Illustrated Guide to Home Biology Experiments: All Lab, No Lecture (DIY Science)

Robert Bruce Thompson, Barbara Fritchman Thompson
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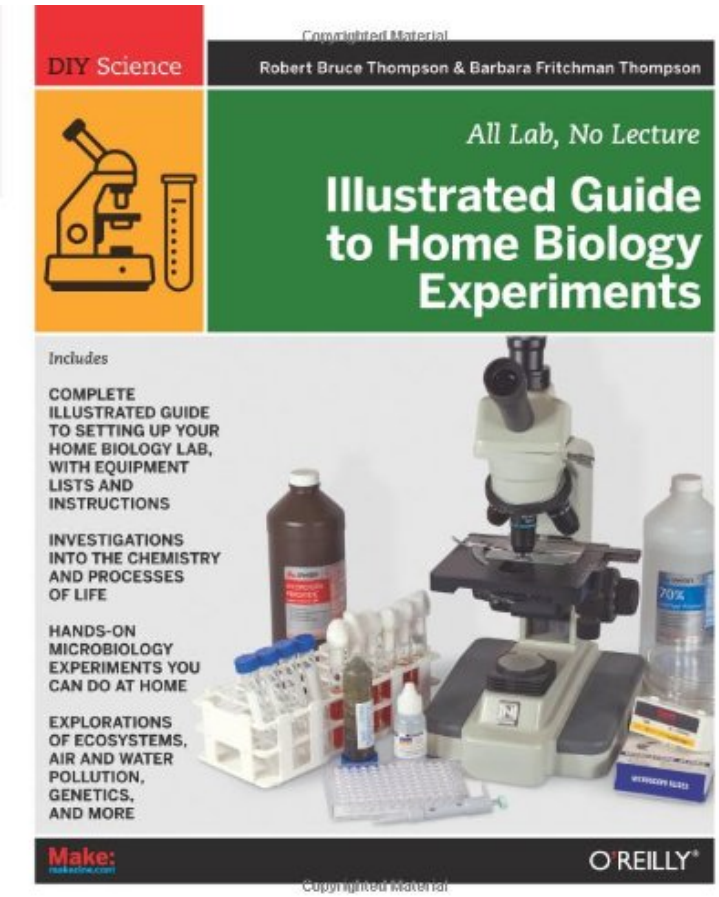

#66182 in Books Robert Bruce Thompson 2012-04-29Original language:EnglishPDF # 1 9.75 x .71 x 8.00l, 1.88 #File Name: 1449396593378 pagesIllustrated Guide to Home Biology Experiments All Lab No Lecture | File size: 56.Mb

Robert Bruce Thompson, Barbara Fritchman Thompson : Illustrated Guide to Home Biology Experiments: All Lab, No Lecture (DIY Science) before purchasing it in order to gage whether or not it would be worth my time, and all praised Illustrated Guide to Home Biology Experiments: All Lab, No Lecture (DIY Science):

9 of 9 people found the following review helpful. Great Book-- but heed their adviceBy Steve W. BondsAll lab-- no lecture. They're not kidding! This book MUST be supplemented with an appropriate microbiology book or the student (such as myself) will only have an incomplete understanding of what's going on. There are suggestions inside the book. The illustrations and photos are top-notch and the instructions are relatively clear. (I still manage to confuse myself sometimes, but I can't in good conscience blame the instructions since they always make sense in retrospect.)If you want a preview of the book, the complete text is available as a PDF on the Home Scientist website. A simple Google search should find it. If you will actually be performing the experiments, a paper copy plus the supply kit from

that same website makes the whole process go much smoother.8 of 8 people found the following review helpful. Nice book for home Biology studiesBy rpenc01After purchasing Thompson's Illustrated Guide to Home Chemistry, I decided to purchase this book for biology. As a home scientist (actually a real scientist with a PhD) and a potential educator, I had my eyes on this book for a while. This is a nice lab manual, and any serious home scientist/hobbyist interested in hands-on biology will enjoy this book. Anyone with a decent microscope (or two) could stand to gain a lot using this book, which addresses a number of diverse areas of the science, including environmental science. The chapter on how to set up a home lab will be particularly useful. Thompson's book would also be very well suited for home schooling at the high school level. Though I haven't gone through the book in detail, I've looked through it thoroughly, and am extremely happy with the content and the level of the material. Highly recommended for any budding biologist or student-- or home hobbyist.17 of 18 people found the following review helpful. Incredibly fun and informative; highly recommended for all levelsBy Ken L LawrenceEver since the authors wrote the "Illustrated Guide to Home Chemistry Experiments" I have been eagerly awaiting this book. Both books are exceptionally well written for all levels of experience. I use these books for self education to expand my knowledge on various topics and conduct my own experiments and these are perfect for me.This book is laid out succinctly with abundant illustrations and numerous suggestions for keeping your expenses to a minimum. Very much appreciated. I have a lot of books on self taught biology and this is by far the best. If you do like this resource, you should also check out the associated chemistry book.I now eagerly await their book regarding Forensic science and experiments, which has been previously hinted about.

Experience the magic of biology in your own home lab. This hands-on introduction includes more than 30 educational (and fun) experiments that help you explore this fascinating field on your own. Perfect for middle- and high-school students and DIY enthusiasts, this full-color guide teaches you the basics of biology lab work and shows you how to set up a safe lab at home.The Illustrated Guide to Home Biology Experiments is also written with the needs of homeschoolers firmly in mind, as well as adults who are eager to explore the science of nature as a life-long hobby. To get the most from the experiments, we recommend using this guide in conjunction with a standard biology text, such as the freely downloadable CK-12 Biology (ck-12.org).Master the use of the microscope, including sectioning and stainingBuild and observe microcosms, soda-bottle worlds of pond lifeInvestigate the chemistry of life from simple acids, bases, and buffers to complex carbohydrates, proteins, lipids, enzymes, and DNAExtract, isolate, and observe DNAExplore photosynthesis, osmosis, nitrogen fixation, and other life processesInvestigate the cell cycle (mitosis and cytokinesis)Observe populations and ecosystems, and perform air and water pollution testsInvestigate genetics and inheritanceDo hands-on microbiology, from simple culturing to micro-evolution of bacteria by forced selectionGain hands-on lab experience to prepare for the AP Biology examThrough their company, The Home Scientist, LLC (thehomescientist.com/biology), the authors also offer inexpensive custom kits that provide specialized equipment and supplies youll need to complete the experiments. Add a microscope and some common household items and youre good to go.

About the AuthorRobert Bruce Thompson is a coauthor of Building the Perfect PC, Astronomy Hacks, and the Illustrated Guide to Astronomical Wonders. Thompson built his first computer in 1976 from discrete chips. It had 256 bytes of memory, used toggle switches and LEDs for I/O, ran at less than 1MHz, and had no operating system. Since then, he has bought, built, upgraded, and repaired hundreds of PCs for himself, employers, customers, friends, and clients. Robert spends most clear, moonless nights outdoors with his 10-inch Dobsonian reflector telescope, and is currently designing a larger, computerized, truss-tube Dobsonian that he plans to build.