SCIENCE FAIR

PARENT & STUDENT VIRTUAL WORKSHOP

MRS. MAMIE KELLY

LINKS TO INFORMATION ARE ALL ON TEACHER'S CLASS WEBPAGE

- Ms. Tia Scott 4th Grade
  - Go to the tabs on the left and pick
    - SCIENCE FAIR information for links to everything in this presentation
    - SCIENCE FAIR websites for help in deciding on a project

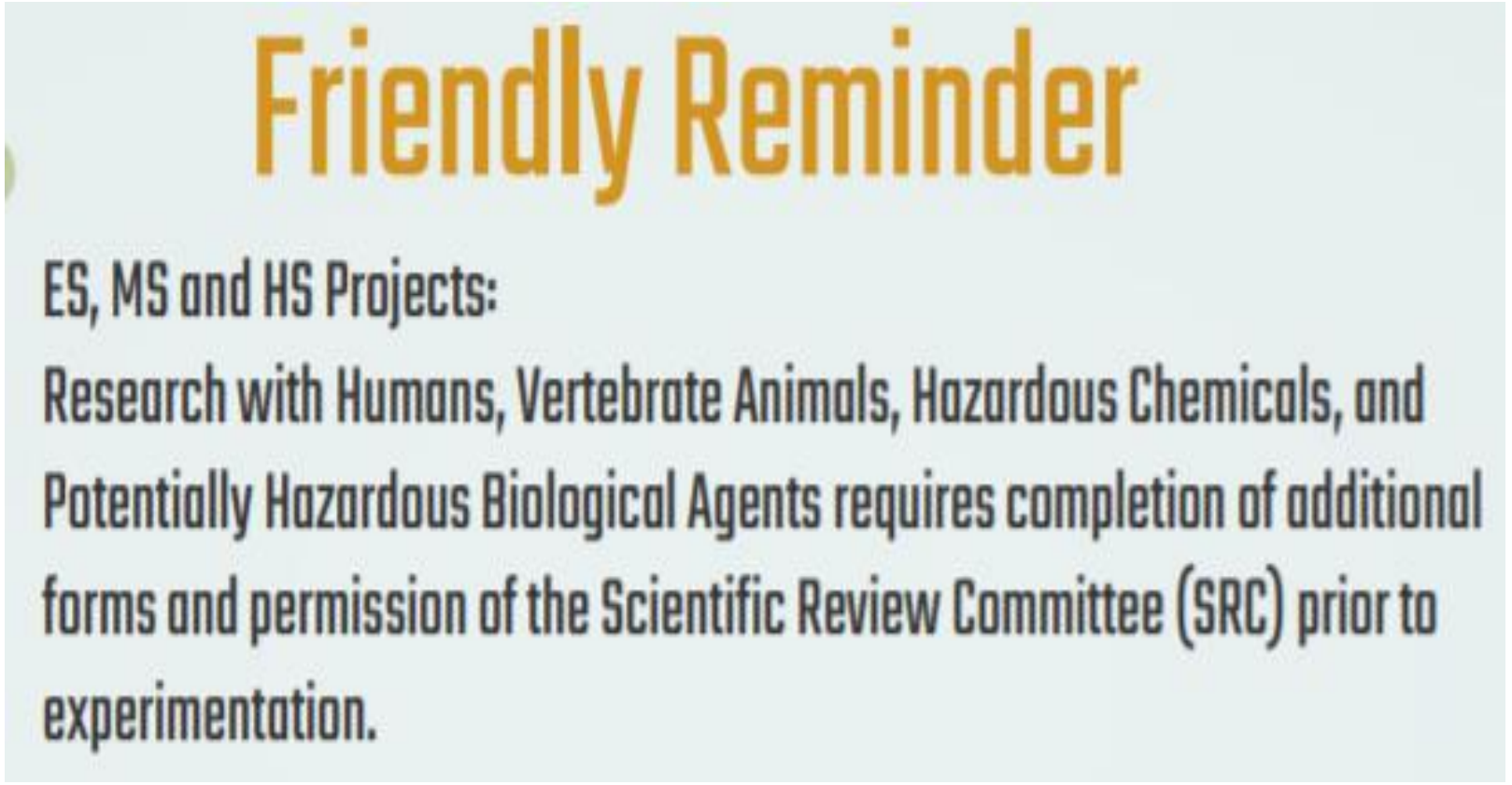
SCIENCE FAIR IS COMING SOON !

Jenkins White Virtual Science Fair will be held on Thursday, February 19, 2021.

- All students in grades K-5 are required to do a virtual science fair project.
- Grades K-3rd will do a class project.
- Grades 4th -5th are required to do individual student projects.
- Be on the lookout for due dates from your child's teacher since projects will be turned in and graded by the teachers before the Science Fair.

THINGS TO KNOW

- It is highly recommended that students do not choose projects that fall in these categories. --->



How to Prepare for the Science Fair

What am I going to do? What is a good idea for my science project?

- This is usually the first thing that you start thinking about when you hear “Science Fair.”

Before you get too excited about an idea, you must know the difference between an experiment and a demonstration.

Do a Science Experiment …

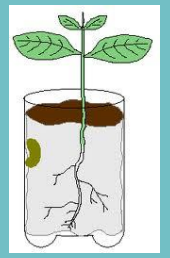
Not a Demonstration

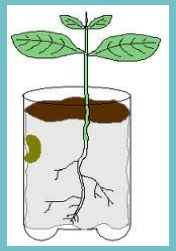
Experiment

An experiment tests at least 2 different materials.

Example:

In which type of soil will a bean plant grow more?





Demonstration

- A demonstration doesn't test different materials.
- Examples of demonstrations:
  - Making a "volcano."
  - Creating an electrical circuit.

