Wiley Elementary 3rd and 4th Grade Science Fair

April 26, 2018. 5:30-7:00pm

Scientist Packet

Please review this Scientist Packet with your parents. Do not lose this packet as it contains all the information you will need for your final project.

- **ALL PROJECTS MUST BE COMPLETED AT HOME BEFORE THE SCIENCE FAIR!**
- This project is mandatory and all students will be participating. You have 2 months to complete this project. This project and its parts are part of your science grade. There are 5 sections in this project, each being graded as a separate assignment.
- You may work individually or in groups of 2 students from the same class. Make sure that you and your partner will be able to meet at least once a week outside of school.
- Parents and siblings can help, but they should not do the project for you or do your science thinking for you. They can help you select your topic, build your display, gather materials, and figure out ways to organize things.

Things to Remember!

1. Be Safe! Make sure you have permission from, and are supervised by an adult at all times.
2. Your project should be school appropriate.
3. No open flames or animals at the presentation.
4. Running water will not be available
5. Electrical outlets will not be available.
6. Batteries must be closed-cell; no bare electrical wiring is allowed.
7. Use of chemicals and materials that could poison, or materials or methods otherwise potentially dangerous, are subject to adult supervision and pre-approval by Mrs. Suggs.
8. HAVE FUN!

Tips for Participants

-Pick something that is interesting to you, something you want to know more about. Your project needs to be in the form of an experiment. Research projects and models do not qualify.
-Please, **NO baking soda volcanoes or models**. While these are fun, they do not constitute an experiment.

-If you need ideas for a project, go to www.mrssuggs.com and click on the "Science Fair" link. There are literally thousands of ideas for experiments listed.

-You do not have to pick one of these and are encouraged to design your own experiment if you so desire.
-No matter what kind of project you choose, you will keep a written record of what you did. Each section will be due on a given date. (The record/schedule is attached to this packet.)

If you have any questions, please contact me at

marina.suggs@uticak12.org

We are looking forward to seeing what this year's young scientists are ready to show us!

Name:_____
Name of Partner (if any):_____
Teacher:_____

Science Project Record and Schedule **(If you need more paper, please staple it to this packet)**

1. **Stating the Problem - The Big Question** (What do you want to find out? Include information about what you know about the question.)
   Due date: *4th grade: March 12, 3rd grade: March 13*

   Example: *Does heart rate go up with exercise? I have read that heart rates change depending on how active someone is.*

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Forming a Hypothesis - A Smart Guess (What do you think will happen?)

Example: *My hypothesis is that heart rate goes up with exercise. The more active someone is, the higher the heart rate becomes.*

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Teacher Signature_____Date:_____

Name:_____
Name of Partner (if any):_____
Teacher:_____

2. **Planning the Procedure** (How will you complete the experiment?)
   Due date: *4th grade: March 19, 3rd grade: March 20*

List of materials (what did you use to complete the experiment)

Example: *4 friends, fitbit with heart rate monitor, record sheet, pencil*

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Step-by-step description of experiment (What did you do with your materials to complete the experiment?)

Example: *Have each of my friends put on the fitbit one at a time and sit quietly on the couch for 5 minutes. Record their heart rate from the fitbit. Then have each friend do 25 jumping jacks and then record their heart rate. Have each friend repeat this process two times each.*

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Teacher Signature_____Date:_____

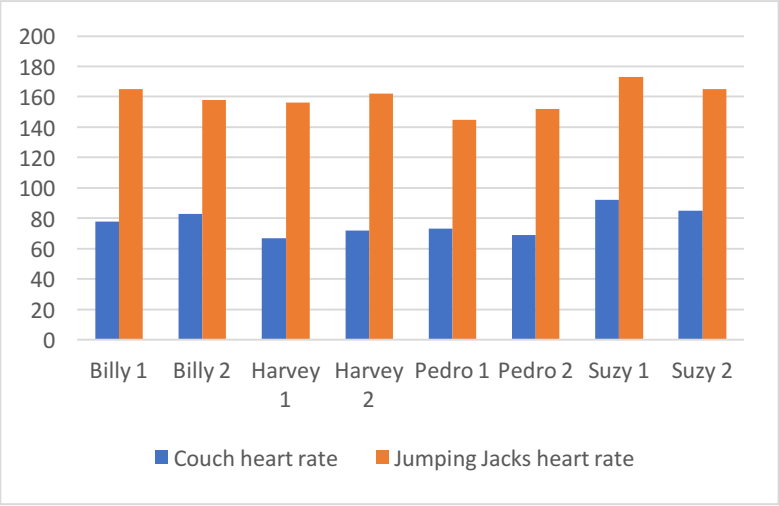
Name:_____
Name of Partner (if any):_____
Teacher:_____

3. **Results** (What happened when you did your experiment? Please include charts, tables, or graphs to record the results of your experiment.)

Due date: *4th grade: April 9, 3rd grade: April 10*

Example:

	Couch heart rate	Jumping Jacks heart rate
Billy 1	78	165
Billy 2	83	158
Harvey 1	67	156
Harvey 2	72	162
Pedro 1	73	145
Pedro 2	69	152
Suzy 1	92	173
Suzy 2	85	165



Teacher Signature_____Date:_____

Name:_____
Name of Partner (if any):_____
Teacher:_____

4. **Making a Conclusion** (What did you learn from your scientific investigation? Did you get a different result than you thought you would in your hypothesis? If you did, why do you think that was? Were there any unexpected results? What would you change if you were to do the experiment again?)

