

SECTION IV

Top-Rated Review Resources

“Some books are to be tasted, others to be swallowed, and some few to be chewed and digested.”

—Sir Francis Bacon

“Always read something that will make you look good if you die in the middle of it.”

—P.J. O'Rourke

“So many books, so little time.”

—Frank Zappa

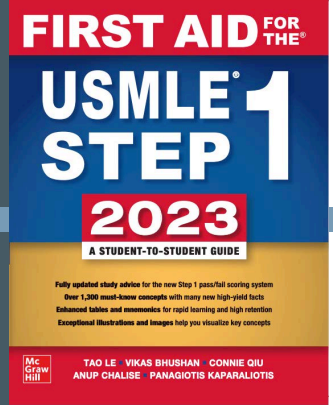
“If one cannot enjoy reading a book over and over again, there is no use in reading it at all.”

—Oscar Wilde

“Start where you are. Use what you have. Do what you can.”

—Arthur Ashe

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► HOW TO USE THE DATABASE

This section is a database of top-rated basic science review books, sample examination books, websites, apps, and commercial review courses that have been marketed to medical students studying for the USMLE Step 1. For each recommended resource, we list (where applicable) the **Title**, the **First Author** (or editor), the **Series Name** (where applicable), the **Current Publisher**, the **Copyright Year**, the **Number of Pages**, the **ISBN**, the **Approximate List Price**, the **Format** of the resource, and the **Number of Test Questions**. We also include **Summary Comments** that describe their style and overall utility for studying. Finally, each recommended resource receives a **Rating**. Within each section, resources are arranged first by Rating and then alphabetically by the first author within each Rating group.

A letter rating scale with six different grades reflects the detailed student evaluations for **Rated Resources**. Each rated resource receives a rating as follows:

A+	Excellent for boards review.
A A–	Very good for boards review; choose among the group.
B+ B	Good, but use only after exhausting better resources.
B–	Fair, but there are many better resources in the discipline; or low-yield subject material.

The Rating is meant to reflect the overall usefulness of the resource in helping medical students prepare for the USMLE Step 1. This is based on a number of factors, including

- The importance of the discipline for the USMLE Step 1
- The appropriateness and accuracy of the material
- The readability of the text
- The quality and number of sample questions
- The quality of written answers to sample questions
- The cost
- The quality of the user interface and learning experience, for web and mobile apps
- The quality and appropriateness of the images and illustrations
- The length of the text (longer is not necessarily better)
- The quality and number of other resources available in the same discipline

Please note that ratings do not reflect the quality of the resources for purposes other than reviewing for the USMLE Step 1. Many books with lower ratings are well written and informative but are not ideal for boards

preparation. We have not listed or commented on general textbooks available for the basic sciences.

Evaluations are based on the cumulative results of formal and informal surveys of thousands of medical students at many medical schools across the country. The summary comments and overall ratings represent a consensus opinion, but there may have been a broad range of opinion or limited student feedback on any particular resource.

Please note that the data listed are subject to change in that

- Publisher and app store prices change frequently.
- Retail and online bookstores may set their own prices.
- New editions and app versions come out frequently, and the quality of updating varies.
- The same book may be reissued through another publisher.

We actively encourage medical students and faculty to submit their opinions and ratings of these basic science review materials so that we may update our database. In addition, we ask that publishers and authors submit for evaluation review copies of basic science review books, including new editions and books not included in our database. We also solicit reviews of new books, mobile apps, websites, flash cards, and commercial review courses.

Disclaimer/Conflict of Interest Statement

None of the ratings reflects the opinion or influence of the publisher. All errors and omissions will gladly be corrected if brought to the attention of the authors through our blog at firstaidteam.com. Please note that USMLE-Rx, ScholarRx, and the entire *First Aid for the USMLE* series are publications by certain authors of *First Aid for the USMLE Step 1*; the following ratings are based solely on recommendations from the student authors of *First Aid for the USMLE Step 1* as well as data from a far-reaching, detailed survey we distribute to thousands of medical students every year.

► QUESTION BANKS

A+	<i>UWorld Qbank</i> uworld.com <p>A diverse question bank with many questions requiring multistep reasoning, which may be more difficult than the actual test. Explanations are detailed with figures and tables. Flash cards, tests, and performance scores can be customized per user preferences. Accessible via iOS and Android mobile apps.</p>	\$299–\$719	Test/3600+ q
A	<i>AMBOSS</i> amboss.com <p>Integrated question bank for Step 1 and Step 2 CK exams with an additional interactive online library of medical resources. Contains numerous color-coded illustrations within the clinical vignettes. Allows for the selection of questions by difficulty level. Includes personalized study plan. Free trial available, accessible through iOS or Android mobile apps.</p>	\$99–\$398	Test/2700+ q
A	<i>NBME Practice Exams</i> nbme.org/examinees/self-assessments <p>Exams consist of retired Step 1 questions. Performance on these exams shows a “moderate correlation” with performance on the actual exam. The postexam reviews now provide explanations for the answers as well. Students use these as rough gauges of score progression over their study period. Additional feature includes an in-person practice session at Prometric (price: \$148) for students who wish to practice the logistics of exam day.</p>	\$60	Test/200 q
A–	<i>USMLE-Rx Qmax</i> usmle-rx.com/products/step-1-qmax/ <p>Offers Step 1–style questions accompanied by thorough explanations. Omits obscure material and distills high-yield information. Best used after a first readthrough of <i>First Aid</i>. Each explanation includes references from <i>First Aid</i>. However, the proportion of questions covering a given subject may not reflect the actual exam’s relative emphasis. Also, content is similar to <i>First Aid</i>, but some questions will test additional concepts required to grasp core concepts. Question stems avoid “buzzwords” and explanations provide in-depth answers and concepts. Most useful to help commit <i>First Aid</i> to memory. Provides detailed performance analyses. Free trial available, accessible through iOS and Android mobile apps.</p>	\$79–\$299	Test/2750+ q
B+	<i>Kaplan Qbank</i> kaptest.com <p>Covers most content found on Step 1, but sometimes emphasizes recall of low-yield details rather than integrative problem-solving skills. Test content and performance feedback can be organized by both organ system and discipline. Includes detailed explanations of all answer choices. Users can see cumulative results both over time and compared to other test takers. Accessible through iOS or Android mobile apps.</p>	\$159–\$499	Test/3300+ q
B	<i>TrueLearn Review</i> truelearn.com <p>Includes over 2600 USMLE-style practice questions developed by board-certified physicians. Topics are aligned with NBME’s blueprint; also included are references from the 2022 edition of <i>First Aid</i>. Uses national benchmarking to show students where they stand in comparison to peers.</p>	\$149–\$419	Test/2600+ q

