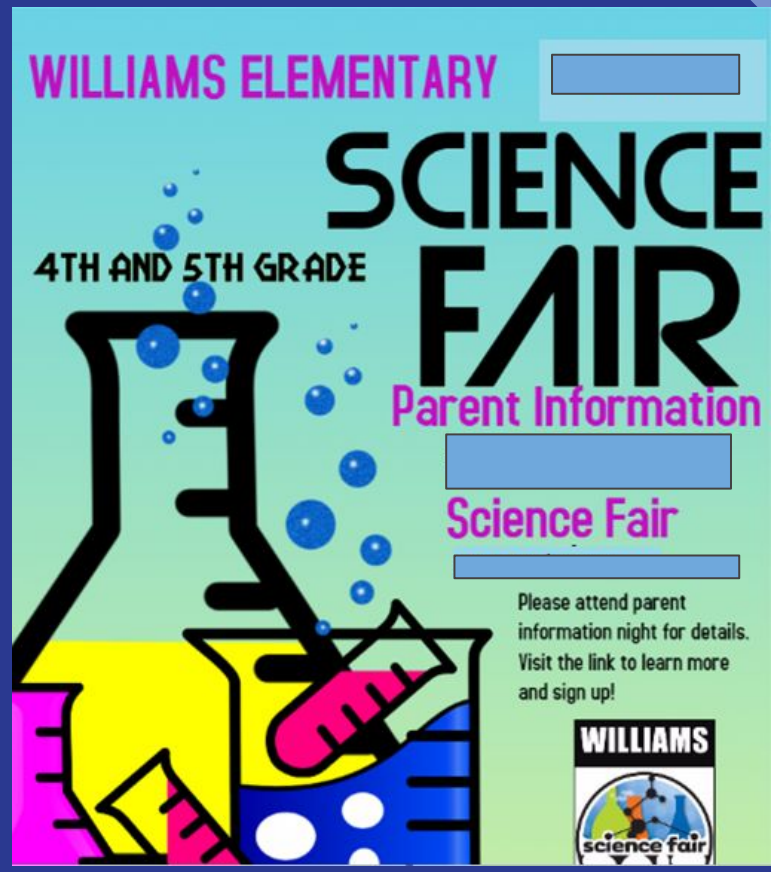
Williams Elementary
4th - 5th Grade
Science Fair – 2025-2026

Parent Information Night - Jan 13th 2026
Time : 6-7 pm
Venue: Williams Cafeteria

Questions? sciencefair.williams@gmail.com



Agenda

- ➔ Introduction
- ➔ Timelines
- ➔ Science Fair
- ➔ Registration Link
- ➔ Science Project Process
- ➔ Science Journal & Display Board Presentations
- ➔ FAQ
- ➔ Reviewing and Rewards (Dr. Blizzard)
- ➔ Reviewing Criteria (Dr. Blizzard & Leland Robotics Team)

Key Dates and Materials

Poster Distribution - Friday, 13th February 2026 @ 2:05pm @ Cafeteria

Pick up Trifold Boards

No other supplies/materials will be provided

Work on the project and Science Journal

Science Fair

Date: Tuesday, March 24th 2026

Time: 5 pm to 7 pm

Science Fair

- Science Fair is an event for 4th and 5th grade students. Participation is **voluntary**, and every 4th and 5th grader is encouraged to participate.
- Students can participate **individually or in teams of two** (not necessarily in the same grade)
- Explore a topic of their interest and learn the scientific method about it
- Encourage kids to ask questions like HOW, WHAT, WHICH – find answers to questions
- Most of all, Science Fair is for students to HAVE FUN with Science!

Science Fair Day - Schedule

Regular school day

7:45 am - 8.00 am → Drop off project board in the morning @ the Cafeteria

4.30 - 4:55 pm → Sign in and Setup

Bring journal/materials in the evening and setup; No liquids; No Electrical Outlets

5:00 - 5:45 pm → Be prepared to discuss, present your project with the judges

Check out your friends' projects (Science Fair Participants Only)

5:45 - 6.30 pm → Share your project with Williams community and parents

6.30 - 7 pm → Award Ceremony

7 - 7.15 pm → Please take boards/journal/materials with you.

