



# The STEMite Zone Fair

## Student Guide

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**Hello STEMites! This guide is specially designed to help you navigate through your science fair project process. We have provided an explanation of the different kinds of projects, going through the different steps with examples. Feel free to use the project banks we've provided as an inspiration for your own project.**

# How To Decide on a Science Fair Project

## Observe Your Environment

Look around you! Your home, school, and community are teeming with science. Notice anything interesting or odd? Maybe it's the way plants grow towards the light or how certain materials recycle. Your curiosity is your compass.



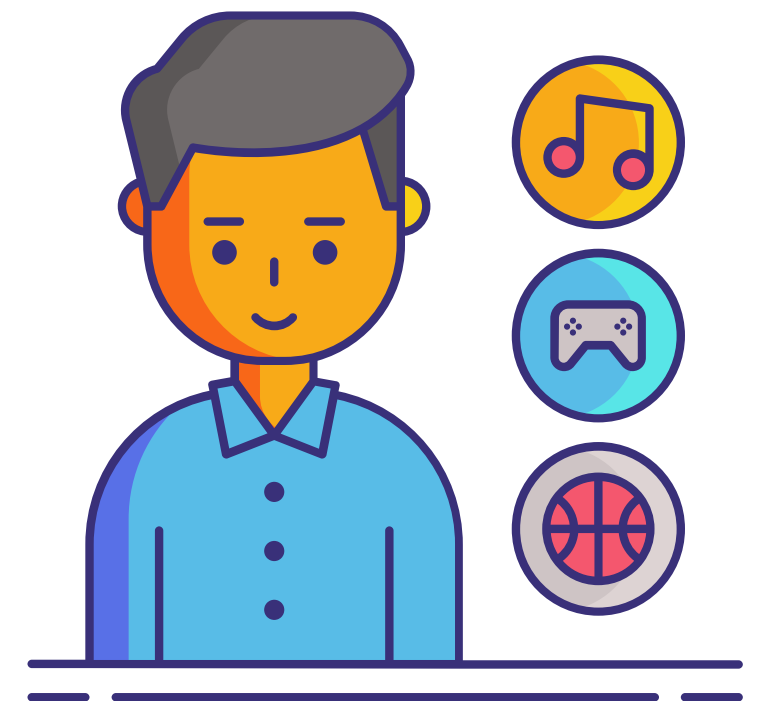
## Ask Questions



Great science starts with great questions. See something peculiar in your everyday life? Ask why it happens, how it works, or what it affects. Every question is a potential science fair project waiting to be discovered!

## Connect with Your Interests

Love playing video games? Explore computer science or virtual reality. Fascinated by cooking? Dive into the chemistry of baking. Match your project with what you love, and the passion will shine through.




**Your Science Fair Project will fall into one of these type: Experiments, Inventions (also called Innovations), and Discovery.**


**The following pages describe each with examples.**

# Types of Science Fair Projects

## Innovation

For those who love to build or design, this is their playground. Here, students identify a problem, design a solution, build a prototype, and then test its effectiveness.

 **Design:** Identify a common problem, brainstorm solutions, create a prototype, and test its efficacy.

 **Tip:** Challenges like “*Can you design a tool to make watering plants easier?*” can spark imaginative solutions.

# Innovation Projects

## Sample Bank



**1** A homemade water filter using locally available materials.

**2** A new type of shoe designed for walking on flooded streets.

**3** An affordable and efficient air purifier for homes near busy streets.

**4** An improved design for carrying heavy loads on a bike or scooter.

**5** A low-cost solar lamp for studying during power outages.





# Innovation Projects

## Sample Bank



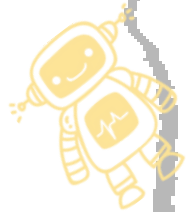
**6** Create musical instruments from household items

**7** Create sculptures or art pieces from items that would typically be discarded

**8** Design and model their own fashion pieces created from recycled materials.

**9** A new type of rainwater harvesting system for urban homes.

**10** A new type of solar cooker using locally available materials.







# Types of Science Fair Projects

## Discovery

Here, you will study or observe situations to understand the why or how of a phenomenon. This could range from observing animal behaviors to studying the effect of video games on sleep patterns.

 **Design:** Choose a phenomenon or behavior, form a question around it, and study it in depth.

 **Tip:** This could range from observing star patterns to understanding cultural practices in their community.

# Discovery Projects

## Sample Bank

A yellow lightbulb icon with rays emanating from it, positioned to the left of the first project description.

