May 3, 2019

Dear Parents,

It's that time to begin working on our Science Fair Projects! The Science Fair will be held on June 6th. The following packet includes a timeline and forms for assignments due along the way. By Tuesday, May 7th, all students must submit the science fair project proposal, indicating who they plan to work with for the project, the question they will be exploring, the independent variable (what will change), and dependent variable (what will be measured to answer the question). Students may work individually, in pairs, or in small groups (no more than 4 to a group). All proposals need to be signed by a parent for it to be considered complete. The website sciencebuddies.org is a great resource for selecting projects. It will be very interesting, as well as, exciting to see the results on the different topics! As a reminder, this project is completed outside of school. Have fun experimenting!

Thank You,

Third Grade Teachers

Student Science Fair Project Schedule

Assignment	Assignment Description	In Class Due Date	Points
Science Fair Project Proposal	Students decide on their projects and experiments that they will conduct. Proposals need to be signed to be considered complete. If working in a group, all parents need to be aware.	5/7/19	5
Question	The specific question your child will be investigating in the science fair project. **Science Fair Proposal Sheet included in this packet. Please tear off and return completed form to your teacher.**	5/7/19	5
Research Plan (3 questions) & Sources	The Research Plan is the list of 3 questions that you have created that focus on your topic. You must also include important vocabulary words associated with your topic. Your sources are a list of items that will be used to answer your research questions. **Source Requirement: at least 2 offline sources.** **Science Fair Questions and Sources Sheet included in this packet. Please tear off and return completed to your teacher.**	5/13/19	5
Hypothesis	Based on student research, what do you think will happen? Explain why.	5/17/19	10
Research Questions and Answers	The purpose of the Research Questions is to provide information to help understand why the experiment turns out the way it does. It should include: · **Definitions** of all important words and concepts that describe the experiment. · **Answers** to all the background research plan questions. **Hypothesis and Answers Sheet included in this packet. Please tear off and turn in completed sheets.**	5/20/19	20

Materials and Procedures	A detailed list of the materials that will be used to conduct the experiment and the detailed steps that will be followed while conducting the experiment. **Write down on a separate sheet of paper to turn in to be graded.**	5/20/19	10
Conducting the Experiment	There should be a minimum of one week to allow the students to do multiple runs of their experiments. **Minimum Trials: 3 runs of experiment.** If students are working with plants, they should have 3 plants for each variable tested. ** Take pictures to include on display board	5/20/19 - 6/3/19	15
Results	Explain what your results mean. Construct a table or graph to show your results.	6/3/19	10
Conclusions	An explanation of the results of the experiment. My hypothesis is correct or incorrect. Explain what this means for the real world.	6/3/19	10
Display Board	The final project board that will be displayed at the science fair. This will be done in class. Students must bring all components for the board. Boards will be supplied by the school.	6/3/19 - 6/5/19	10
School Science Fair	The Science Fair will be held in the multipurpose room. Parents will be invited for a preview. After the preview students from the junior high will judge the boards. Students should be prepared to answer questions and explain all aspects of their experiment and board.	6/6/19	

******* All components will need to be typed in Google Docs. Students may submit through Google Docs by sharing with their teacher. *******

Name_____

Science Fair Project Proposal (Example)

Topic: **Load Bearing Strength**

Question: **How does arch curvature affect load bearing strength?**

Independent variable (what I will change): **the curvature of the arch**

Dependent variable (what I will measure to answer my question): **the amount of weight being carried by the load**

Partner or partners:

Note that students who choose to work in a group will need to meet outside of school to complete a project.

Student signature:

Parent signature:

EXAMPLE

Name_____

Science Fair Project Proposal

Topic:

Question:

Independent variable (what I will change):

Dependent variable (what I will measure to answer my question):

Partner or partners:

Note that students who choose to work in a group will need to meet outside of school to complete a project.

Student signature:

Parent signature:

Name(s)

_____

Project Question

_____

_____

_____

Science Fair Research Plan (Example)

Sources (at least 3; more can be recorded on the back)

- **Title of Book/Magazine/Journal 1 and author**
- **Title of Book/Magazine/Journal 2 and author**
- **Website URL**

Research Questions (at least 3; more can be recorded on the back)

- **Does curvature of an arch effect how much weight the structure can hold?**
- **Why do architects use arches to help bear the load?**
- **When did architects begin to use arches for function rather than aesthetics?**

Important Vocabulary Words and Definitions:

EXAMPLE

Name(s)
_____

Project Question
_____

_____

Science Fair Research Plan

Sources (at least 3; more can be recorded on the back)

-
-
-

Research Questions (at least 3; more can be recorded on the back)

-
-
-

Important Vocabulary Words and Definitions:

Name_____ Date_____

Research Write-Up

Record your three research questions below. As you find the answers, write a short paragraph to answer the question. Make sure you include the source or sources you used to find the answer.

Question 1:

Answer:

Source:

Question 2:

Answer:

Source:

Question 3:

Answer:

Source:

Important Words and Definitions:

Name_____Date_____

__

Hypothesis

Give your hypothesis and explain why you are making that prediction. Use your research to help you make your hypothesis and explain why you think it is right.

Question:

Hypothesis:

Name_____Date_____

__

Hypothesis

Give your hypothesis and explain why you are making that prediction. Use your research to help you make your hypothesis and explain why you think it is right.

Question:

Hypothesis:

FOR YOUR REFERENCE.

Students will be provided with the sheets that need to be completed and turned in.