Parents please ensure you are there to pick up your kids

How to participate in the Science Fair?

Register using the google form :

https://www.williamswins.org/science-fair

Registration Open

Monday, January 19th 2026 @ 9:00am

Registration Deadline

Friday, January 23rd 2026 @ 6:00pm

Office Hours

Every Thursday starting February 5th

Time: 2 pm to 3pm

Place: K4

Office hours can be used by students who registered to ask questions about any part of their science project.

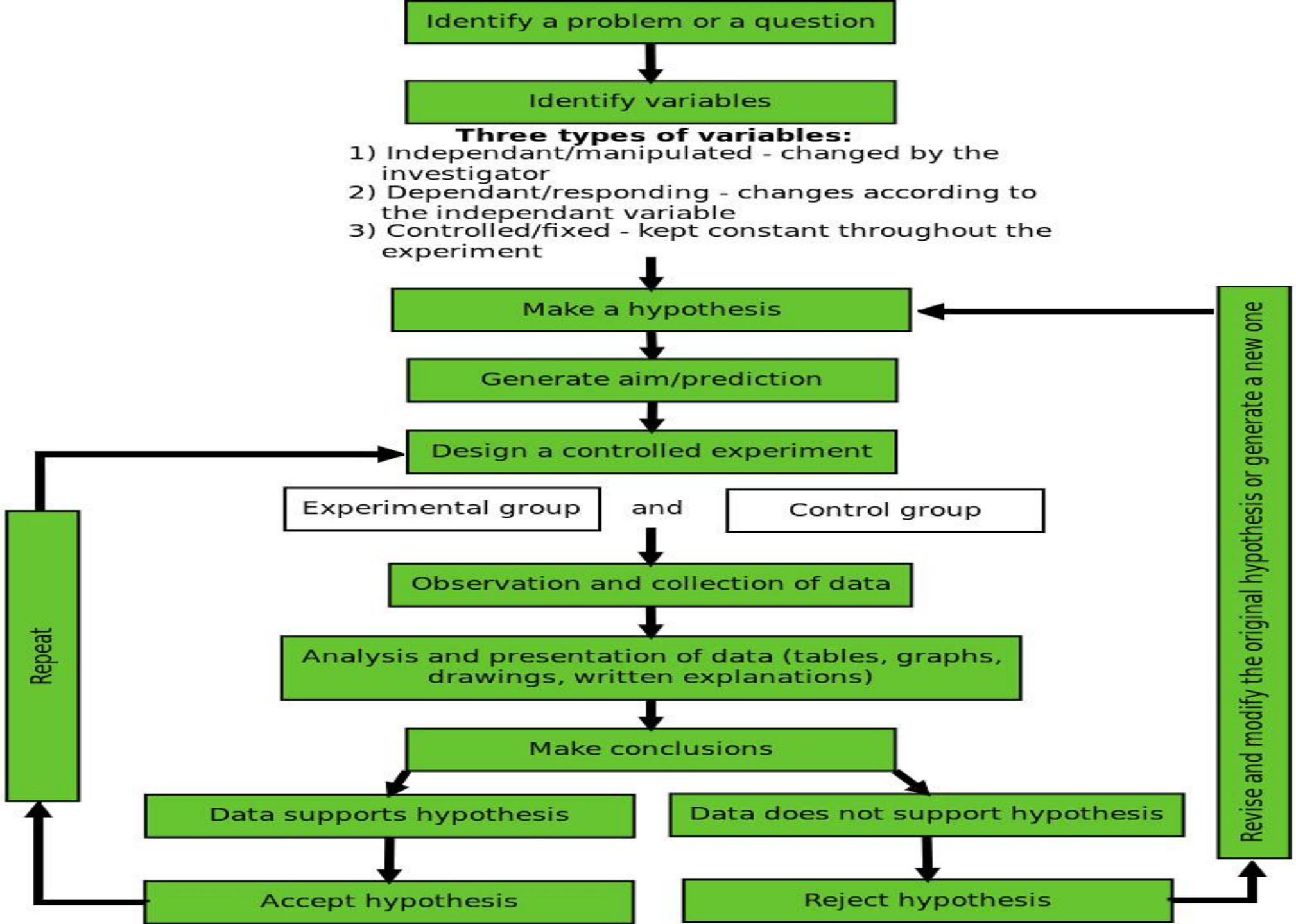
What Makes a Good Science Fair Project?