**1** Observing and documenting the types of birds found around Lagos.

**2** Studying the behavior of different species of ants in Lagos.

**3** Documenting the different types of fish sold at Makoko fish market.

**4** Studying the impact of seasonal changes on the flora of Lekki Conservation Centre.

A yellow robot icon with a smiling face and arms, positioned to the left of the fifth project description.

**5** Documenting the different types of trees found in Lagos.



# Discovery Projects

## Sample Bank



**6** Exploring and documenting the different types of rocks found at Bar Beach.

**7** Studying how market days affect traffic in different parts of Lagos.

**8** Documenting the different types of street foods sold in Lagos.

**9** Studying the impact of rainfall on traffic patterns in Lagos.




**10** Exploring the types of aquatic life found in Lagos Lagoon.



# Types of Science Fair Projects

## Experiments

These involve conducting a hands-on experiment. You ask a specific question, create a hypothesis, and test that hypothesis by designing an experiment.

 **Design:** Identify a specific question, form a hypothesis, and design experiments to test that hypothesis.

 **Tip:** Often, the best experiments come from everyday wonders – “Why do some fruits ripen faster when placed in a paper bag?”

# Experiments Projects

## Sample Bank



**1** How does the type of fabric affect the rate of evaporation of clothes?

**2** Does the color of a room affect the mood or behavior of people in Lagos?

**3** How does the type of pot affect the cooking time of Jollof rice?

**4** Does saltwater affect the corrosion rate of metals found in Lagos?

**5** How does the amount of traffic affect air quality in different areas of Lagos?



# Experiments Projects

## Sample Bank



**6** How does living near a market affect the types of insects found in homes?

**7** How does the type of sand affect the strength of homemade bricks?

**8** How does music affect plant growth?

**9** Does the type of music affect studying habits of students in Lagos?



**10** How does the weather affect the sale of certain types of street food in Lagos?



# Doing a Science Fair Project

## The Steps

- Planning the Project
- Submitting Project Proposal on our website
- Writing and Keeping Track of Progress in Logbook
- Submitting Project Results on our website
- Creating the Poster Board
- Presenting at the Fair





# Going Through the Steps

Innovation project with worked example:

A homemade water filter using locally available materials.



# Innovation

## Planning the Project

Using worked example - A homemade water filter using locally available materials.

### 1) Start with Why

- Learn why clean water is important.
- Understand the water challenges some communities face.

### 2) Do Background Research

- Find out about different water filters.
- Know how they work scientifically.

### 3) Check for Local Materials

- Identify materials you can get nearby.
- Visit local stores to see what's available.

### 4) Define Your Goal

- Clearly say what you want your water filter to do.
- Think about how it can help people.

### 5) Gather Info

- Make a list of things you want to find out.
- For example, how well local materials filter water.

### 6) Draw Your Idea

- Sketch how your water filter might look.
- Plan where each material will go.

### 7) Plan Your Budget

- Figure out how much your project might cost.
- Make sure it fits your budget.

### 8) Work Out Your Timeline

- Set a timeline for your project.
- Break it into smaller tasks and assign dates.
- This will help you stay organized and meet deadline

# Innovation

## Submitting Proposal on our website

### STEMite Zone Fair Student Proposal Form

#### Student Details

What's your name? \*

Chloma Adedunle

What's your Email? \*

chlomaadedunle@example.com

Which class are you? \*

Primary 4-6

Date of Birth (MM/DD/YYYY) \*

February 5, 2008

What's the name of your school? \*

Lagos Model School

Your school is under which division? \*

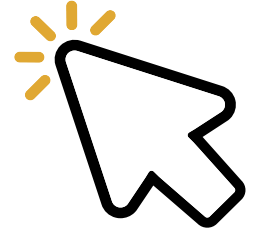
Lagos Island

Next

**Go to the following link:**

<https://thestemitezonefair.com/project>

-proposal-form/



Fill out the following details

# Innovation

## Submitting Proposal on our website

Using worked example - A homemade water filter using locally available materials.

### Project Details

Science Project Title \*

EcoFilter: A Homemade Water Filtration Solution

Short Description of Your Project

Briefly explain your project? - what will you be studying or creating?

My project involves creating a water filtration system using simple, locally sourced materials. I want to understand how effective these materials are in purifying water and providing a simple, affordable solution for communities.