► WEB AND MOBILE APPS

A⁺	Free 120 orientation.nbme.org/launch/usmle/stpf1 <p>Three blocks containing 40 questions each, made available by the NBME. Emulates the real exam both in terms of questions style and user interface. The questions can be accessed for free or used as a simulation exam in the Prometric center. Some candidates state that questions in this free resource are likely to show up in the real test.</p>	Free Test/120 q
A	AMBOSS Library amboss.com <p>A comprehensive, interactive online library with articles on a variety of medical subjects relevant to the USMLE and medical school exams. The articles contain tables and diagrams, images with digital overlays and special features such as Highlighting tool and High-Yield mode. The library is available both online and offline.</p>	\$129 Review
A	Anki ankiweb.net <p>Flash card-making resource designed for retention of facts through spaced repetition. Premade decks of cards are available. Free access via desktop and smartphone for Windows, Mac, and Android (syncable across devices). The iOS app must be purchased for \$25. Available in different languages. Mobile interface is user friendly, but some may require time to familiarize with using the app.</p>	Free Flash cards
A	Boards and Beyond boardsbeyond.com <p>Includes approximately 450 videos averaging ~26 minutes each (playable at different speeds), covering the breadth of Step 1 material. Membership includes access to the companion books as PDFs. A collection of videos is offered as free samples on the website. Also includes Qbank of ~2300 questions.</p>	\$24–\$399 Review/ Test/2300+ q
A	OnlineMedEd onlinemeded.org <p>A video lecture series covering primarily clinical science material, with recent addition of biochemistry, cell biology, immunology, and organ systems for basic sciences. Video access is free with registration. A monthly paid subscription starting at \$70/month gains access to ad-free videos, lecture notes, flash cards, a question bank, and downloadable audio lectures.</p>	Free–\$365 Review
A	Pixorize pixorize.com <p>Visual mnemonic system focusing primarily on biochemistry, particularly mechanisms of metabolic diseases such as lysosomal storage diseases, and also on other topics like microbiology, immunology, neuroanatomy, and pharmacology. Step-by-step videos and interactive images aid studying and review. Comparable to Sketchy and Picmonic. Videos are generally shorter than Sketchy videos. Unlike Sketchy, Pixorize has a separate video for every disease that it covers. Most helpful for review after learning the material first elsewhere.</p>	\$185–\$249 Review

A	<p><i>Rx Bricks</i> usmle-rx.com/products/rx-bricks</p> <p>Interactive platform providing short, topic-based modules (called Bricks) supplemented with clinical cases, interactive art, and other tools to help learn core Step 1 exam material. Goals for reviewing the module are identified at the start of the Brick, and the objectives for each goal are met by the end of the topic review. At the end of each Brick, there are practice questions to assess the level of knowledge gained and allow for review in more detail if needed. Integrated with links to <i>First Aid Step 1 Express</i> videos, <i>First Aid Step 1 Flash Facts</i>, and the USMLE-Rx Step 1 Qmax question bank.</p>	\$99–\$399	Study plan
A	<p><i>SketchyMedical</i> sketchy.com</p> <p>The “All-in-one Medical Program” includes a visual multimedia library with 980+ memorable, high-yield, video lessons that cover topics including microbiology, pharmacology, and pathology; 980+ interactive review cards; and quizzes comprised of 3795+ board-style questions. Free subscription gives access to certain video and associated review cards.</p>	\$300–\$600	Review
A–	<p><i>Dirty Medicine</i> youtube.com/DirtyMedicine</p> <p>Contains videos on many topics tested on the Step 1 exam. Video question banks explain how to approach various question types. Also has helpful mnemonics. Explains the reasoning behind choosing the correct answer and why other answers are incorrect.</p>	Free	
A–	<p><i>Osmosis</i> osmosis.org</p> <p>Web platform that includes exam study scheduling tool, 7300+ USMLE Step 1- and Step 2-focused variable quality multiple choice questions, 16,000+ flash cards with spaced repetition, and 1800+ videos, memory anchors, and reference articles. Includes a curriculum analysis and search engine, collaboration features for study groups, and a mobile app with quizzes and videos.</p>	\$179–\$279	Test
A–	<p><i>Physeio</i> physeo.com</p> <p>Online comprehensive review including 800+ videos and image mnemonics covering different subjects. Accessible via website or mobile app. Includes a supplemental, full-color, highly visual PDF textbook. Known for its physiology content. Videos are concise and focus on high-yield material, and board-style practice questions are included after each topic to help solidify understanding. Similar structure to Pathoma, but with physiology focus. Site offers free ANKI deck for review.</p>	Free–\$450	Review
A–	<p><i>USMLE-Rx Step 1 Express</i> usmle-rx.com/products/step-1-express-videos</p> <p>Online comprehensive review including 800+ videos and image mnemonics covering different subjects. Accessible via website or mobile app. Includes a supplemental, full-color, highly visual PDF textbook. Known for its physiology content. Videos include more than 600 extra images and multimedia clips. Includes many step-by-step breakdowns of how to answer USMLE-style questions. Subscription includes a color workbook with over 200 pages.</p>	\$49–\$179	Review/Test

