

Get Ready for the annual WIS Science Inquiry Fair, to be held in the Spring of 2017!

This is an invitation for all 4th-5th grade students to participate in our Science Fair on **April 5th, 2017**. It is open to all 4th and 5th grade students. The Science Fair is a display of student-made inquiry projects and experiments. You may choose to do a group or individual project. Student groups are welcome, as long as each person participates equally and parents approve of the team. The projects will be experiments based on a question that you want to investigate. Parent may help you, however the project remains your responsibility and should reflect your creativity and individuality.

Participation is optional and projects will not be judged. Each student who displays a project will receive a Certificate of Participation. Time spent doing a science fair project can be an exciting period in which you make new discoveries.



Steps To Enter

1. Read through this entire packet.
2. Fill out the proposal form on the last page and get parent permission.
3. Get your proposal approved by Mrs. Vinton.
 - a. Give your completed proposal form to your teacher. If you have fully completed the form and followed the basic guidelines, your teacher will give the form to Mrs. Vinton.
 - b. The deadline for submitting the completed form to your teacher is **Tuesday, February 7th**.**
 - c. You will be notified if your project is approved or if you need to make any modifications.
 - d. When your project is approved you will receive your approved form back as well as an approval coupon and a science notebook to use for your experiment. Your approval coupon has your registration number and is also good for picking up your free display board from the office.
2. Work on your experiment, logging your data, results and conclusions in your science notebook.
4. Pick up your display board from the front office and create your display.
5. The science fair will be held on Wednesday, April 5th, 6:30 p.m. to 7:30 p.m. for family and the morning of April 6th for class visits.
6. Have FUN!!



Define Your Project by Asking a Question: Find a Project That's Right for You!

Start with something that interests you and that you can understand. A common mistake a student can make is to choose a subject they do not really like or that is too complicated. Projects will take time and effort, so choose something that will be fun and enjoyable. Narrow down your topic by learning as much as you can about the subject. Then fine-tune your project to get to a specific question (e.g. What minerals form the biggest crystals? What is the effect of temperature of a sugar solution on the size of rock candy crystals?). You should be able to answer, "Yes," to all the bullets below if you have found a good questions:

- Is my topic interesting?
- Is it safe?
- Is my topic realistic, something I can really do?
- Can I investigate my topic by experimenting and collecting data?
- Are the materials I need realistic and reasonably priced?
- Do I have enough time to complete the experiment?

Teachers can guide students to make appropriate choices and supply resources that trigger ideas. A brief suggestion list is included in this packet. Books containing suggestions will be made available in the library and there is no end to the information available on the Internet.

A wonderful resource for project ideas :<http://www.sciencebuddies.org>

(Keep in mind that not all the projects on this website or on line are inquiry projects)

Your project will be a full inquiry exploring a question you are interested in.

Step 1. Think of a question you would like to investigate. Remember, "Why?" questions are better answered through research than through an investigation conducted by a student. You have had many experiences through the years with developing investigable questions, but if you need help, these statements may be helpful:

"What is the effect of _____ on _____?"

Examples: What is the effect of different soils on plant growth?

What is the effect of temperature on the height a basketball bounces?

What is the effect of adding salt on the temperature water boils?

What is the effect of different rewards on the success of my dog learning a new trick.

What is the effect of listening to music while memorizing new information?

Which _____ is the most or least _____?

Examples: Which paper towel brand is the strongest when wet?

Which potato chip brand is the oiliest?

Which color is easiest to see?

Which juice stains clothing the most?

Step 2. Once you have an interesting question to investigate, plan your procedure for your experiment. You will turn in your investigable question and plan for your procedure in order to get your project approved. This is to make sure your question is really investigable and your plan is safe for an intermediate school student.

Once you have approval, write your question and your procedure in your science notebook. This notebook is separate from your school notebook. You may either use a school provided notebook or purchase one of your own.

Step 3. Predict what you think you will find out during your investigation. Remember, scientists are just as excited when their results disprove their prediction as if their prediction was correct. Write your prediction and **why** you think so in your science notebook.

Step 4. Conduct your experiment, keeping all of your observations and data in your science notebook.

Step 5. Decide how to present your data in a clear graph, chart, or table.

Step 6. Analyze your data. Then describe your conclusions in your science notebook. Include any further questions that you are wondering about.

Step 7. Decide how to present your project and findings in a clear and interesting way.

*Optional Step. At any point in your project you may read about your topic and/or the way other people have explored the same or similar topics. You may include this information on your display.

Possible Questions to Get Started

Does the shape of an ice cube affect how quickly it melts?

Which materials absorb the most water?

Does temperature affect the growth of plants?

Does the shape of a kite affect its flight?

Which do dogs understand better ... hand signals or voice commands?

Do all colors fade at the same rate?

Which food substances stain cloth the worst?