Why did you choose this project? - Briefly explain why this project interests you and why you want to learn more about it?

Clean water is essential, and not everyone has easy access to it. I'm interested in finding a solution that can be easily replicated to help communities filter water using what's available to them.

**Fill in a short  
description of their  
project as  
exemplified here**

# Innovation

## Submitting Project Proposal on our website

Using worked example - A homemade water filter using locally available materials.

**In the last section as seen below,  
fill in a rough description of the  
steps to be taken for the project**

### What will you do in your project?

- Gathering Materials: Collect sand, gravel, charcoal, and empty plastic bottles.
- Assembling the Filter: Create layers of sand, gravel, and charcoal in the plastic bottle.
- Testing: Pour contaminated water through the filter and analyze the results.
- Improvements: Modify the filter design based on testing outcomes.
- Documentation: Keep a detailed logbook of the process and results.

# Writing and Keeping Track of Progress in Logbook

- Use dates for each entry.
- Attach photos or drawings where possible.
- Be honest, even if things don't go as planned.
- Have fun! Your logbook is your project's diary.



# Innovation

## Writing & Keeping Track of Progress in Logbook

Using worked example - A homemade water filter using locally available materials.



### Date: January 10, 2024

- Today, I started my project on creating a homemade water filter using materials I found at home. I researched different materials that could be used and made a list of items to gather.

### Date: January 15, 2024

- Gathered materials: sand, gravel, activated charcoal, cotton cloth, plastic bottles. I cleaned the plastic bottles thoroughly to prepare them for use as filter containers.

### Date: January 20, 2024

- Constructed my first prototype water filter using a plastic bottle cut in half. Layered the materials inside the bottle: gravel at the bottom, followed by sand, activated charcoal, and finally, cotton cloth at the top. Secured the layers with tape.

### Date: January 25, 2024

- Tested my prototype filter by pouring dirty water through it. Noticed that water flowed through too quickly, and some sediment passed through the filter. Need to adjust the layers for better filtration.

### Date: January 30, 2024

- Made adjustments to the filter layers by adding more cotton cloth to slow down the water flow and trap smaller particles. Tested the modified filter with dirty water again. Noticed improved filtration, but water still had a slight odor.



# Innovation

## Submitting Project Results on our website

Using worked example - A homemade water filter using locally available materials.

### Provide a summary of your project explaining what you did and discovered (Max 100 words)

- In my project, I created a homemade water filter using locally available materials like sand, gravel, and activated charcoal. Through experimentation, I discovered that the filter effectively removed impurities from water, making it safer to drink.

### Provide the objective of your project, what you aimed to achieve with your project

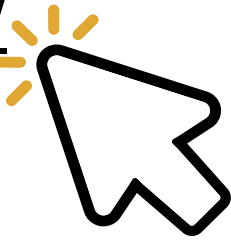
- The objective of my project was to design and test a simple water filtration system using materials found in my local environment. I aimed to demonstrate how easily accessible materials could be used to purify water, especially in areas with limited access to clean drinking water.

### Describe the steps you followed to conduct your project. Explain how you collected data or performed experiments. (Max. 100 words)

- I gathered materials: sand, gravel, activated charcoal, plastic bottles.
- I cut the bottom of a plastic bottle and layered it with cotton, activated charcoal, sand, and gravel.
- I poured dirty water through the filter and observed the clarity of the filtered water.
- I tested the effectiveness of the filter by comparing the clarity of filtered and unfiltered water samples.
- I recorded observations and noted any improvements needed in the filter design.

**Go to the website:**

**[https://thestemitezonefair.com/  
result-submission-form/](https://thestemitezonefair.com/result-submission-form/)**



# Innovation

## Submitting Project Results on our website

Using worked example - A homemade water filter using locally available materials.

### Share the results of your projects. What did you learn?

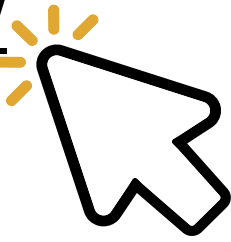
- Through my project, I learned that homemade water filters can effectively remove sediment and impurities from water, making it safer to drink. The filtration process improved water clarity and reduced the presence of contaminants, demonstrating the potential for low-cost filtration solutions in areas without access to clean water sources.