A-	<i>USMLE-Rx Step 1 Flash Facts</i> usmle-rx.com/products/step-1-flash-facts Access to 15,000+ flash cards with intelligent spaced repetition integrated with <i>First Aid for the USMLE Step 1</i> . Updated each year to reflect the newest edition of the book; students can access the past 3 editions' worth of flash cards. Searchable by organ system, discipline, and topic.	\$29–\$99	Flash cards
B+	<i>Armando Hasudungan</i> youtube.com/user/armandohasudungan Videos on medicine and biology subjects. The videos center around hand-drawn diagrams and illustrations and are produced and narrated by a physician trainee based in Australia. Efficient in providing details on concepts of anatomy and physiology of the human body, and also on core clinical subjects.	Free	Review
B+	<i>Cram Fighter</i> cramfighter.com Helps organize a study schedule. Highly flexible with customizable settings. Supports more than 650 of the most popular books, video lectures, question banks, and flash cards. Good tool for time management for people who have a hard time coming up with their own study plan. Mobile apps available for iOS and Android. Free 7-day trial is available.	\$29–\$149	Study plan
B+	<i>Firecracker</i> wolterskluwer.com/en/solutions/lippincott-medicine/medical-education/firecracker Learning platform divided into modules arranged by organ systems. Contains comprehensive topic summaries, flashcards, and many questions/vignettes. Quizzes on flagged review material, actual exam simulation, and page references to <i>First Aid for the USMLE Step 1</i> and other texts also available. Features customizable quizzes and personalized study plans. Accessible on all smartphones and tablets. Some may find the platform difficult getting used to at first, but this becomes a habit gradually. Comprehensive; best if started early in preclinical years.	\$99–\$149	Review/ Test/2300 q
B+	<i>Kaplan USMLE® Step 1 Prep</i> kaptest.com/usmle-step-1 Comprehensive and detailed Step 1 prep resource. Useful if there are large gaps in learning. Lengthy videos, but do contain high quality and high yield information. Some videos not necessary for Step 1 review. Contains vignettes that may help with understanding scenarios for Step 1.	\$1999	Review/ Test/3300+ q
B+	<i>Lecturio</i> lecturio.com/medical/usmle-step-1 Online platform for comprehensive exam preparation. Includes 6500+ video lectures (600+ hours) and 5000+ board-style questions with in-depth explanations, a flash card deck, quizzes, and a question bank. Organized by subject matter and allows users to customize their learning experience. Some content may be beyond the scope of the exam and better suited for medical school coursework. Lectures and quizzes may be accessed for free. iOS and Android apps are available.	\$105–\$720	Review/ Test/5000+ q
B+	<i>Ninja Nerd Medicine</i> youtube.com/ninjanerdsience Contains videos with line diagrams explained in a simplified way. Topics include pulmonary medicine, hepatic pathology, cardiac pathology, endocrine pathology, and COVID-19. Limited content necessitates use of additional resources for comprehensive study.	Free	Review

B+	<i>Picmonic</i> picmonic.com <p>Helpful resource for visual learners. Unique images and stories with daily quizzes and spaced repetition. Contains 1800+ images and includes study guides, webinars, and infographics that help cover more than 22,000 facts of Step 1 material. Offered via both web and mobile platforms. Contains a scheduling tool that organizes the platform's material based on the user's test date, time availability, classes, and other parameters.</p>	\$528–\$1019	Review
B+	<i>Radiopaedia.org</i> radiopaedia.org <p>A user-friendly website with thousands of well-organized radiology cases and articles. High-yield anatomy and pathology are covered with images described in detail. Good resource for learning to read CT scans, MRI scans, and ultrasound images. Quiz mode allows students to make a diagnosis based on radiographic findings. Good complement to classes and clerkships. Expanded options available for paying members (\$72 to \$144 per year).</p>	Free	Cases/Test
B	<i>Dr. Najeeb Lectures</i> drnajeblectures.com <p>Provides 800+ video lectures covering basic medical sciences and clinical medicine with thousands of hand-drawn illustrations and mnemonics. Videos are really good for strengthening weak areas as discussions are in-depth. Not really oriented for USMLE exams, so may not be par with content outlines. Website provides mobile video support on smartphones and tablets. Free lectures accessible at drnajeblectures.com/free-medical-videos/.</p>	\$499	Review
B	<i>KISSPrep</i> kissprep.com <p>Online lecture videos focused on select subjects from the Step 1 exam. Focuses on harder-to-learn content and teaches it in a simple, easy-to-understand manner. Quizzes and other interactive tools are available to help with knowledge retention. Not all Step 1 content is covered on this platform.</p>	\$30–\$150	Review
B	<i>Medbullets</i> step1.medbullets.com <p>Free online learning and collaboration community for students preparing for their exams. Supplements medical school coursework and Step 1 studying with a simplified, to-the-point online search platform that is best used as a reference. Free for the initial 90 days. Premium content is available for a fee and includes an online question bank and adaptive learning system. Website rates each article (from A to C) based on the importance, or relevance of the topic it covers.</p>	\$80–\$250	Review/ Test/1000+ q
B	<i>Memorang</i> memorang.com <p>Platform utilizing spaced repetition, available both in website and app form. Utilizes custom and/or premade flash card “study sets” derived from 22,000+ flash cards that focus on specific subject areas and are then tested via various games and quizzing methods. Free 7-day trial, or monthly/annual membership.</p>	\$20–\$240	Flash cards