- Is my topic realistic?Is it something I can do?
- Is it interesting?
- Can I investigate my topic by experimenting and collecting data?
- Can I gather all the supplies needed?
- Do I have enough time to complete the experiment?
- Is information on my topic readily available?
- Is there anything about my topic that is against science fair rules or difficult to access?
- Will I face any challenge while performing the experiment?

Science Fair Project Process Helpful Hints

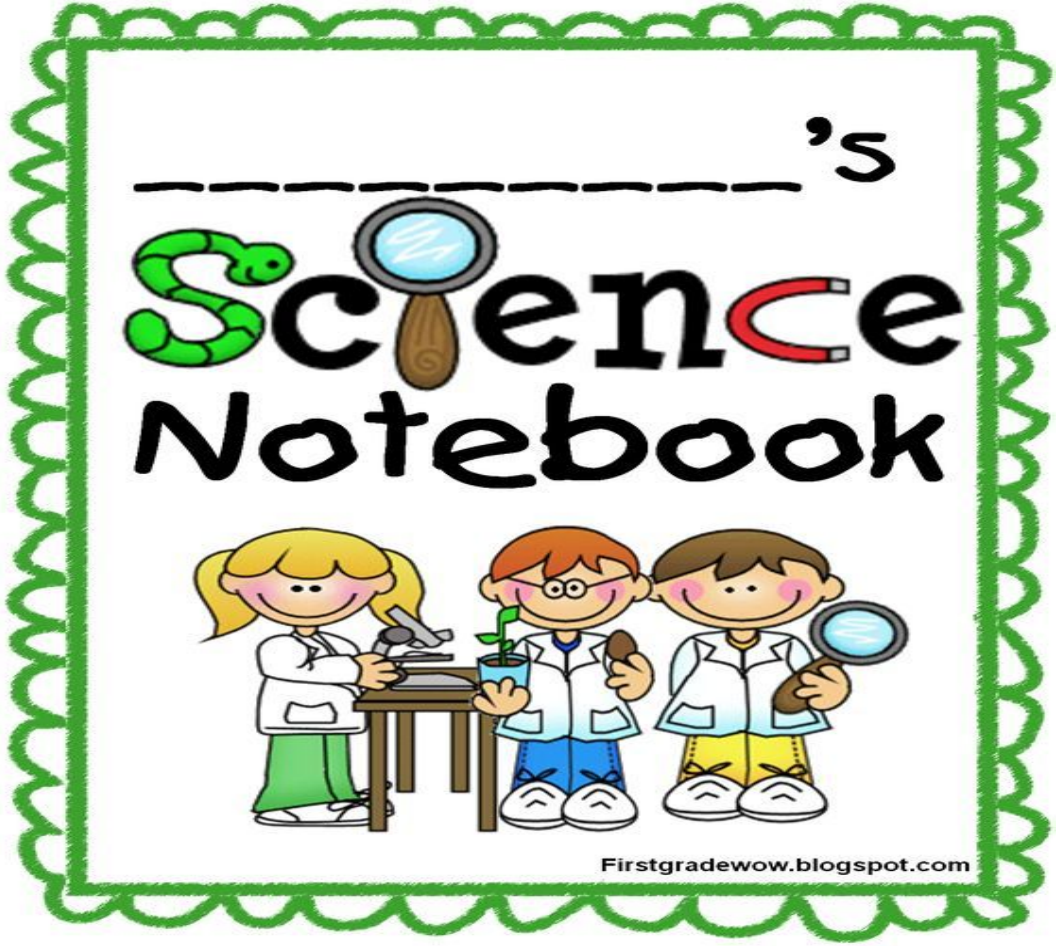
- 1. A Successful ***Science Exploration*** begins with the simplest of tasks
- *2. **Ask a question** that begins with How? What? Or Which?*
- *3. Now you will need to gather some information – **Research to Understand the scientific Method**. Search library, internet, ask parents, teachers*
- *4. Make a guess about the answer – **Hypothesis***
- *5. Decide on your important task of all: how can you investigate your question? Is there a way to prove it? Can you design/ set up an experiment? **Procedure/Experiment***
- 6. Collect all of the items you needed for the experiment (Safety first, Be sure to ask help with chemical, sharp things, electricity etc). ***Materials***
- *7. **Conduct your experiment**, 2 or more times to be sure*
- *8. What happened? Take pictures, draw drawings to keep proof of results. **Observation***
- *9. Was your hypothesis right or wrong? **Analyze the data and Draw Conclusion***
- *10. Write the **Project Report***
- ***Put it together on your display board..***
- *Do you have more questions? Write them down for follow up and further research.*
- ***Presentation:** Share your question, hypothesis, experiment, observations, Conclusion!*