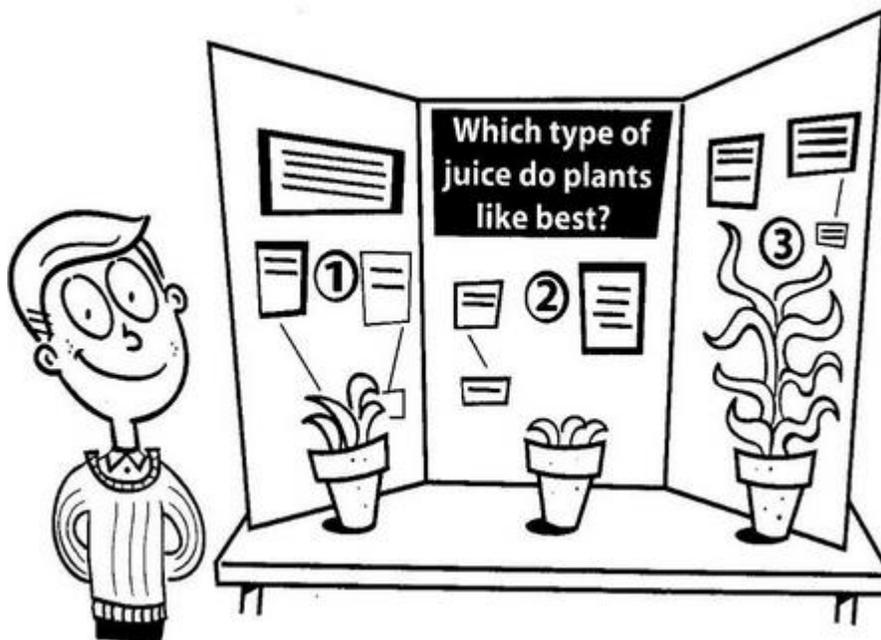
Which type of battery lasts the longest?

Does an earthworm react to light and darkness?

Which way does the wind blow most frequently?

What things will glow under a black light?

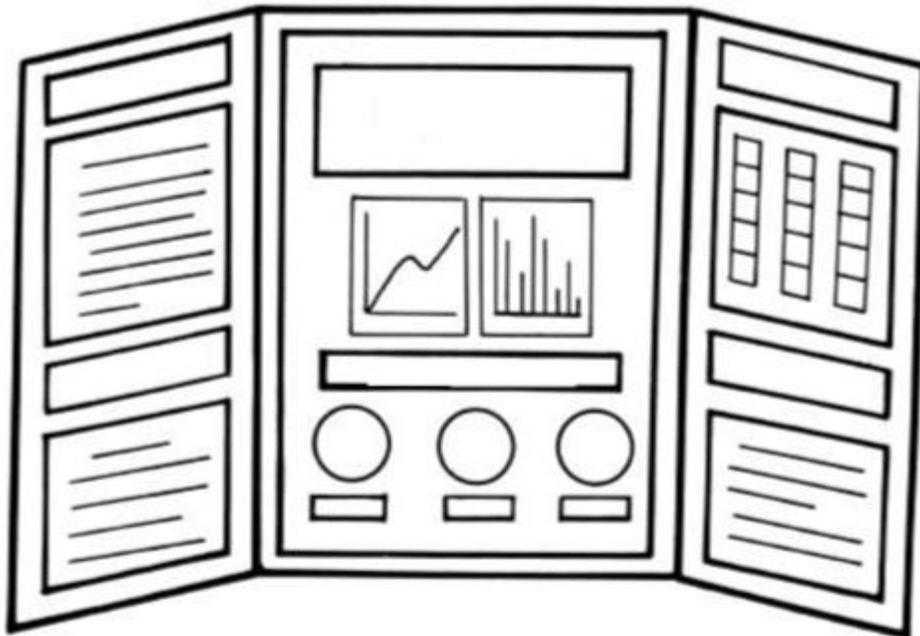
Will chilling an onion before cutting it keep you from crying?



Display Board Guidelines

- Each project must have a display board.
- The display must be a 3-sectioned board that is self-standing and will sit on a table but fold and close flat.
- The experiment inquiry must be prominent, with optional further questions to investigate.
- In order to pick up your free board, present your approval coupon to the main office. These are too big to travel well on the bus, so **choose a day you can be a pick-up.**
- Construction or contact paper, cloth, or paint may be applied over the 3 sections.
- The display briefly summarizes the question, procedures, results, and conclusions.
- You may layer the paper with your words or drawings on top of larger colored sheets of paper to “frame” your work.
- Photos of you doing your experimentation are a terrific eye catcher!
- Be creative. Use attractive colors, large print and high contrast. This is the big pictorial description of your project.
- Your **name** should be clearly written/typed on the **bottom front** of your display as well as **your name, grade, and teacher on the top center of the back**. Label all materials with grade and name.
- **Must be included on your board: Your Inquiry Question, Title, Materials Used, Procedure, Results/Data, Conclusions.**
- **Optional to Include: Your Prediction, Background Research, Questions for Further Investigation.**
- **Must be included with your board: Your Science Notebook from this investigation.**

You want a display draws people to read it. So before you glue everything down, lay the board on a flat surface and arrange the materials a few different ways. This will help you decide on the most suitable presentation.



Schedule of Events

Kick-Off Assembly: January 27th

Entry Deadline: In order to enter into the science fair, submit your completed form on or before **February 7th**.

Fair Date/Location: **April 5th, 2017**. Location: WIS Cafeteria and LRC.

Project Set-Up: Arrange with your parents to bring in your display board and any props. You will set up your project during the last half hour of the day on April 5th.

Public Viewing: The fair will be open for viewing on the evening of April 5th from 6:30 pm to 7:30 pm.

Classroom Viewing: Classes will come in with their teachers the morning of April 6th. (This is for all grades 3-5)

Project Pick-Up: Students must take their project home by the end of that week, Friday, April 7th. This must be done during a pick-up as board are too large to travel by bus.



Science Fair inquiry Proposal

*Please print
clearly and include
first and last
names for all
group members.*

Student Name(s): _____

Teacher(s): _____ **Grade:** _____

Question to be investigated:

Draft of basic procedure:

(Use back of this paper if more space is needed.)

Parent's permission and signature:

I have read through the science fair packet and support the topic choice of my child.

Signature: _____

Email for information blasts and reminders: *(Please print clearly.)*

Submit this form to your teacher for approval no later than February 7th!