John Stanford International School

Science Fair Journal

Date of the Science Fair: _____

My Science Fair Responsibilities:

1. I will record everything about my science project in my science journal.
2. I will do my best work.
3. I will have fun with science.

Student Name: _____

Project Title: _____

_____

_____

_____

General Guidelines

Students may work individually, or, with the teacher's approval, as a team of two. Keep in mind that working as a team requires coordination and equal contribution from both partners.

Students are required to do a science ***investigation*** vs. a science ***demonstration***. An investigation is a hands-on experiment where a scientist sets up parameters, observes what happens, gathers data, analyzes it, and learns in the process. One may guess at the outcome, but, at the start, the scientist does not necessarily know what will happen. On the other hand, with a demonstration, you already know what the outcome will be. An example of a science demonstration is mixing vinegar and baking soda (or adding Mentos to Coke).

Projects may not include the following: toxic material, excessive liquids (liquids are allowed but must be well-contained), animals, fire, or high voltage electricity.

We encourage students to do projects that do not require specialized equipment or expensive materials.

JSIS will provide a three sided display board (36" high by 48" wide) free of charge. If the original is lost, the student is responsible for purchasing a replacement.

Science projects will be done at home, and we rely on parent support to succeed. That said, parents should refrain from doing the majority of the work. Experience shows that students learn most effectively when they do the project themselves.

Table of Contents

Scientific Question

What does the term “Sustainability” mean?

Tree map

Scientific Question (continued)

What three ideas am I interested in?

1.

2.

3.

Which idea am I most interested in? (Circle one)

How do I phrase my idea as a question that I can investigate?

My final science project question is:

Is my question narrow and specific enough? If not, narrow it down. Make it specific.

How do I know my question is testable?

Prediction

What do you think is going to happen? Phrase your prediction:

I think (X)

is going to happen because . . .

Variables

Controlled variable: what are you keeping the same?

Manipulated variable: what are you changing?

Responding variable: what are you measuring?

Materials

List the materials you are going to use. Do not buy expensive materials. (Brainstorm with your teacher or mentor to substitute expensive equipment with economical materials.)

What is a fair test?

How do you know your experiment is a fair test?

Procedure

How are you setting up your experiment? List what you are going to do STEP by STEP.

Why is it important to write down your procedure?

Data

How are you going to collect data?

Collect data at regular intervals. How frequently are you going to collect data?

Take photos at key stages of your project.

If your experiment allows, do multiple trials. Why is it important to do multiple trials?

Data (continued)

Use these pages to record your data. What do you observe?

Be specific. Write down dates and measurements. (Scientists use the metric system.)

Data (continued)

Data (continued)

Data (continued)

What do charts, graphs, or tables show about data?

Can you represent your data in a chart, graph, or table? Sketch it here, but do the "data crunching" with a computer program (like Excel).

Results

Give a summary of what happened, but not WHY you think it happened (The WHY belongs in your conclusion).

Conclusion

The results supported / did not support my prediction. I think this is because…

Research: Find supporting evidence to explain why your results turned out the way they did. What did you learn from your research?

Conclusion (continued)

Research and supporting evidence (continued)
(If you need more space, use the notes section.)

Conclusion (continued)

Based on the results of your investigation, what recommendations can you make?

Why does what you learned from your science project matter in the real world?

Did your experiment raise new questions that would be interesting to follow up on? What are they?

If you were to repeat the investigation, what would you do differently?

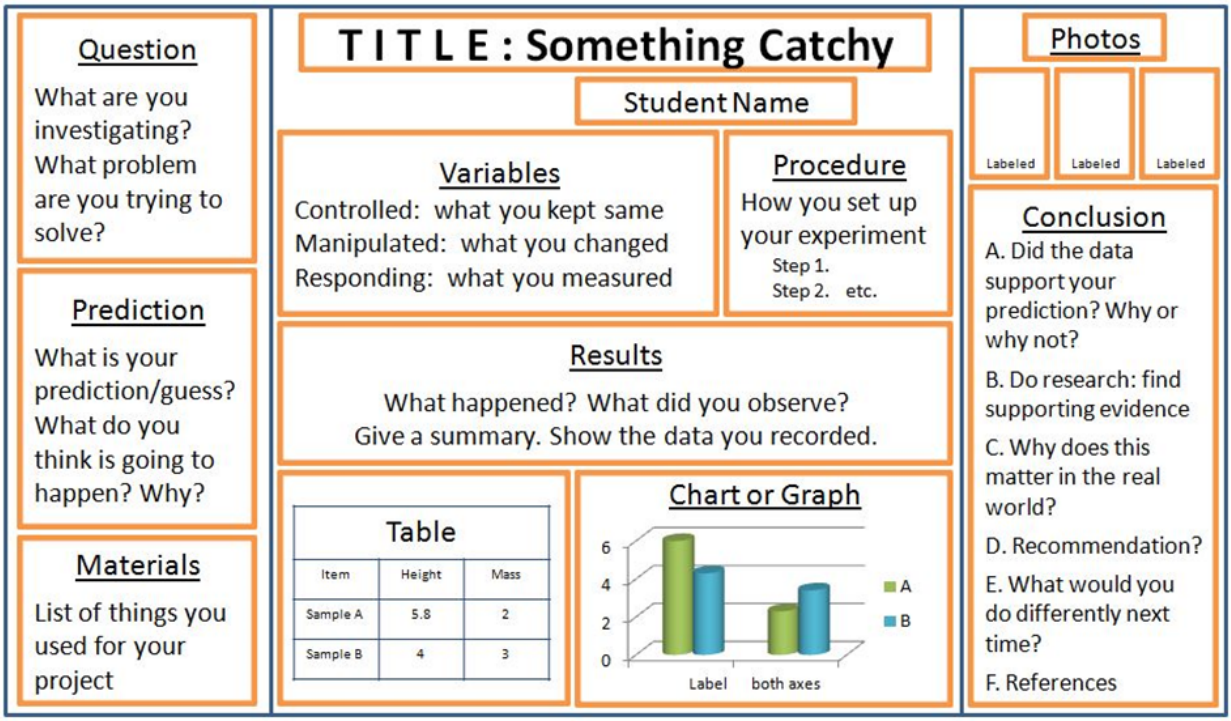
References

List your references or sources.

These can be web sites, books, magazine articles, TV or movie documentaries, and/or people resources.

Display Board

- Type and review your summaries before you glue anything to your board.
- Use correct spelling and grammar.
- Lay out information in logical order. Scientists will read your board from top to bottom, left panel to right panel.
- Make sure each scientific method component is present.
- Use colored borders to make your summaries stand out, but do not go overboard. It is not an art project.
- Label photos, tables, charts, graphs, and axes.
- Place your science journal in front of your display. If you have models or samples, bring them to school on the day of the science fair and put them in front of your display.



Presentation

Practice your presentation!

- Show confidence. You are the expert of your subject matter.
- Speak clearly. Do not rush.
- Relax. Be conversational.
- Make eye contact with your audience.
- Go through each section methodically, in logical order.
- Do not read from your board.
- If you get stuck, take a deep breath and glance at your board. Then turn back to your audience.
- If you have a partner, decide who will say what. Practice taking turns.
- You will be speaking for approximately 15 minutes.
- Practice with your family, your friends, your classmates, even your reading buddies. Practice more than once.

Congratulations on finishing your project!

Good luck presenting to your judge!

You are ready!

Notes

Use this space for extra notes.

Notes

December

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

January

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

February

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

March

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday

Notes