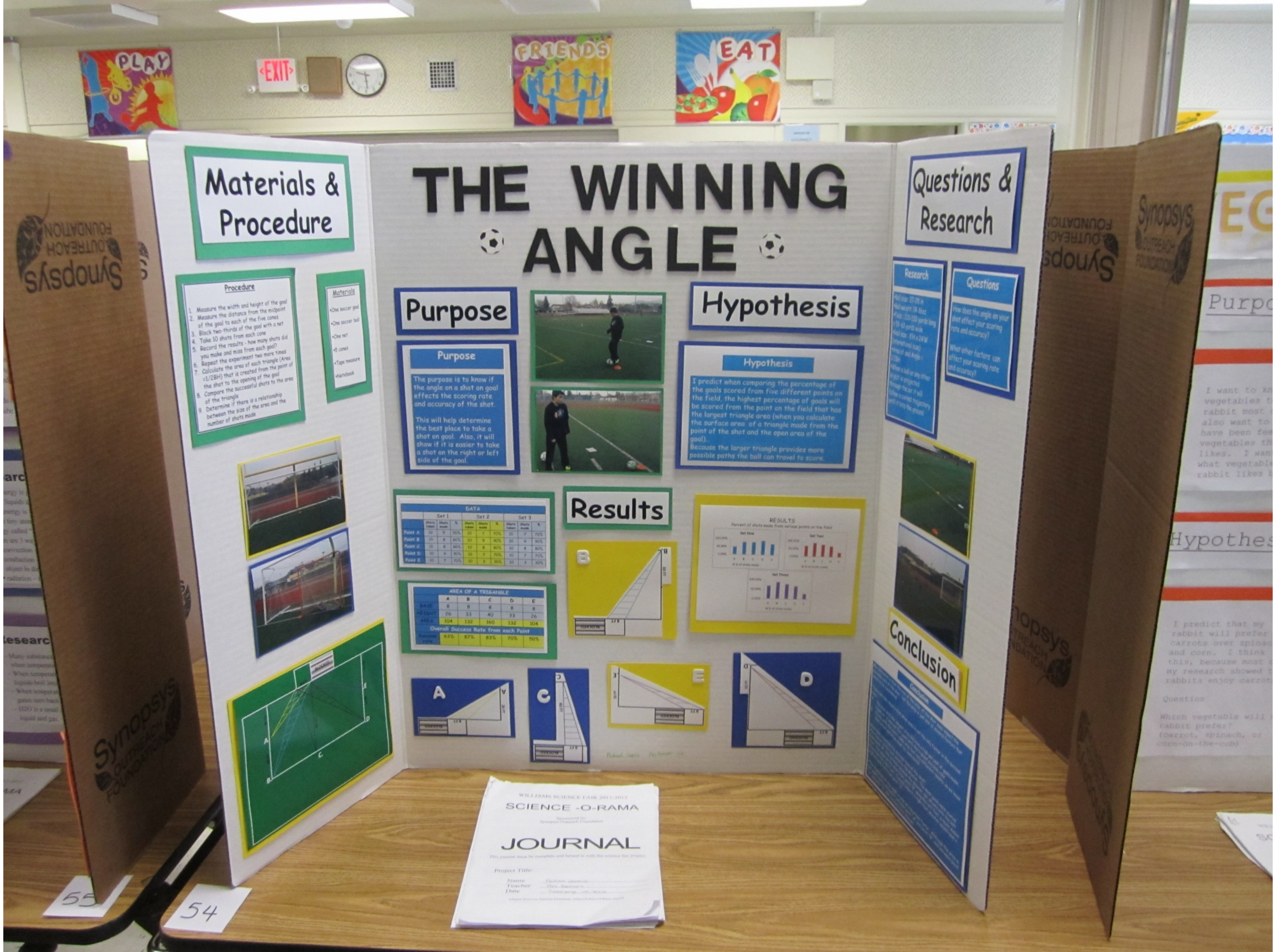
  Practice to Present it on the day of the fair !!!