Stay away from projects that compare consumer products.

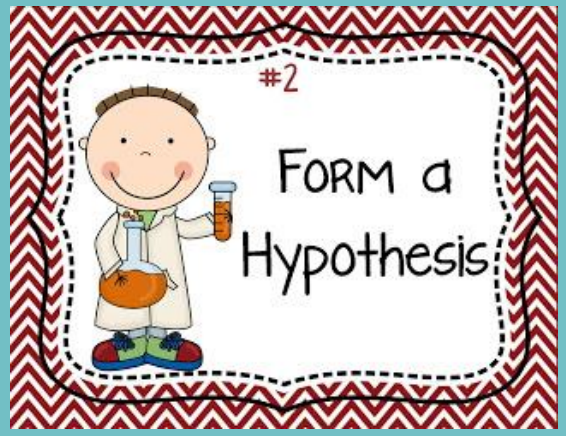
Stay away from projects that involve live animals.

Scientific Method

Each project should be done according to the Scientific Method.

- **<u>Question:</u>** This is what you want to discover. Make sure that you have chosen an actual experiment.

You must be able to measure and graph the results.



- **<u>Hypothesis (Prediction)</u>**: This is what you think the answer will be to your question.
- It is a statement of your educated guess based on research from at least three sources.

- **<u>Materials:</u>** List everything needed for the experiment. It should tell how much, how many, what kind, or what size for every item listed.

- **<u>Procedure:</u>** This is a list of numbered steps followed during the experiment.

- **<u>Do the experiment</u>** at least 3 times according to the procedure you developed.
- **<u>Record your data and observations:</u>** This includes a **<u>data table</u>** and/or a **<u>graph</u>** of recorded results.

- **<u>Conclusion:</u>** This is a summary stating your findings.
- Was your hypothesis accepted or rejected?
- What did you learn?

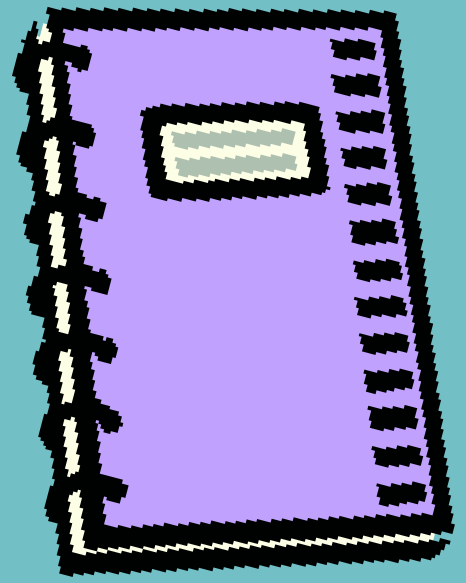
Any questions about the experiment process?

- **<u>Communicate your results</u>**:
  Each project will consist of three components:
  - Log-book (composition book)
  - Research paper
  - Online Poster

1. Logbook

- The purpose of the logbook is to serve as a dated record of all work done on the science project.
- It's like a journal for your project
  - Students may choose to do the logbook as a word document or in a COMPOSITION notebook this year. Each entry must be dated

General information about logbook:



- Can use pencil or ink.
- Don’t write on the back of the paper
- Don’t tear out pages.
- Keep it with you

2. Research Paper

- The purpose of your **research paper** is to provide information to help others understand why your experiment turned out the way it did.

General information about research papers:

- Can be in pencil, pen or typed.
- Must follow given format (including bibliography)
- Put it in a report cover or folder

3. Display Poster

- The purpose of the display is to show what you have done.
- The exhibit should be visually appealing, using color and photos.

DISPLAY POSTER LAYOUT

Science Project Title

Your name | Teacher's name | School

Problem / Question

Enter your question here (statement of the problem)

Hypothesis

- Add your answer / solution here
- Write hypothesis before you begin the experiment
- This should be your best educated guess based on your research

Project Overview

- Add a brief overview or summary of your project. (Use the Bullets button on the Home tab to remove the bullets.)

Variables / Research

Controlled variables	Independent variable	Dependent variable
• These are kept the same throughout your experiments	• The one variable you purposely change and test	• The measure of change observed because of independent variable • Decide how you will measure the change

Materials

Materials (detailed list)	Quantity (be specific)
Item	Amount
Item	Amount
Item	Amount
Item	Amount
Item	Amount
Item	Amount
Item	Amount

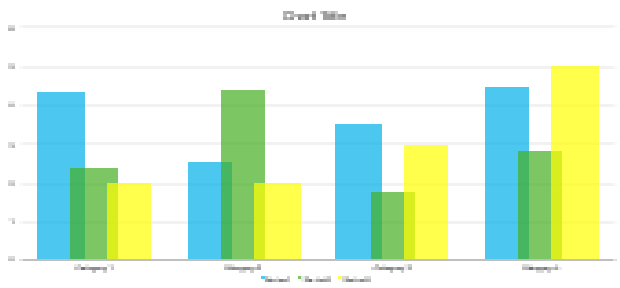
Procedure

Step 1	Step 2	Step 3	Step 4
			
Describe this step in your experiment	Describe this step in your experiment	Describe this step in your experiment	Describe this step in your experiment

Data / Observations

- Observation 1
- Observation 2
- Observation 3

Results



- Include results based on your experiments
- Result 2
- Result 3

Conclusion

- Brief summary of what you discovered based on results
- Indicate and explain whether or not the data supports your hypothesis

Works Cited

- Include print and electronic sources in alphabetical order

Any questions about the three components that we require?

Important Links

- Teacher's Class Page
- Parent Information, Rubrics, Research Paper template, Vitual Poster Template
- Science Buddies website for project ideas
- Science Fair Central website for ideas and guides in completing a good project