B	<p><i>WebPath: The Internet Pathology Laboratory</i> webpath.med.utah.edu</p> <p>Features more than 2700 gross and microscopic images, clinical vignette questions, and case studies. Includes nine general pathology exams and 11 system-based pathology exams with approximately 1300 questions. Also features 170 questions associated with images. Questions are useful for reviewing boards content but are typically untimed, easier, and shorter. No multimedia practice questions. Not regularly updated with regard to high-yield Step 1 material.</p>	<p>Free Review/ Test/1300+ q</p>
B-	<p><i>Innerbody Research</i> innerbody.com/htm/body.html</p> <p>Contains interactive 3D models of the human body. Students can view anatomic details by system or organ. Can be helpful to master complex anatomic concepts.</p>	<p>Free Review</p>

► COMPREHENSIVE

A	<p><i>First Aid Cases for the USMLE Step 1</i> LE McGraw-Hill, 2019, 496 pages, ISBN 9781260143133</p> <p>Hundreds of high-yield cases organized by organ system. Each case features a clinical vignette with relevant images, followed by questions and short, high-yield explanations. Offers coverage of many frequently tested concepts, and integrates subject matter in the discussion of the vignette. Helpful in reviewing material outlined in <i>First Aid for the USMLE Step 1</i>.</p>	<p>\$50 Cases</p>
A	<p><i>First Aid for the Basic Sciences: General Principles</i> LE McGraw-Hill, 2017, 528 pages, ISBN 9781259587016</p> <p>Comprehensive review of the basic sciences covered in the preclinical years of medical school. Similar to the first part of <i>First Aid</i>, organized by discipline, and includes hundreds of color images and tables. Best if started with first-year coursework and then used as a reference during boards preparation.</p>	<p>\$75 Review</p>
A	<p><i>First Aid for the Basic Sciences: Organ Systems</i> LE McGraw-Hill, 2017, 912 pages, ISBN 9781259587030</p> <p>A comprehensive review of the basic sciences covered in the preclinical years of medical school. Similar to the second part of <i>First Aid</i>, organized by organ system, and includes hundreds of color images and tables. Each organ system contains discussion of embryology and anatomy, physiology, pathology, and pharmacology. Best if started with second-year coursework and then used as a reference during boards preparation.</p>	<p>\$72 Review</p>

A	<p><i>USMLE Step 1 Secrets in Color</i> \$45 Review O'CONNELL Elsevier, 2021, 5th ed., 736 pages, ISBN 9780323810609</p> <p>Clarifies difficult concepts in a concise, readable manner. Uses a case-based format and integrates information well. High-quality clinical images. Complements other boards study resources, with a focus on understanding preclinical fundamentals rather than on rote memorization. Some potential errors.</p>
B+	<p><i>USMLE Step 1 Lecture Notes 2022</i> \$350 Review KAPLAN Kaplan Test Prep, 2022, 2000 pages, ISBN 9781506272967</p> <p>Extremely comprehensive review of Step 1 topics through videos and lecture notes. Seven-book set covering pathology, pharmacology, physiology, biochemistry and medical genetics, immunology and microbiology. Generally best used to fill gaps in understanding and to review unfamiliar topics, and therefore the notes and associated videos are commonly used by international medical graduates. Some very detailed sections go beyond the scope of the Step 1 exam.</p>
B+	<p><i>Crush Step 1: The Ultimate USMLE Step 1 Review</i> \$45 Review O'CONNELL Elsevier, 2018, 704 pages, 9780323481632</p> <p>Detailed, text-heavy review book with practice questions included. Coverage of many high-yield topics but includes some outdated information. Best if used with coursework, but also recommended as a supplemental reference for boards review. Its biostatistics chapter is regarded as one of the best parts of the book.</p>
B	<p><i>USMLE Step 1 Made Ridiculously Simple</i> \$30 Review CARL MedMaster, 2020, 416 pages, ISBN 9781935660224</p> <p>A lengthy text that can be used to supplement other primary review resources with mnemonics and visual memory hooks. Should not be used as a primary resource due to the extent of detail and low yield information present.</p>
B	<p><i>Kaplan USMLE Step 1 Qbook</i> \$55 Test/850 q KAPLAN Kaplan Test Prep, 2022, 10th ed., 456 pages, ISBN 9781506276410</p> <p>Consists of over 850 exam-like questions organized by the traditional basic science disciplines. Similar to the Kaplan Qbank, and offers USMLE-style questions with clear, detailed explanations; however, lacks classic images typically seen on the exam. Also includes access to a sample online question bank and a guide on test-taking strategies.</p>
B	<p><i>medEssentials for the USMLE Step 1</i> \$60 Review KAPLAN Kaplan Medical, 2022, 6th ed., 536 pages, ISBN 9781506254609</p> <p>A comprehensive review divided into general principles and organ systems, organized using high-yield tables and figures. Helpful for visual learners, but can be overly detailed and time consuming. Includes color images in the back along with a monthly subscription to online interactive exercises, although these are of limited value for Step 1 preparation. Pages may be too thin to allow for handwritten annotating. Comes with a free mobile version.</p>

