Science Bowl Resources

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General Resources:

- https://science.osti.gov/wdts/nsb/Regional-Competitions/Resources/Tips-and-Resources
- https://www.fairviewhs.org/sites/science-bowl/files/55383

A Note on Textbooks:

I have tried to link an online version to each of the textbooks listed below. If you are interested in reading a textbook that I have not provided a link to, reach out to me and I will try to find a pdf version to send to you (I 99% will have it, but simply could not attach pdfs to this google doc).

Alternatively, if you are interested in reading a paper version of the book, please let me know. If several people are interested in obtaining hard copies of a textbook, I can get a discount for ordering in bulk. You can also check to see if any nearby libraries hold a copy, or see if Amazon is relatively cheap for that textbook.

Regarding editions: in general, the later edition of a textbook will be better than an older version - it will likely have better images, more problems, more examples, etc. However, for most textbooks, the difference is not that big. If you are looking to buy a textbook and notice that the newer version is substantially more expensive than an older one, check the reviews of both editions on google to see if it is worth investing in a newer edition.

Overall, I highly recommend reading textbooks as they are the best way to learn information and create a good foundation. Reading textbooks will not only help you for science bowl, but also for AP classes in school as well as olympiads if you choose to participate in them. Moreover, reading textbooks teaches you patience and perseverance all while teaching you about an interesting subject.

I would recommend picking one subject to focus on as it takes a good deal of effort to fully understand and absorb the material. If you are ambitious, feel free to do more, but know that a more serious time commitment will be involved. Refer to the links above and resources below on how exactly to tackle reading textbooks.

Lastly, please note that the textbooks listed below are only a small subset of the available literature for the subject. There are many resources and books available, and using any of them will make you a better scientist and better at science bowl. I have simply included the more popular/tried and tested ones, but please feel free to use more or different resources at your discretion. Find study partners to work with and enjoy the process!

Subject Specific Resources:

Highlighted = very good, highly recommended

Subject	Corresponding Olympiad	Standard Introductory Textbooks (referred to by last name of authors)	Links
Physics	F=ma	Algebra based: • Hewitt Calculus based: • Giancoli • Halliday, Resnick, Krane Volume 1 and Volume 2	• More comprehensive list of resources • Khan Academy for basic calculus and AP physics • Nice summary of concepts/equations: https://kevinshuang.com/wp-content/uploads/2016/09/physics-syllabus.pdf • MIT Notes for electricity and magnetism
Chemistry	USNCO	• Any AP Chemistry Textbook • Zumdahl • Atkins • Klein	• Guides to approaching chemistry
Biology	USABO	• Campbell	• More comprehensive list of resources • Amoeba Sisters • Good videos
Math	AMC	• Refer to links	• For the Win • Khanacademy
Earth Science	USESO	• Tarbuck	• List of topics: USESO Syllabus • More comprehensive list of resources: Unofficial USESO Guide
Astronomy	USAAAO	• Karttunen	
Energy	None	• Refer to links	• Official DOE website: https://science.osti.gov/-/media/wdts/nsb/pdf/HS-Sample-Questions/Sample-Set-3/Energy-Category.pdf