### Write a conclusion summarizing what you discovered through your project. What are your thoughts on the results?

- In conclusion, my project demonstrated that homemade water filters using locally available materials can be a practical and affordable solution for water purification. By harnessing the natural filtering properties of materials like sand, gravel, and charcoal, communities without access to advanced filtration systems can still obtain clean and safe drinking water. Through further research and experimentation, these homemade filters could be optimized and implemented in areas where clean water is scarce.

**Go to the website:**

**[https://thestemitezonefair.com/  
result-submission-form/](https://thestemitezonefair.com/result-submission-form/)**



# Innovation

## Creating your Poster Board

Using worked example - A homemade water filter using locally available materials.

### A homemade water filter using locally available materials.

#### Introduction

Hi there! Welcome to my innovation project - "A homemade water filter using locally available materials."

#### Problem Statement

Did you know that millions of people worldwide lack access to clean water? This inspired my project to develop an affordable water filter using everyday items found in our community.

#### Problem Goal

My goal is to design a water filter that anyone can make using easily accessible materials, ensuring that clean water is not a luxury but a basic right for everyone.

- Plastic bottles
- Sand
- Gravel

#### Materials

- Cotton cloth
- Charcoal
- Rubber bands

#### Procedure

1. Prepare the Bottle:
  - Cut the bottom off a plastic bottle to create a funnel.
2. Layer the Materials:
  - Fill the bottle layers of gravel, sand, cotton cloth, and charcoal.
  - Each layer plays a role in filtering impurities.
3. Secure the Filter:
  - Use rubber bands to keep the layers in place.
4. Test Your Filter:
  - Pour dirty water into the filter and observe how it becomes clearer as it passes through.

#### Results

By following these steps, I've created a homemade water filter that effectively removes impurities, making water safe for drinking.

#### Conclusion

Clean water is essential for a healthy life. With this simple yet innovative project, we can make a positive impact on communities lacking access to clean water.

#### Future Improvements

I'm excited to continue improving my water filter design and explore ways to make it even more accessible to people in need.

#### Acknowledgments

A big thank you to my school and mentors for supporting me in this project. Together, we can make a difference!



# Going Through the Steps

Discovery project with worked  
examples:

Studying the impact of rainfall on  
traffic patterns in Lagos.



# Discovery

## Planning the Project

Using worked example - Studying the impact of rainfall on traffic patterns in Lagos.

### Background Research

- Explore information about traffic congestion in Lagos.
- Learn about the typical traffic patterns in your local area.
- Investigate the basics of how rainfall can affect transportation.

### Define Your Hypothesis

- Formulate a hypothesis about how rainfall might impact traffic.
- Example: "I hypothesize that heavy rainfall leads to increased traffic congestion in Lagos."

### Identify Variables

- Define the variables you will study, such as rainfall intensity, traffic volume, and travel times.

### Research Rainfall Data

- Find historical rainfall data for Lagos during different seasons.
- Look for patterns or trends related to the amount and duration of rainfall.



# Discovery

## Planning the project

Using worked example - Studying the impact of rainfall on traffic patterns in Lagos.

### Explore Traffic Data

- Collect information on traffic patterns in Lagos.
- Examine peak traffic hours and common congestion areas.

### Plan Field Observations

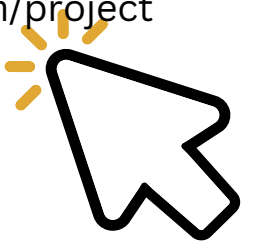
- Decide when and where you will conduct on-site observations.
- Consider factors like time of day, weekdays vs. weekends, and specific locations.

### Prepare Observation Tools

- Gather materials such as a notebook, camera, and an umbrella for on-site observations.
- Create a list of interview questions for commuters and traffic officials.

### Create a Research Timeline

- Outline a timeline for your research, ensuring you have enough time for data collection, analysis, and presentation.



### **Science Project Title: Impact of Rainfall on Traffic Patterns in Lagos**

#### **Short Project Description:**

I will investigate how rainfall affects traffic patterns in Lagos, specifically looking at changes in congestion and travel times during and after rainfall.

#### **Reason for Choosing This Project:**

Living in Lagos, I've always been intrigued by the chaotic traffic, especially during rainy seasons. I want to understand the dynamics of how rainfall contributes to these traffic patterns, which is not only a personal interest but also a relevant issue in our city.



# Discovery

## Submitting Proposal on our website

Using worked example - Studying the impact of rainfall on traffic patterns in Lagos.

