Logbook:
1/6/2025

My mom told me about the science fair and I was like ok I will do it about baseball. We looked up baseball topics and decided to test which bat material hits fastest.

1/20/2025

We started the presentation, chose bats of different materials at different sizes, and weighed all the bats.

26 crayon 17.2oz
30 crayon 21.2oz
30 wood 22.4oz
29 hype fire 19.4oz
29 wood 23.4oz
27 wood 18.8oz
27 cat connect 16.9oz
25 blue 15.6oz

1/25/2025

I worked on the presentation.

2/2/2025

We went to the park to collect our data.

2/3/2025

We went to the batting cages to collect more data.

2/10/2025

We put all of our data into a table on the computer and worked more on the presentation.

2/13/2025

We took pictures of are equipment we used for batting. We finished the bibliography.

2/142025

We finished our science fair project.

Bibliography:

1. “Selection and Performance Rationale of Wood vs. Aluminum Baseball Bats.” *The Sport Journal*, 26 Sept. 2024, thesportjournal.org/article/selection-and-performance-rationale-of-wood-vs-aluminum-baseball-bats/.
2. “Bat Preference: Wood, Alloy, or Composite.” *BaseballMonkey.Com*, Baseball Monkey, 8 July 2024, www.baseballmonkey.com/learn/deciding-which-type-of-bat-is-best.
3. *YouTube*, YouTube, www.youtube.com/watch?v=0F4FHG7sin4. Accessed 13 Feb. 2025.

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2025 Safety Form

☑ I have written a research plan that includes the following:
- The question or problem being addressed and the expected outcome
- Describes in detail the method and procedures including all safety precautions Includes all procedures to be used for data collection and/or building your prototype, if an engineering project
- Identifies any potential risks and safety precautions to complete the project safely
- Who will be supervising your project? For approval, an adult over 18 must be present and supervising during experimentation or prototype development and building.

☑ I have reviewed this research plan with my:
- Teacher
- Parent/Guardian
- Any other 18+ Adult who will be supervising the project (if not listed above)

☑ I have reviewed the rules for The Academy of Science – St. Louis Science Fair and verified with my teacher that my project adheres to the rules.

☑ I have reviewed the additional rules that apply if my project involves any of the following:
- Mold
- Bacteria
- Humans

I acknowledge that all of the above safety precautions will be followed and that this project will be completed in a safe manner. I also acknowledge that no humans or animals (vertebrates or invertebrates) will be harmed in any way.

Print or Type Student Name	Student Signature Alex Yuan	Date
Ian Yuan / Alex Yuan	Ian Yuan	2-1-25
Print or Type Parent/Guardian Name	**Parent/Guardian Signature**	**Date**
Jessica Yuan		2/5/25
Print or Type Teacher Name	**Teacher Signature***	**Date**
Brendan Kearney	Brendan Kearney	1-16-2025

*You may include a project approval email from your teacher in lieu of a teacher signature.

Questions? Contact your science teacher, or the Academy Fair Director at sciencefair@academyofsciencestl.org

Revised for 2025 Fair

Visit sciencefairstl.org for more information.