACT

*(Must be only one page)*

**NOTE:** *If re-created on computer, use Times New Roman font, 10 or 12 pt., Bold type.*

**Class and Category:** \_\_\_\_\_

**Project Title:** \_\_\_\_\_

**I. Problem:**

**II. Hypothesis:**

**III. Materials Used:**

**IV. Procedure:**

**V. Observation:**

**VI. Conclusion:**