**What will you do in your project? List the steps you will take to complete your project and the materials you will need for each step**

### 1. Research Phase:

- Collect historical rainfall and traffic data.
- Materials: Computer, internet access, data analysis software.

### 2. Data Compilation:

- Organize data to identify patterns.
- Materials: Spreadsheet software, charts, graphs.

### 3. Field Observations:

- Conduct on-site observations during rainfall.
- Materials: Notebook, camera, umbrella.

### 4. Interviews:

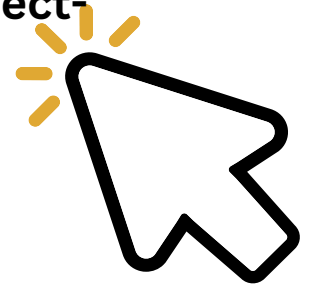
- Interview commuters and traffic officials.
- Materials: Recording device, interview questions.

### 5. Analysis and Conclusions:

- Analyze data and draw conclusions.
- Materials: Computer, statistical tools.

**Go to the following link:**

<https://thestemitezonefair.com/project-proposal-form/>



Fill out the following details

# Writing and Keeping Track of Progress in Logbook

- Use dates for each entry.
- Attach photos or drawings where possible.
- Be honest, even if things don't go as planned.
- Have fun! Your logbook is your project's diary.



# Discovery

## Writing & Keeping Track of Progress in Logbook

Using worked example - Studying the impact of rainfall on traffic patterns in Lagos.



- On January 10, 2024, I started my project by researching traffic hotspots in Lagos and where they measure rainfall. I studied maps of Lagos to understand the city's layout better.
- Five days later, on January 15, 2024, I visited a weather station to learn more about how they measure rainfall. I took pictures of rain gear and asked about rain's impact on traffic.
- By January 20, 2024, I had collected rainfall data and made graphs to visualize it. I also looked for extreme weather events that might affect traffic patterns.
- On January 25, 2024, I interviewed Lagosians about rain and traffic, writing down their answers and drawing traffic maps based on their responses.
- By January 30, 2024, I had combined the rainfall and traffic data to create jam maps, which showed areas with the most traffic congestion during rainy weather. I found links between rain and traffic patterns.

# Discovery

## Submitting Project Results on our website

Using worked example - Studying the impact of rainfall on traffic patterns in Lagos.

### Provide a summary of your project explaining what you did and discovered (Max 100 words)

- For my project, I investigated how rainfall affects traffic congestion in different areas of Lagos. Through data collection and analysis, I discovered significant correlations between rainfall intensity and traffic congestion levels, particularly in areas with poor drainage systems.

### Provide the objective of your project, what you aimed to achieve with your project

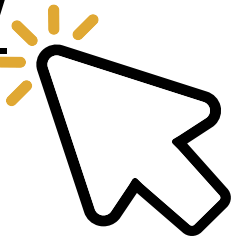
- The objective of my project was to understand how rainfall influences traffic patterns in Lagos and to identify potential factors contributing to increased congestion during rainy conditions.

### Describe the steps you followed to conduct your project. Explain how you collected data or performed experiments. (Max. 100 words)

- Identified key areas in Lagos known for heavy traffic congestion.
- Collected rainfall data from local weather stations and traffic congestion data from traffic management agencies.
- Analyzed the data to identify correlations between rainfall intensity and traffic congestion levels.
- Conducted surveys to gather information from commuters about their experiences with traffic during rainy weather.
- Used mapping software to visualize the impact of rainfall on traffic patterns across Lagos.

**Go to the website:**

**[https://thestemitezonefair.com/  
result-submission-form/](https://thestemitezonefair.com/result-submission-form/)**



# Discovery

## Submitting Project Results on our website

Using worked example - Studying the impact of rainfall on traffic patterns in Lagos.

### Share the results of your projects. What did you learn?

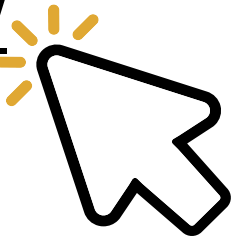
- I found out that when it rains a lot, traffic jams get worse in Lagos, especially in areas where the drainage isn't good. The data showed that heavy rain makes traffic worse, and people confirmed that they have more trouble getting around when it's raining.

### Write a conclusion summarizing what you discovered through your project. What are your thoughts on the results?

- From my project, I learned that heavy rain can make traffic really bad in Lagos. It's important for the city to fix drainage problems and come up with better ways to manage traffic during rainy days. I hope my project helps people understand why traffic gets so bad when it rains and encourages city planners to find solutions to make things better.