Due date: *4th grade: April 16, 3rd grade: April 17*

Example: During this experiment, I learned that my hypothesis that the heart rate goes up during exercise was correct. I thought that it was interesting that my friends had different heart rates while sitting on the couch. I did not get any unexpected results. If I were to try the experiment again, I think it would be interesting to see how long it would take each person to get their heart rate back to the same level it was when they were sitting on the couch.

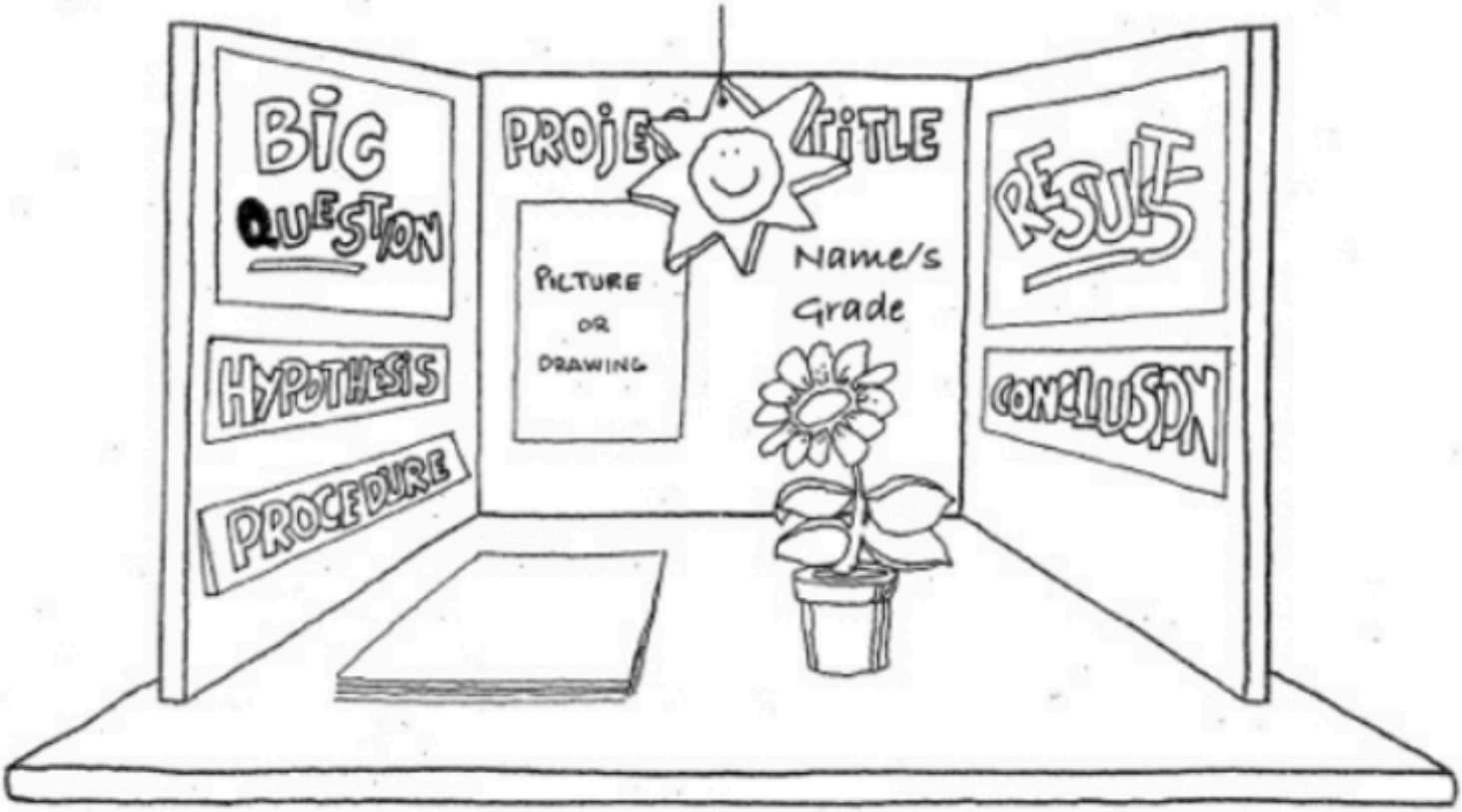
Teacher Signature_____Date:_____

5. **Display** (This will be your final poster board display.)

Due Date: April 26, 2018

Displaying Your Project

Your display is a way of sharing what you have learned. A neat, attractive, colorful display with a "catchy" title will grab people's attention. You've spent a lot of time and energy on your research project. Take the time to do a good job on your display.



What Should Be Displayed?

The center board of your display is reserved for the title. Many people use their Big Question for the title, but it is often better to try and catch peoples' attention with a snappy title. The other space on the display should include the hypothesis, procedure, results in the form of charts and graphs, and your conclusion. **Your board MUST include your names and Grade level.**

Color and Lettering

If your backboard needs painting, use attractive colors with contrasting letters. The lettering for the titles should be large and bold. Using stencils instead of drawing freehand will make your display neat and attractive. You may wish to stencil letters on construction paper, cut them out and attach them to the backboard with glue or tape.