► ANATOMY, EMBRYOLOGY, AND NEUROSCIENCE

A⁻	<i>High-Yield Gross Anatomy</i> DUDEK Lippincott Williams & Wilkins, 2015, 320 pages, ISBN 9781451190236 A good review of gross anatomy with some clinical correlations. Contains color clinical photos and well-labeled, high-yield radiographic images, but often goes into excessive detail that is beyond the scope of the boards.	\$53	Review
B⁺	<i>BRS Embryology</i> DUDEK Lippincott Williams & Wilkins, 2014, 336 pages, ISBN 9781451190380 An outline-based review of embryology that is typical of the BRS series. Offers a good review and includes much more detail than is required for Step 1. A discussion of congenital malformations is included at the end of each chapter, along with over 220 USMLE-style questions with answers and explanations. The comprehensive exam at the end of the book is high yield. Includes access to a searchable online text on the free companion website, which also features interactive quizzing.	\$60	Review/ Test/220 q
B⁺	<i>High-Yield Neuroanatomy</i> GOULD Lippincott Williams & Wilkins, 2016, 208 pages, ISBN 9781451193435 An easy-to-read, straightforward format with excellent diagrams and illustrations. Features a useful atlas of brain and spinal cord images, a glossary of important terms, and an appendix of neurologic lesions. Overall, a great resource and quick read, but more detailed than what is required for Step 1.	\$49	Review/ Test/50 q
B⁺	<i>Netter's Anatomy Flash Cards</i> HANSEN Elsevier, 2022, 6th ed., 680 pages, ISBN 9789323834179 Netter's illustrations in a question/answer column format that allows for self-testing. Each card includes commentary on the structures with a clinical correlation, and pairs well with the associated textbook. More effective as a supplement to coursework, and much too detailed for boards preparation. Lack of embryology correlates limits Step 1 usefulness. Includes online access with additional bonus cards and more than 400 multiple choice questions. Note: an iOS app has a similar cost and additional functionality.	\$41	Flash cards
B⁺	<i>Crash Course: Anatomy and Physiology</i> STEPHENS Elsevier, 2019, 350 pages, ISBN 9780702073755 Part of the Crash Course review series for basic sciences, integrating clinical topics. Offers two-color illustrations, handy study tools, and Step 1 review questions. Contains an up-to-date self-assessment section. Provides a solid review of anatomy and physiology for Step 1. Best if started early.	\$40	Review

B	<p><i>Anatomy—An Essential Textbook</i> GILROY Thieme, 2017, 528 pages, ISBN 9781626234390</p> <p>A thorough, visually appealing approach to learning anatomy. Contains over 650 colorful, helpful illustrations. Presents material in bullet-point format and tables. Includes over 160 clinical correlates and 400 USMLE-style questions, with the opportunity to complete practice questions online. Best used selectively as it contains more information than is required for the exam.</p>	\$50	Text/ Test/400 q
B-	<p><i>Complete Anatomy</i> 3d4medical.com</p> <p>Comprehensive and interactive resource for studying anatomy. Allows visualization of structures in 3D. More detailed than is necessary for the boards; better used during the preclinical years.</p>	\$75	Review

► BEHAVIORAL SCIENCE

A-	<p><i>BRS Behavioral Science</i> FADEM Lippincott Williams & Wilkins, 2021, 384 pages, ISBN 9781975188856</p> <p>An easy-to-read outline-format review of behavioral science. Offers detailed coverage of mostly high-yield topics, but at a level of depth that often exceeds what is tested on Step 1. Better used prior to dedicated study period. Incorporates tables and charts as well as a statistics chapter. Features over 600 review questions, including an end-of-book comprehensive exam. References DSM-V criteria.</p>	\$60	Review/ Test/600 q
B	<p><i>Biostatistics and Epidemiology: A Primer for Health and Biomedical Professionals</i> WASSERTHEIL-SMOLLER Springer, 2015, 280 pages, 9781493921331</p> <p>Book that focuses on the underlying framework of biostatistics and epidemiology and offers practical guidelines for research and interpretation. New edition has an expanded chapter on genetic epidemiology. Can be used for self-learning. While it can be used for clarifying certain concepts, content may go into greater breadth than needed for the boards, and there are no board-style questions. Limited student feedback.</p>	\$90	Review

► BIOCHEMISTRY

B+	<p><i>Lippincott Illustrated Reviews: Biochemistry</i> ABALI Lippincott Williams & Wilkins, 8th ed., 2021, 649 pages, ISBN 9789960717319</p> <p>An integrative and comprehensive review of biochemistry that includes good clinical correlations and effective color diagrams. Extremely detailed and requires significant time commitment, so it should be started with first-year coursework. High-yield summaries at the end of each chapter. Comes with access to the companion website, which includes over 200 USMLE-style questions.</p>	\$82	Review/ Test/200 q
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B+	<i>BRS Biochemistry, Molecular Biology, and Genetics</i> LIEBERMAN Lippincott Williams & Wilkins, 2020, 448 pages, ISBN 9781496399236 <p>A highly detailed review featuring many images, figures, and clinical correlations. The biochemistry portion includes much more detail than required for Step 1, but may be useful for students without a strong biochemistry background or as a reference text. The molecular biology section is more focused and high yield. Also offers a chapter on laboratory techniques and over 500 clinically oriented practice questions.</p>	\$58	Review/ Test/500 q
B	<i>Lange Flashcards: Biochemistry and Genetics</i> BARON McGraw-Hill, 2017, 184 flash cards, ISBN 9781259837210 <p>Flash card deck featuring clinical vignettes on one side and concise discussions on the other. Each section contains 2–3 cards on biochemistry principles. High level of detail may make this less ideal for dedicated boards studying. Note that no carrying case for the cards is included.</p>	\$38	Flash cards