**Go to the website:**

**[https://thestemitezonefair.com/  
result-submission-form/](https://thestemitezonefair.com/result-submission-form/)**



# Discovery

## Creating Your Poster Board

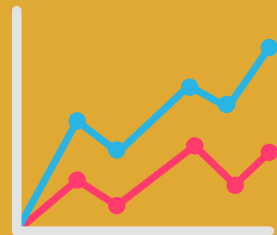
Using worked example - Studying the impact of rainfall on traffic patterns in Lagos.

### Project Overview and Purpose

Investigating the relationship between rainfall and traffic in Lagos to improve urban planning during wet conditions

### Methodology & Data Collection

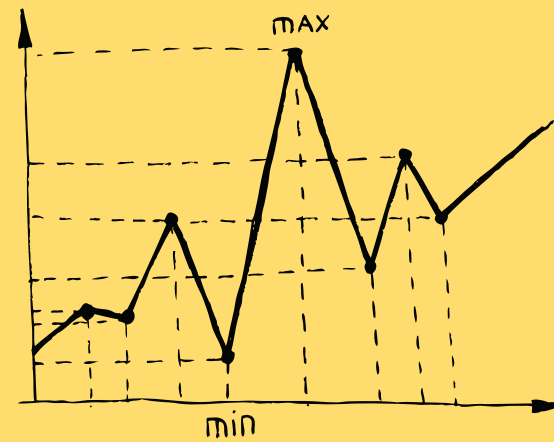
We deployed rain gauges and traffic cameras across key areas in Lagos. Our team collected data on rainfall intensity and observed traffic patterns during rainy days



Graph depicting rainfall intensity over the observation period.

### Impact of Rain on Lagos Traffic Discoveries & Patterns

- Key Findings: Increased rainfall correlates with higher traffic density, especially in central and low-lying areas. Our discoveries highlight potential traffic hotspots during rainy weather.



[Graph illustrating variations in traffic density corresponding to different levels of rainfall.]

### Implications and Future Considerations:

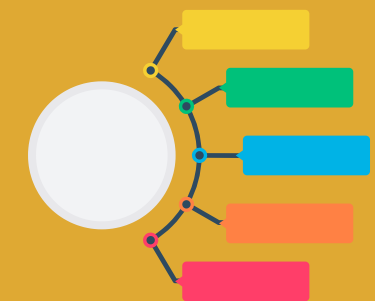
Why It Matters: Our findings suggest the need for improved drainage systems and alternative routes in vulnerable areas. Future considerations may include urban planning adjustments to mitigate rain-induced traffic congestion.

### Acknowledgements

Acknowledgments: Special thanks to our dedicated team and the Lagos Traffic Management Authority for supporting our research. Excited to present our insights!

### Conclusion

Rain significantly influences Lagos traffic. Concluding our study, envisioning a more resilient and efficient city.



[Infographic summarizing key findings]





# Going Through the Steps

Experiment project with  
worked examples

Impact of Pot Type on Jollof Rice  
Cooking Time





# Experiment

## Planning the Project

Using worked example - Impact of Pot Type on Jollof Rice Cooking Time

### Background Research:

- Basic principles of cooking
- How different materials conduct heat
- Previous studies or experiments related to cooking and pot materials

### Hypothesis:

- Formulate a hypothesis based on background research
- Example: "I hypothesize that the [type of pot] will significantly affect the cooking time of Jollof rice."

### Experimental Design:

- Identify and list the different types of pots (e.g., aluminum, stainless steel, non-stick)
- Describe how you will measure and prepare the same quantity of Jollof rice for each pot
- Outline the steps for cooking simultaneously and monitoring cooking times
- Specify the tools and materials needed (pots, ingredients, timer, notebook)

# Experiment

## Planning the Project

Using worked example - Impact of Pot Type on Jollof Rice Cooking Time

### Variables:

- Independent variable: Type of pot
- Dependent variable: Cooking time
- Control variables: Same quantity of rice, same cooking environment, etc.

