

# Alamo Junior Academy of Science Sample Report

## Requirements (submit 2 reports to judges)

1. **No more than 20 pages** (including Title Page). It can be less. Use the **past tense**.
2. Use **Front Side** of each page.
3. Use 10 or 12 pt. font minimum; **Double Space** or use 1.5 spacing.
4. Single space between sections or parts if writing a step-wise method
5. **Do not use a Folder or Binder** for report. **Staple** report on upper **left-hand** corner.

<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<p><b>Title of Project</b></p>  <p>John Smith Isaac Newton High School Junior Academy of Science Robert E. Lee High School January 30, 2016</p>	<p><b>Abstract</b></p> <ul style="list-style-type: none"> <li>▪ 250 words or less</li> <li>▪ Past tense</li> <li>▪ Abstract <b>NOT</b> to be included in the Oral Presentation</li> </ul> <p><i>*Note: This is <b>NOT</b> the Official Abstract/Certification Form for the science fair.</i></p>	<p><b>Table of Contents</b></p> <p>(May or may not be included)</p> <ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Materials/Method/Procedure</li> <li>3. Data/Observations</li> <li>4. Discussion of Results</li> <li>5. Conclusion</li> <li>6. Practical Application</li> <li>7. Future Expansion</li> <li>8. Acknowledgments</li> <li>9. Bibliography</li> </ol> <p><i>*Note: NOT included in Oral Presentation</i></p>	<p><b>Introduction</b></p> <ul style="list-style-type: none"> <li>▪ Rationale With Brief Background Information and Importance of Study</li> <li>▪ Question</li> <li>▪ Purpose/Problem/Objective</li> <li>▪ Hypothesis/Null Hypothesis</li> <li>▪ Indicate Variables</li> <li>▪ Can be 1-2 pages</li> </ul> <p><i>*Note: Do not use a separate page for each of the bullets.</i></p>
<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>
<p style="text-align: center;"><b>Materials</b></p> <ul style="list-style-type: none"> <li>▪ List materials used</li> </ul> <p style="text-align: center;"><b>Method/Procedure</b></p> <ul style="list-style-type: none"> <li>▪ List steps used (past tense) or</li> <li>▪ Describe steps in paragraph form (past tense)</li> <li>▪ May use photos, drawings, diagrams, flow charts, etc.</li> <li>▪ No. of pages depends on student's procedure</li> </ul>	<p style="text-align: center;"><b>Data and Results</b></p> <ul style="list-style-type: none"> <li>▪ Observations/Results</li> <li>▪ Visuals may be charts, graphs, diagrams, photos</li> <li>▪ Statistical Analysis may be used</li> <li>▪ No. of pages depends on what students wish to include</li> </ul>	<p style="text-align: center;"><b>Discussion of Results</b></p> <ul style="list-style-type: none"> <li>▪ Can be a continuation of the "Data and Results"</li> <li>▪ Results, observations, or data are explained</li> <li>▪ No. of pages depends on the depth of discussion</li> </ul>	<p style="text-align: center;"><b>Conclusion</b></p> <ul style="list-style-type: none"> <li>▪ Refers to the hypothesis</li> <li>▪ State whether or not data agrees or supports or disagrees or does not support the hypothesis</li> </ul> <p style="text-align: center;"><b>Practical Application</b></p> <p>What is the importance this study? Of what use is a study such as this?</p>
<b>I</b>	<b>J</b>	<b>L</b>	<p><b>NOTE:</b></p> <p>Refer to the explanation of the Explanation of Components on the next page.</p>
<p style="text-align: center;"><b>Future Expansion</b></p> <ul style="list-style-type: none"> <li>▪ State question(s) pertaining to the same study</li> <li>▪ Question(s) does not have to be long</li> <li>▪ What are some new ideas as to how to expand or improve the study?</li> </ul>	<p style="text-align: center;"><b>Acknowledgements</b></p> <p>Express gratitude to those that made study possible by being supportive <b>without</b> mentioning names of persons or institutions, etc.</p>	<p style="text-align: center;"><b>Bibliography</b></p> <ul style="list-style-type: none"> <li>▪ Use proper citing format for books, journals, and websites</li> <li>▪ <b>Websites</b> should include author, title of article, and date posted or retrieved from website</li> <li>▪ <b>NOT</b> included in Oral Presentation</li> </ul>	

## Explanation of Components

- C
- The Table of Contents can also be titled: "Outline".
  - Page numbers, detailed subtitles can also be used.
- 
- D
- The Introduction is background information on the topic.
  - Good idea to cite some references.
- 
- E
- Materials can be listed such as Supplies, Chemicals, and Equipment separately **OR** included in the Procedure.
  - Procedure (Methods, Experimental Design, or Protocol) can be in paragraphs **OR** outlined by steps.
  - Use quantities, concentrations, and metric measurements where applicable.
  - When using **Human Subjects**, state gender, age, no. of subjects, and how confidentiality was established.
  - If **Vertebrate Animals** were used in the study, state the species, gender, where animals were obtained, and what animal care procedures were implemented.
- 
- F
- Charts, observations, graphs, pictures, and diagrams can also be included in the Data and Results.
  - Be sure to have **captions** or titles to each item.
  - If each item is minimized, several items can be included in one page.
  - This can also be several pages long.
- 
- G
- The Discussion of Results section should refer to results/observations and an explanation as to what occurred. This section can be a continuation of component F.
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- H
- The Conclusion should be based on the data collected.
  - *"Does the data of results agree/disagree, support/not support, or accept/reject the hypothesis?"*
  - *"Therefore, it can be concluded that (refer to hypothesis). . . "*
- 
- I
- During a study, new questions come to mind. *"What were some new questions pertaining to the study?"*
  - Refer to the Procedure E for different variables, concentrations, time span, more trials, etc.
  - *"How can the study be expanded?"*
- 
- J
- There should be **no mention of names** of individuals, institutions, firms, etc.
  - The Acknowledgment should be general.
- 
- K
- Bibliography or References should be **properly cited** using an acceptable format.
  - Do not just depend on Internet. Website should include author, title of article, date posted or retrieved from website.
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- Note:**
- After registration, students should go directly to assigned room to get familiar with **Elmo** projector.
  - **Only** overhead visuals are allowed. Each room has an "Elmo" overhead projector which projects printed materials and photos. Method or procedures can be given by flow charts, outlines or photos.
  - Visuals may be PowerPoint (PPT) format however, PPT presentations with laptops are **not** allowed.
  - **DO NOT** bring models or other handouts to give to judges. Display boards **ARE NOT** allowed.
  - Note cards can be used, but not necessary. Laser pointers are permitted.
  - Students have 12 minutes to present followed by judge's questions.
  - The Abstract, Table of Contents, and the Bibliography **ARE NOT** part of the oral presentation.