► CELL BIOLOGY AND HISTOLOGY

B+	<i>Blue Histology</i> lecannabiculteur.free.fr/SITES/UNIV%20W.AUSTRALIA/mb140/Lectures.htm <p>Most helpful when used as a question bank while learning new histology content. More detail than required for exam. Questions are accompanied by brief explanations. However, most are one-step questions and not suitable for board preparation.</p>	Free	Test
B+	<i>Crash Course: Cell Biology and Genetics</i> STUBBS Mosby, 2017, 216 pages, ISBN 9780723438762 <p>Part of the Crash Course review series for basic sciences, integrating clinical topics. Offers two-color illustrations, handy study tools, and Step 1 review questions. Includes online access. High level of detail makes this resource best suited for coursework.</p>	\$47	Review/Print + online
B	<i>BRS Cell Biology and Histology</i> GARTNER Lippincott Williams & Wilkins, 2018, 448 pages, ISBN 9781496396358 <p>Covers concepts in cell biology and histology in an outline format. Can be used alone for cell biology study, but may have fewer histology images than some other resources. Includes more detail than is required for Step 1, and information is less high yield than that of other books in the BRS series. Interactive quizzes on the free companion website provide additional practice.</p>	\$59	Review/ Test/320 q

► MICROBIOLOGY AND IMMUNOLOGY

A⁻	<p><i>Medical Microbiology and Immunology Flash Cards</i> ROSENTHAL Elsevier, 2016, 192 flash cards, ISBN 9780323462242</p> <p>Flash cards covering the microorganisms most commonly tested on Step 1. Each card features color microscopic images and clinical presentations on one side and relevant bug information in conjunction with a short case on the other side. Also includes Student Consult online access for extra features. Overemphasizes “trigger words” related to each bug. Not a comprehensive resource.</p>	\$41	Flash cards
B⁺	<p><i>Basic Immunology</i> ABBAS Elsevier, 2020, 336 pages, ISBN 9780323549431</p> <p>A useful text that offers clear explanations of complex topics in immunology. Best if used in conjunction with coursework and later skimmed for quick Step 1 review. Includes colorful diagrams, images, tables, and a glossary for further study. Features online access.</p>	\$72	Review
B⁺	<p><i>Clinical Microbiology Made Ridiculously Simple</i> GLADWIN MedMaster, 2021, 448 pages, ISBN 9781935660453</p> <p>An excellent, easy-to-read, detailed review of microbiology that includes clever and memorable mnemonics. The sections on bacterial disease are most high yield, less emphasis placed on pharmacology. Recommended to read during coursework and review the concise charts at the end of each chapter during boards review. All images are cartoons; no microscopy images that appear on boards. Requires a supplemental source for immunology.</p>	\$45	Review
B⁺	<p><i>Microcards: Microbiology Flash Cards</i> HARPAVAT Lippincott Williams & Wilkins, 2015, 156 flash cards, ISBN 9781451192353</p> <p>A well-organized and complete resource for students who like to use flash cards for review. Cards feature the clinical presentation, pathobiology, diagnosis, treatment, and high-yield facts for a particular organism. Some cards also include excellent flow charts organizing important classes of bacteria or viruses. Overall, a good review resource, but at times it is overly detailed, requiring a significant time commitment. Also useful as an aid with coursework. Includes access to online USMLE-style questions with answers.</p>	\$62	Flash cards
B⁺	<p><i>Lange Microbiology and Infectious Diseases Flash Cards, 3e</i> SOMERS McGraw-Hill, 2018, ISBN 9781259859823</p> <p>Clinical vignettes presented on one side of the card as a mini-case study of the disease and the flip side presents the etiology and epidemiology, pathogenesis, clinical manifestations, laboratory diagnosis, and treatment and prevention of the disorder. Good for reviewing clinical aspects of many infectious diseases.</p>	\$55	Flash cards

B	<p><i>Lippincott Illustrated Reviews: Microbiology</i> CORNELISSEN</p> <p>Lippincott Williams & Wilkins, 2019, 448 pages, ISBN 9781496395856</p> <p>A comprehensive, highly illustrated review of microbiology that is similar in style to other titles in the Illustrated Reviews series. Has more than 400 color illustrations and color-coded summaries to help visual learners. Contains several hundred USMLE-style review questions to help with exam preparation. Compare with Levinson's <i>Review of Medical Microbiology and Immunology</i>.</p>	\$78	Review/Test/ Few q
B	<p><i>Case Studies in Immunology: A Clinical Companion</i> GEHA</p> <p>W. W. Norton & Company, 2016, 384 pages, ISBN 9780815345121</p> <p>A text that was originally designed as a clinical companion to Janeway's <i>Immunobiology</i>. Provides a great synopsis of the major disorders of immunity in a clinical vignette format. Integrates basic and clinical sciences. Features excellent images and illustrations from Janeway, as well as questions and discussions.</p>	\$62	Cases
B	<p><i>Review of Medical Microbiology and Immunology</i> LEVINSON</p> <p>McGraw-Hill, 2022, 848 pages, ISBN 9781264267088</p> <p>A clear, comprehensive text with outstanding diagrams and tables. Includes an excellent immunology section. Contains a chapter summarizing details on medically important organisms. Can be used as reference for reviewing immunology concepts. Can be detailed and dense at points, so best if started early with coursework. Includes practice questions, but does not provide detailed explanation of answers. Compare with <i>Lippincott Illustrated Reviews: Microbiology</i>.</p>	\$69	Review/ Test/650 q
B	<p><i>How the Immune System Works</i> SOMPAYRAC</p> <p>Wiley-Blackwell, 2019, 168 pages, ISBN 9781119542124</p> <p>A short overview of high-yield immunology designed for those with no prior immunology knowledge. Analogies and images create a "storybook" feel to spruce up a relatively dry subject. The 15 chapters offer a general overview with good supporting details.</p>	\$42	Review