### Data Collection:

- Record the cooking time for each pot
- Note any observations or changes in appearance or taste
- Use a timer and a notebook for accurate data collection

### Data Analysis:

- Organize data in a table or chart
- Look for patterns or trends in cooking times
- Analyze any differences in the cooked rice's appearance and taste

# Experiment

## Submitting Proposal on our website

Using worked example - Impact of Pot Type on Jollof Rice Cooking Time

**Science Project Title: "Impact of Pot Type on Jollof Rice Cooking Time"**

### **Short Project Description:**

This experiment aims to investigate how different types of pots affect the cooking time of Jollof rice.

### **Project Explanation:**

The project will study the cooking time variation when using different pots commonly found in households. The goal is to understand if the material or design of the pot influences the cooking time of Jollof rice, a popular Nigerian dish.

### **Reason for Choosing the Project:**

I chose this project because cooking is a daily activity, and I'm curious about the science behind it. Understanding how different pots affect cooking times could help in optimizing cooking processes.

# Experiment

## Submitting Proposal on our website

Using worked example - Impact of Pot Type on Jollof Rice Cooking Time

### Project Steps and Materials:

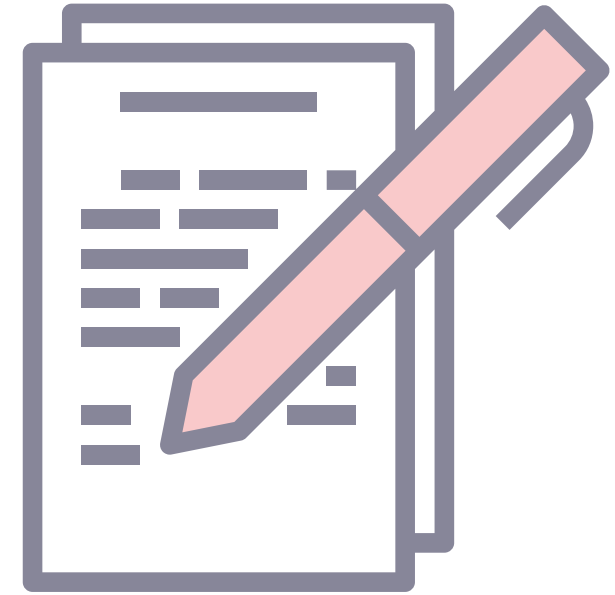
1. Selection: Choose three different types of pots (e.g., aluminum, stainless steel, and non-stick).
2. Preparation: Measure and prepare the same quantity of Jollof rice for each pot.
3. Cooking: Simultaneously cook the Jollof rice in each pot.
4. Monitoring: Record and monitor the cooking time for each pot.
5. Observation: Observe and note any differences in the appearance and taste of the cooked rice.

### Materials:

- Three different pots
- Ingredients for Jollof rice
- Timer
- Logbook for recording observations

# Writing and Keeping Track of Progress in Logbook

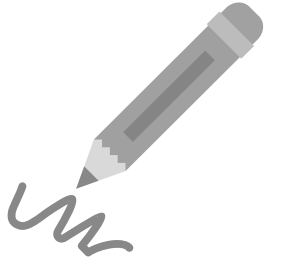
- Use dates for each entry.
- Attach photos or drawings where possible.
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- Have fun! Your logbook is your project's diary.



# Experiment

## Writing & Keeping Track of Progress in Logbook

Using worked example - Impact of Pot Type on Jollof Rice Cooking Time



- January 10, 2024: Started my project by researching different types of pots used for cooking. Found information about how the material and size of the pot can affect cooking time.
- January 15, 2024: Set up my experiment stations with three different types of pots: aluminum, stainless steel, and non-stick. Took photos of each pot and labeled them for my logbook.
- January 20, 2024: Prepared the ingredients for cooking Jollof rice: rice, tomatoes, onions, and spices. Documented the quantity of each ingredient used in each pot.
- January 25, 2024: Started cooking the Jollof rice simultaneously in each pot. Set a timer and recorded the cooking time for each pot. Took notes on any observations or differences noticed during the cooking process.
- January 30, 2024: Analyzed the data collected from the experiment. Created graphs to compare the cooking times of each pot type. Noticed that the stainless steel pot had the shortest cooking time, while the non-stick pot took the longest.



# Experiment

## Submitting Project Results on our website

Using worked example - Impact of Pot Type on Jollof Rice Cooking Time

**Provide a summary of your project explaining what you did and discovered (Max 100 words)**

- For my science project, I investigated how the type of pot affects the cooking time of Jollof rice. I experimented with three different types of pots: aluminum, stainless steel, and non-stick, to see which one cooks Jollof rice the fastest.