Identify a problem or a question
Identify variables
Three types of variables:
1) Independant/manipulated - changed by the investigator
2) Dependant/responding - changes according to the independant variable
3) Controlled/fixed - kept constant throughout the experiment
Make a hypothesis
Generate aim/prediction
Design a controlled experiment
Experimental group
and
Control group
Observation and collection of data
Analysis and presentation of data (tables, graphs, drawings, written explanations)
Make conclusions
Data supports hypothesis
Data does not support hypothesis
Accept hypothesis
Reject hypothesis
Repeat
Revise and modify the original hypothesis or generate a new one

Science Journal & Display Board

1. Title/Topic
2. Problem / Question
3. Hypothesis
4. Materials Needed for the Experiment
5. Procedure
6. Data Results
7. Conclusion




PLAY
EXIT
FRIENDS
EAT
THE WINNING ANGLE
Materials & Procedure
Procedure
Materials
Purpose
The purpose is to know if the angle on a shot on goal effects the scoring rate and accuracy of the shot.
This will help determine the best place to take a shot on goal. Also, it will show if it is easier to take a shot on the right or left side of the goal.
Hypothesis
I predict when comparing the percentage of the goals scored from five different points on the field, the highest percentage of goals will be scored from the point on the field that has the largest triangle area (when you calculate the surface area of a triangle made from the point of the shot and the open area of the goal).
Because the larger triangle provides more possible paths the ball can travel to score.
Questions & Research
Research
Questions
Results
DATA
AREA OF A TRIANGLE
Overall Success Rate from each Point
RESULTS
Conclusion
A
B
C
D
E
Synopsys OUTREACH FOUNDATION
SCIENCE -O-RAMA
JOURNAL
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The Fountain of Coke

Materials

2-Liter Cokes
roll each of Mint Mentos, awberry Mentos, and Fruit Mentos
1 Aluminum Tub
1 Measuring Cup

Procedure

1. Place a 2 Liter Coke inside the Aluminum Tub.
2. Add one Mint Mento to the coke.
3. Once it explodes, take the displaced liquid in the tub and pour the coke carefully into a measuring cup to measure it. Record the information.
4. Repeat Steps 1-3, but with a Strawberry Mento and again with a Fruit Mento.

Purpose

Having always been amazed by the reaction between Coke and Mentos, I wanted to dedicate the scientific method to analyzing it. This was also both a fun and practical way to practice the scientific method itself.

Question

Which flavor of Mentos causes the biggest explosion when placed in coke?

Hypothesis

I predicted that Mint Mentos will have the biggest explosion when put in coke.

Research

1. One reason why it explodes when it has contact with a Mento is that Coke is acidic.
2. The reaction that causes the explosion between Coke and Mentos is called **nucleation** where Carbon Dioxide in the soda is attracted to a certain chemical inside the Mentos.
3. Different Mentos flavors contain different chemicals that may affect the intensity of the explosion

Results & Observations

After multiple attempts, I found that the Mint Mentos displaced the most liquid, Fruit Mentos displaced the second most liquid, and the Strawberry Mentos displaced the least amount of liquid. An observation I had was that Fruit and Mint mentos kept fizzing after the first initial explosion while the reaction between the Strawberry Mentos and Coke quickly died out. Another observation I had was that the Mentos did not completely dissolve as the center of the candy could be seen at the bottom of the bottle. This means that the reaction occurs because a chemical in the shell, not the entire candy, is highly reactive with Coke .