► PATHOLOGY

A⁺	<p><i>Pathoma: Fundamentals of Pathology</i> SATTAR</p> <p>Pathoma, 2021, 218 pages, ISBN 9780983224631</p> <p>Explains key concepts of pathology in an integrated manner. Resource is comprehensive and invaluable for preparation. Physiology and Pharmacology are well integrated throughout the book. More than 35+ hours of video lectures can be found on the web page, where Dr. Sattar provides more in-depth explanations in an easy-to-understand manner. Online subscription is needed for full access, with price varying according to plan chosen.</p>	\$85–\$125	Review/Lecture
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A-	<p><i>Rapid Review: Pathology</i> GOLJAN Elsevier, 2019, 864 pages, ISBN 9780323476683</p> <p>A comprehensive source for key concepts in pathology, presented in a bulleted outline format with many high-yield tables and color figures. Features detailed explanations of disease mechanisms. Integrates concepts across disciplines with a strong clinical orientation. Lengthy, so best if started early with coursework. Includes access to online question bank with more than 500 questions. Covers material for both Step 1 and Step 2 exams.</p>	\$69	Review/ Test/500 q
A-	<p><i>Robbins and Cotran Review of Pathology</i> KLATT Elsevier, 2022, 488 pages, ISBN 9780323640220</p> <p>A question book that follows the main Robbins textbooks. Questions are more detailed, difficult, and arcane than those on the actual Step 1 exam, but the text offers a great review of pathology integrated with more than 1100 images. Thorough answer explanations reinforce key points. Requires significant time commitment, so best if started with coursework. Table of contents closely follows the organization of <i>Robbins and Cotran Pathologic Basis of Disease</i>.</p>	\$57	Test/1500 q
A-	<p><i>Crash Course: Pathology</i> McKINNEY Elsevier, 2019, 438 pages, ISBN 9780702073540</p> <p>Part of the Crash Course review series for basic sciences, integrating clinical topics. Offers two-color illustrations, handy study tools, and Step 1 review questions. Includes online access. Best if started during coursework as an adjunct.</p>	\$40	Review
B+	<p><i>Pocket Companion to Robbins and Cotran Pathologic Basis of Disease</i> MITCHELL Elsevier, 2016, 896 pages, ISBN 9781455754168</p> <p>A condensed version of <i>Robbins and Cotran Pathologic Basis of Disease</i> that is good for reviewing keywords associated with most important diseases. Presented in a highly condensed format, but the text is complete and easy to understand. Contains no photographs or illustrations but does include tables. Useful as a quick reference.</p>	\$41	Review
B	<p><i>BRS Pathology</i> GUPTA Lippincott Williams & Wilkins, 2021, 496 pages, ISBN 9781975136628</p> <p>A concise resource highlighting high-yield information, supplemented by summary tables for focused review and exam preparation. Questions at the end of every chapter as well as a comprehensive exam help in reviewing frequently tested topics. A supplemental online interactive question bank allows for additional review of the topics from the textbook. This book is recommended for use alongside coursework.</p>	\$58	Review/ Test/450 q

B***Pathophysiology of Disease: Introduction to Clinical Medicine***

HAMMER

McGraw-Hill, 2019, 832 pages, ISBN 9781260026504

\$90 Text

An interdisciplinary text useful for understanding the pathophysiology of clinical symptoms. Effectively integrates the basic sciences with mechanisms of disease. Features great graphs, diagrams, and tables. In view of its length, most useful if started during coursework. Includes 132 case studies, checkpoint questions that appear in every chapter, and a few non-boards-style questions. The text's clinical emphasis nicely complements *BRS Pathology*.

► PHARMACOLOGY

B+***Crash Course: Pharmacology***

PAGE

Elsevier, 2019, 336 pages, ISBN 9780702073441

\$40 Review

Part of the Crash Course review series for basic sciences, integrating clinical topics. Offers two-color illustrations, handy study tools, and Step 1-style review questions with a self-assessment section. Includes online access. Gives a solid, easy-to-follow overview of pharmacology.

B+***Katzung & Trevor's Pharmacology: Examination and Board Review***

TREVOR

McGraw-Hill, 2021, 608 pages, ISBN 9781260117127

\$62 Review/
Test/1000 q

A well-organized text with concise explanations. Features good charts and tables; the cramable list in Appendix I is especially high yield for Step 1 review. Also good for reviewing drug interactions and toxicities. Offers two 100-question practice exams. Text includes many low-yield/obscure drugs. Compare with *Lippincott Illustrated Reviews: Pharmacology*, both of which are better suited to complementing coursework than last-minute studying for boards.

B***Lange Pharmacology Flash Cards***

BARON

McGraw-Hill, 2018, 266 flash cards, ISBN 9781259837241

\$39 Flash cards

A total of 266 pocket-sized flash cards of relevant drugs formatted with clinical vignettes on one side and relevant information on the other side (eg, mode of action, adverse effects, clinical uses). Particularly high-yield information is highlighted in bold. Mainly useful as a supplement for pharmacology knowledge, rather than as a primary resource. Printed on less durable material.

B***Pharmacology Flash Cards***

BRENNER

Elsevier, 2017, 277 flash cards, ISBN 9780323355643

\$46 Flash cards

Flash cards for more than 200 of the most commonly tested drugs. Cards include the name of the drug (both generic and brand) on the front and basic drug information on the back, with occasional cards covering high-yield pharmacology pathways. Divided and color coded by class, and comes with a compact carrying case. Lacks figures and clinical vignettes.

