Molecular Biology of the Cell 6E - The Problems Book

John Wilson, Tim Hunt
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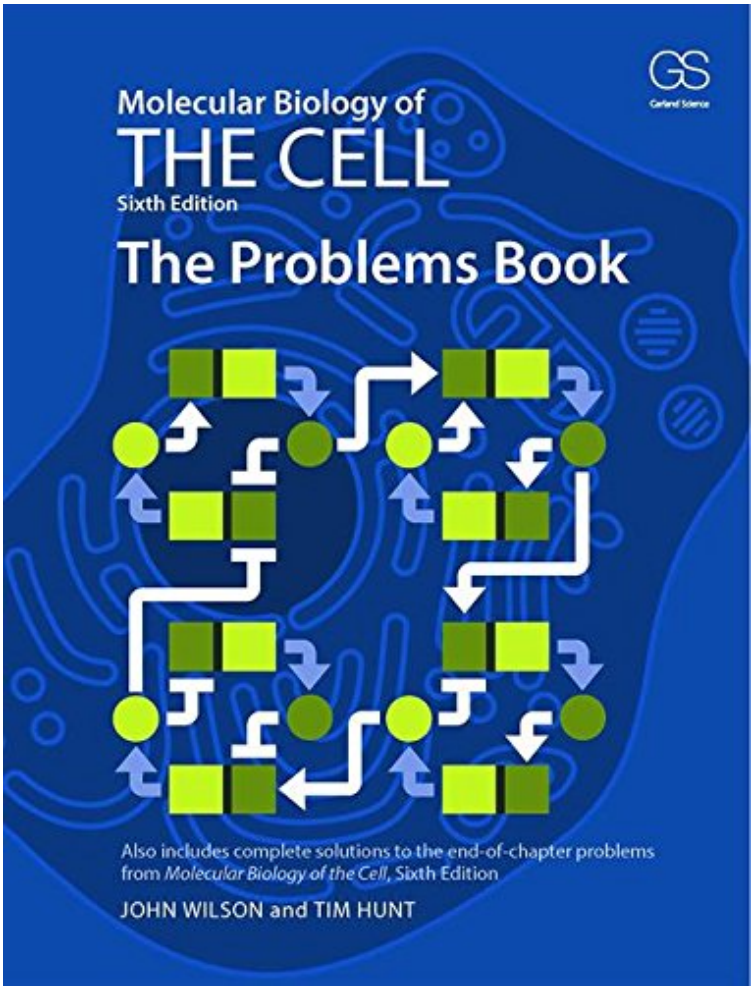

#77453 in Books imusti 2014-11-21Original language:EnglishPDF # 1 1.30 x 8.30 x 10.70l, 6.22 #File Name: 0815344538984 pagesGarland Science | File size: 34.Mb

John Wilson, Tim Hunt : Molecular Biology of the Cell 6E - The Problems Book before purchasing it in order to gage whether or not it would be worth my time, and all praised Molecular Biology of the Cell 6E - The Problems Book:

46 of 46 people found the following review helpful. Huge improvements over previous ed. An absolute must-have.By Gavin ScottThis is the "Problems Book" that goes with the sixth edition of Molecular Biology of the Cell. Doesn't sound all that exciting does it? But actually the problems book is just as fascinating and informative as the textbook it's a companion for. And there have been enormous improvements over the previous (fifth) edition here too. I've been working my way through the new edition of MBoC and loving it, and just got around to taking a look at this new problems book and WOW.The problems typically start out with an interesting fact and then ask you a question about it that will require some creative thought. The background information provided for each question is often fascinating and goes into all sorts of areas with detail that there isn't room for in the main textbook. Here's an example question

from p.6:"1-45: Giardiasis is an acute form of gastroenteritis caused by the protozoan parasite Giardia lambila. Giardia is a fascinating eukaryote; it contains a nucleus but no mitochondria and no recognizable endoplasmic reticulum or Golgi apparatus--one of the very rare examples of such a cellular organization among eukaryotes. This organization might have arisen because Giardia is an ancient lineage that separated from the rest of eukaryotes before mitochondria were acquired and internal membranes were developed. Or it might be a stripped-down version of a more standard eukaryote that has lost these structures because they are not necessary in the parasitic lifestyle it has adopted. How might you use nucleotide sequence comparisons to distinguish between these alternatives?"In the previous fifth edition, a CD-ROM was provided with the book that included PDF chapters of the answers for each problem chapter in the book. This was inconvenient at best. But now for the sixth edition all the problems AND all the answers are printed in the book. You get over 400 pages of problems followed by another 400+ pages of answers, so you can read and think about a problem and then flip to the answer to read their explanation. This gives the printed version of the book a significant advantage over the Kindle version in my option, since it's much easier to flip back and forth in a physical book than it is in the Kindle reader app (if only they could provide active links between the questions and answers...)The answers are as extensive as the questions, and provide lots of additional interesting information, history, etc. The answer to question 1-45 above takes up half a page and includes a paper reference.There are several styles of problem. Each section contains one ore more of the following: basic vocabulary (match the term to its definition), True/False questions, Thought Problems (as the example above, and there are lots of these), Calculations that ask you to figure out some (usually fairly simple) quantitative value to illustrate some fact about the spatial or temporal world of the cell, Data Handling questions that present information in terms of experiments and then ask related questions, Medical Links questions that connect the basic science more to human clinical practice, and new MCAT style questions that consist of a passage of text followed by questions.There are plenty of illustrations and diagrams, some repeated from the textbook and others original, in both the problems and answers sections.The book is now printed in color and this greatly improves the usability of the book and its figures, and it substantially improves the look and feel of the book overall.If you want to see more before you decide to buy you can get the first 47 pages or so via the Kindle Preview option if you have a tablet or PC/Mac Kindle reader app. The answers are all in the second half of the book so the preview will just show you more questions as well as the front-matter of the book. The Kindle version is a "Print Replica" so it's an exact reproduction of the physical book (like a PDF).Besides the Problem Book's own questions and answers, it also includes answers to all the end of chapter questions from the main textbook.This book is as much a source of new knowledge as it is a way to test your knowledge of the subject matter in the textbook. You can think of it as another nearly 1,000 pages of fascinating molecular biology presented in a Socratic style. Like the textbook itself it's extremely well written and very approachable, and is one of those rare "wow" book experiences.It's great if you want to learn and think more about cell biology (and life in general), as well as its applications to human health, and even if you've just been assigned this as an additional book for a class using the main textbook then I think you'll really enjoy it.G.0 of 0 people found the following review helpful. However the annoying part about this solution manual is that the answers ...By JThis book literally is a critical thinking machine. However the annoying part about this solution manual is that the answers are all the way at the back of the textbook. I ripped my book in two for this reason. The problems are super difficult and sometimes even the answers are hard to understand. The weakness in this book is that the explanations can be quite convoluted also there are some questions that are too low quality and honestly quite stupid. Generally speaking though, if one wants to learn more about experimental designs and questions of that nature, this book is for you. There are definition questions, true/false, math based problems and experimental problems.0 of 0 people found the following review helpful. Five StarsBy jonesGreat companion to the book. Get you thinking

The Problems Book helps students appreciate the ways in which experiments and simple calculations can lead to an understanding of how cells work by introducing the experimental foundation of cell and molecular biology. Each chapter reviews key terms, tests for understanding basic concepts, and poses research-based problems. The Problems Book has been designed to correspond with the first twenty chapters of Molecular Biology of the Cell, Sixth Edition.