Conclu

FAQ - 1 of 2

Who can participate in the 4th and 5th Grade Science Fair?
Any 4th and 5th Grade Williams Students

Is the Science Fair Mandatory?
No

Is the Science Fair part of my students' grade?
No

Can I do my Science Fair Project with a friend?
Yes, the maximum number per group is 2 students (both of them need to be 4th or 5th Grade Students at Williams).

Do I have to use the Science Journal?
Yes, we highly recommend that all students use the Science Journal as it goes through the Scientific Method, but no one will be checking your Journal.

Will you provide the Display Board?
Yes, students who register for the science fair will get a Trifold board. However, you are responsible for purchasing all of your own materials for the experiment.

When do I bring my Display Board & Materials for the Science Fair?
Please bring it on the day of the Science Fair before school. We will provide more details about this as we get closer to the day of the fair.

What do I bring to the Science Fair?
Please bring your Display Board, Completed Project (if applicable) or other Appropriate Display Pieces and the Completed Journal. Please be ready to share and talk about your project with the reviewers

Who will review the Science Fair project?
Dr. Blizzard will invite a panel of reviewers. They will review the projects and ask the kids some questions about their specific experiments.

FAQ - 2 of 2

Will the projects be reviewed?
Yes. All projects will be reviewed. The review panel will reward the top projects that have used the Scientific Method to conduct their experiment. In addition, each participant will receive a trophy & certificate from the principal.

Can I bring materials such as a circuit board or a rocket for display?
You may bring any materials for display as long as they fit within the poster board space.

Is there any funding for materials?
No.

Will there be power supply available near the tables?
No.

Will you provide extension cords?
No.

What if several students pick the same project?
That's perfectly fine.They might have different methods, findings etc.
We will space out the duplicate projects.

Will the participating students get a homework pass from their teachers?
No.

Can the students display their projects in their class?
No. However, we will make this a community event, so all their friends and families can be encouraged to attend the Science Fair and view all the projects displayed.

How much space will be provided to demonstrate the experiment?

The project has to fit in the display board

Reviewing & Rewards

Reviewing

- A panel of reviewers (Leland High School Students) will evaluate the Science Fair projects
- They will spend about 2 - 3mins with each participant to understand the project and learn about the experiments
- Reviewers will grade all the projects and determine the best projects.
- Results will be consolidated and announce at the end of the science fair.

Rewards

- All Participants will receive a trophy and certificate for participating!
- A memorable note from the science teacher along with a special goody !
- The **Top 10** projects with the best Scientific Method will get a special prize!

Reviewing Criteria

Factors judges use to make decisions	What the judges are trying to determine	Examples of questions a judge might ask during an interview
Creativity / originality	Is this work novel?	Why did you choose this topic and how did you settle on your approach to the problem?
Scientific thought / engineering process	Did the student understand the scientific/engineering method and apply it appropriately?	Can you walk me through how and why you decided on this experimental/engineering design?
Background information / thoroughness	Does the student understand what was done previously in the field?	How does your approach to the question differ from people's previous approaches?
Skill / independence	Who designed and carried out the bulk of the work?	What was the most surprising experimental/engineering challenge you faced during this science project? How did you overcome it?
Thoroughness	Is the completed work sufficient to move the field forward?	What were your goals with this science project and how would you evaluate where you are in respect to those goals?
Clarity	Can the student clearly and easily discuss all aspects of his or her project? During an interview, judges might want to make sure that a student can think and speak well when thrown a curve.	If your tests had shown XYZ instead, what would you have done? Why?
Teamwork (only applicable for team projects)	Was each member of the team fully involved? Does each member, regardless of his or her specific experimental role, understand all aspects of the science project?	The great thing about working together is the synergy between people. What would you say was the most important skill or idea each of you had during the course of this science project?

Note to Parents:

- Please watch your children if using combustible/ electrical / flammable products.
- Help them to look up ideas online or referring to books at the library.
- Make sure the children work on all the steps in the science project process.
- Please have the children focus more on the scientific method in the project.
- A student can bring a phone,tablet or computer to show a video of their experiment if appropriately needed.
- Please have your children wear comfortable shoes and carry a bottle of water.
- Uniform is not mandatory.

Good Luck to all the Young Scientists !!!

THANK YOU !!!