B	<p><i>BRS Pharmacology</i> LERCHENFELDT Lippincott Williams & Wilkins, 2019, 384 pages, ISBN 9781975105495</p> <p>Features two-color tables and figures that summarize essential information for quick recall. A list of drugs organized by drug family is included in each chapter. Too detailed for boards review; best used as a reference. Also offers end-of-chapter review tests with Step 1–style questions and a comprehensive exam with explanations of answers. An additional question bank is available online.</p>	\$59	Review/ Test/200 q
B–	<p><i>Lippincott Illustrated Reviews: Pharmacology</i> WHALEN Lippincott Williams & Wilkins, 2022, 8th ed., 704 pages, ISBN 9781975170554</p> <p>A resource presented in outline format with practice questions, many excellent illustrations, and comparison tables. Effectively integrates pharmacology and pathophysiology. Best started alongside coursework, as it is highly detailed and requires significant time commitment. Focuses on basic principles.</p>	\$78	Review/ Test/380 q

► PHYSIOLOGY

A–	<p><i>Physiology</i> COSTANZO Elsevier, 2022, 7th ed., 528 pages, ISBN 9780323793339</p> <p>A comprehensive, clearly written text that covers concepts outlined in <i>BRS Physiology</i> in greater detail. Offers excellent color diagrams and charts. Each systems-based chapter features a detailed summary of objectives and a Step 1–relevant clinical case. Includes access to online interactive extras. Requires time commitment, but helps develop a strong foundation in physiology concepts. Best if started alongside coursework. Practice questions at end of each chapter.</p>	\$70	Text
A–	<p><i>Color Atlas of Physiology</i> SILBERNAGL Thieme, 2015, 472 pages, ISBN 9783135450070</p> <p>Contains more than 180 high-quality illustrations of disturbed physiologic processes that lead to dysfunction. An alternative to standard texts, but not high yield for boards review.</p>	\$50	Review
A–	<p><i>Pulmonary Pathophysiology: The Essentials</i> WEST Lippincott Williams & Wilkins, 2022, 272 pages, ISBN 9781975152819</p> <p>A volume offering comprehensive coverage of respiratory physiology. Clearly organized with useful charts and diagrams. Review questions at the end of each chapter provide answers but no explanations. Best used as a course supplement during the second year, less ideal for use immediately prior to Step 1.</p>	\$58	Review/ Test/75 q

B+	<p><i>BRS Physiology</i> COSTANZO</p> <p>Lippincott Williams & Wilkins, 2022, 8th ed., 336 pages, ISBN 9781975153601</p> <p>A clear, concise review of physiology that is both comprehensive and efficient, making for fast, easy reading. Includes excellent high-yield charts and tables, but lacks some figures from Costanzo's <i>Physiology</i>. Features high-quality practice questions with explanations in each chapter along with a clinically oriented final exam. An excellent reference during times of focused Step 1 studying, but best if started early in combination with coursework. Respiratory and acid-base sections are comparatively weak.</p>	\$55	Review/ Test/350 q
B+	<p><i>Pathophysiology of Heart Disease</i> LILLY</p> <p>Lippincott Williams & Williams, 2020, 480 pages, ISBN 9781975120597</p> <p>Great resource that outlines an in-depth explanation of both cardiac physiology and pathology. Best used as a supplement when learning the material for the first time, as it helps build a strong foundation. Because the book itself is rather dense, it is not recommend as a primary resource during focused boards studying period.</p>	\$59	Review
B+	<p><i>Acid-Base, Fluids, and Electrolytes Made Ridiculously Simple</i> PRESTON</p> <p>MedMaster, 2017, 166 pages, ISBN 9781935660293</p> <p>A resource that covers major acid-base and renal physiology concepts. Provides information beyond the scope of Step 1, but remains a useful companion for studying kidney function, electrolyte disturbances, and fluid management. Includes scattered diagrams and questions at the end of each chapter. Consider using after exhausting more high-yield physiology review resources.</p>	\$24	Review
B+	<p><i>Lippincott Illustrated Reviews: Physiology</i> PRESTON</p> <p>Lippincott Williams & Wilkins, 2018, 544 pages, ISBN 9781496385826</p> <p>A good textbook for understanding key concepts in physiology. Similar in content to other leading books, but with more compact presentation style and a lot of extra details. May have information in excess to what is needed for Step 1. Excellent illustrations. Ideal as a supplement material, or as coursework during first year of medical school.</p>	\$79	Review
B	<p><i>Vander's Renal Physiology</i> EATON</p> <p>McGraw-Hill, 2018, 224 pages, ISBN 9781260019377</p> <p>Well-written text on renal physiology, with helpful but sparse diagrams and practice questions at the end of each chapter. Too detailed for Step 1 review, however. Best if used with organ-based coursework to understand the principles of renal physiology.</p>	\$49	Text

B	<p><i>Endocrine Physiology</i> MOLINA McGraw-Hill, 2018, 320 pages, ISBN 9781260019353</p> <p>Questions at the end of each chapter are helpful solidify knowledge, but some are not representative of Step 1 questions. Provides more detailed explanations of endocrine physiology than Costanzo review offers, but much too lengthy for Step 1 review. May be useful as a coursework adjunct.</p>	\$59 Review
B	<p><i>Netter's Physiology Flash Cards</i> MULRONEY Saunders, 2015, 200+ flash cards, ISBN 9780323359542</p> <p>Flash cards contain a high-quality illustration on one side with question and commentary on the other. Good for self-testing, but too fragmented for learning purposes and not comprehensive enough for boards.</p>	\$40 Flash cards