**Provide the objective of your project, what you aimed to achieve with your project**

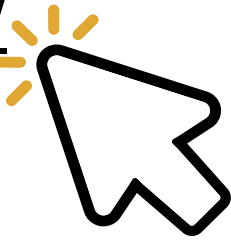
- My objective was to determine if the material of the pot has an impact on the cooking time of Jollof rice. I aimed to find out which pot type cooks Jollof rice the fastest and understand how different materials conduct heat during cooking

**Describe the steps you followed to conduct your project. Explain how you collected data or performed experiments. (Max. 100 words)**

- First, I set up three stations with each type of pot. Then, I measured and prepared the same amount of rice, tomatoes, onions, and spices for each pot. I cooked the Jollof rice simultaneously in each pot and recorded the cooking time for each. I also observed any differences in the cooking process.

**Go to the website:**

**[https://thestemitezonefair.com/  
result-submission-form/](https://thestemitezonefair.com/result-submission-form/)**



# Experiment

## Submitting Project Results on our website

Using worked example - Impact of Pot Type on Jollof Rice Cooking Time

### Share the results of your projects. What did you learn?

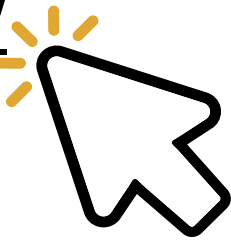
- After conducting the experiment, I found that the stainless steel pot had the shortest cooking time, while the non-stick pot took the longest. The aluminum pot fell in between. This suggests that the material of the pot does indeed affect the cooking time of Jollof rice.

### Write a conclusion summarizing what you discovered through your project. What are your thoughts on the results?

- In conclusion, my project demonstrated that the type of pot used can significantly impact the cooking time of Jollof rice. The stainless steel pot cooked the rice the fastest, which may be due to its ability to conduct heat more efficiently. These findings can help people choose the right pot for cooking Jollof rice to save time in the kitchen.

**Go to the website:**

**[https://thestemitezonefair.com/  
result-submission-form/](https://thestemitezonefair.com/result-submission-form/)**



# Experiment

## Creating your Poster Board

Using worked example - Impact of Pot Type on Jollof Rice Cooking Time

### How does the type of pot influence the cooking time of Jollof rice?

#### Hypothesis

We hypothesized that the material of the pot will affect how quickly Jollof rice cooks

#### Experimental Design

- Identified different types of pots: Aluminum, stainless steel, and non-stick.
- Described how the same quantity of Jollof rice was measured and prepared for each pot.
- Outlined the steps for simultaneous cooking and monitoring of cooking times.
- Specified tools and materials needed: pots, ingredients, timer, notebook.

#### Variables

- Independent variable: Type of pot.
- Dependent variable: Cooking time.
- Control variables: Same quantity of rice, same cooking environment.

#### Data Collection

- Recorded cooking times for each pot.
- Noted any observations or changes in appearance or taste.
- Used a timer and a notebook for accurate data collection.

#### Results

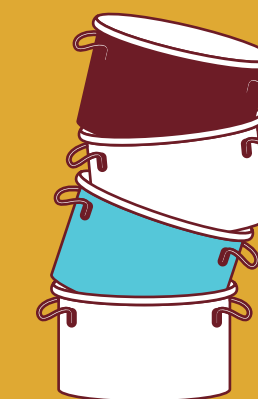
Pot Type	Cooking Time (minutes)
Aluminum	20
Stainless Steel	25
Non-stick	18

#### Data Analysis:

- Identified patterns or trends in cooking times.
- Analyzed differences in the appearance and taste of the cooked rice.

#### Conclusion

- We concluded that the type of pot does impact Jollof rice cooking time."



# Presenting at the Fair

## Engage Your Audience:

Ask questions to involve your audience.

## Passion and Confidence:

Speak with enthusiasm and confidence. Let your passion for solving this problem shine through your presentation.

## Visuals and Props:

Use visuals such as charts, graphs, or a well-designed poster board. Props can include the actual materials you used in your filter.





# Presenting at the Fair

## Rehearse:

Practice your presentation multiple times. This will help you feel more confident and ensure a smooth delivery.

## Time Management:

Be mindful of your presentation time. Practice delivering all key points within the allocated time frame (3 minutes).

## Q&A Preparation:

Anticipate potential questions and prepare concise, clear answers. This shows your depth of understanding about your project.



# Have any Questions?

## Contact Us



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