

November 5, 2020

Dear Speas students and parents,

It is time to start thinking about the Science Fair. As with everything else this year, the Science Fair will be very different and difficult to accomplish this year. First, there are no mandatory projects required this year. The district does NOT want to place a burden on you trying to complete a project at home with very little help from the teachers here at school. We cannot have groups of students working together at school, a group display of projects nor are we not allowed to have volunteer judges in the building.

That said, the Science Dept does want to allow you to continue to be scientifically curious, so if you and your family would like to do an experiment, we are allowing Science Fair project to be done at home. There will be NO class time spent working on individual projects. We will share the expectations of a project and the criteria. Projects need to be approved by the student's teacher before beginning any project.

There are two grade level competitions- K-2 and 3-5. The students may work alone or with family. The students will complete the project at home and then will submit a one to two-minute video explaining their project. There will be no need for a large triptych board. Instead the student will submit a Google slide deck showing each of the required subheading for a board. The projects must contain the following steps in the scientific method:

Title, Problem, Hypothesis, Procedure, Materials, Data, Results, Conclusion, & Next Time

- State your **Problem**. Tell what you have observed and thought about
- State your **Hypothesis** - what you think will happen in your experiment.
- State your **Procedure** - what you are going to do and how.
- List your **Materials** - Tell about your materials used.
- Display all your **Data** - tell about the results of the experiment.
- Make your **Conclusions** - explain why you think things happened the way they did.
- **Next Time** - tell what you would do differently if you did this experiment again.

Each project must be approved by the student's teacher confirming there are no hazardous materials being used. The use of animals in the project is prohibited. Please remember that the science fair is not a demonstration or collection. While baking soda volcanoes are really fun to make, it is not a science fair project. You need to conduct an experiment to find the answer to your question/problem. The "Scientific Method" will take you through the correct process of asking a question, doing some preliminary research, making a hypothesis, conducting your experiment, and analyzing and comparing your results with words and graphs.

**Please check out www.sciencebuddies.org (project ideas) and www.school.discoveryeducation.com/sciencefaircentral websites for some great ideas!

If you need any further help or ideas, please contact your student's teacher or Cathy Smith, csmith@wsfcs.12.nc.us Thank-you for supporting science at Speas!!

Office Hour Help for Science Fair with Regional Director Judy Day
Mondays 2:30 p.m. - 3:30 p.m. Starts Nov. 2nd Ends February 15th
<https://zoom.us/j/94205914652?pwd=dC9RS21ML0YwaFBndm16a05aSndpdz09>

Science Fair projects are due Tuesday, December 8th

Science Fair- Tips for Success

Choose an Exciting Topic

- Choose a topic that will interest and challenge you.
- Do not be afraid to try something new-you will learn about it along the way.
- Remember that simple is better. Complicated projects do not always win.
- Be a True Scientist! Don't just copy a project off the internet.
- Keep a detailed and up-to-date lab notebook or notes of everything you did or thought during the project. It will help you organize your thoughts and if you ever need to go back to see how you did something you can find out. Judges will want to see a lab notebook during the judging period.

Trudge Onward!

- During the experiment, do not get discouraged if you run into problems.
- Do not stop if your experiment does not turn out the way you think it should.
- It is okay if your hypothesis is proved incorrect. Most hypotheses get disproved! It's OK to be wrong.
- Judges like to see persistence so keep at it. Ask for advice if you need help. Judges love to talk about the problems you ran into and how you solved/tried to solve them
- Use Your Brain (it's not as hard as it seems!)
- Look at your results and ask yourself why they do or do not make sense.
- Apply your background research to your results to help you figure out what happened during the experiment.

The Google Slide Deck (Displayed before on the triptych boards)

- The science fair slides represent all the work you have done. It must tell the project in such a way that it holds the interest of the viewer. Use a Google Slide Deck for your display. The title should be short and catchy. Use color to back your title to draw the judge's eye to it, It should be the first slide. Each slide should be full but not too crowded. Use lots of pictures of each step in your project.
- Show each step of the way during your project. Add pictures to each slide if you think it will help explain your process.
- Keep it simple. Do not try to overcomplicate the projects. Just tell what you did and what the results were. Do **NOT** be upset if you prove your hypothesis to be incorrect. Einstein said that most scientists get it wrong the first time!
- Use graphs and charts to show your conclusions.
- You may have a notebook or folder containing your report, your abstract or the journal of your project's work. You can show your work there.

Be sure to use the scientific method. A good science fair project has **ALL** the following parts:

- **Title, Problem, Hypothesis, Procedure, Materials, Data, Results, Conclusion, and Next Time**
- State your **Problem**. Tell what you have observed and thought about
- State your **Hypothesis** - what you think will happen in your experiment.
- State your **Procedure** - what you are going to do and how. Tell about your materials used.
- Display all your **Data** - tell about the results of the experiment.
- Make your **Conclusions** - explain why you think things happened the way they did.
- **Next Time** - tell what you would do differently if you did this experiment again.