

Marshall Brain's How Stuff Works

Marshall Brain

Download now

Read Online ➔

Marshall Brain's How Stuff Works

Marshall Brain

Marshall Brain's How Stuff Works Marshall Brain

Marshall Brain's How Stuff Works is a lavish, full-color, highly visual resource for those with hungry minds who crave an understanding of the way things work around them-from submarine ships to digital technology to toilets

With over 1,000 full-color illustrations and photos showing step-by-step images of how stuff works, these easy-to-understand explanations cover the most popular and interesting subject areas, including Technology, Science, Health, Fitness, Transportation, and more Sample topics include: How CDs Work, How Car Engines Work, and How Nuclear Radiation and Power Work.

Marshall Brain's How Stuff Works Details


Date : Published September 29th 2001 by Wiley


ISBN : 9780764565182

Author : Marshall Brain

Format : Hardcover 320 pages

Genre : Science, Nonfiction

 [Download Marshall Brain's How Stuff Works ...pdf](#)

 [Read Online Marshall Brain's How Stuff Works ...pdf](#)

Download and Read Free Online Marshall Brain's How Stuff Works Marshall Brain

From Reader Review Marshall Brain's How Stuff Works for online ebook

Timothy says

If you have kids that have even a shred of curiosity, they need to read this book! Great cut outs and concise details.

Andrew says

These are brilliant books (there is a More version too). They are lavishly illustrated both by photographs and drawings. They are clear and concise and ok some of the images may seem a little dated now - (familiar equipment is showing its age by its styling and design - who owns and runs a fax these days) but even so the book is very informative and educational. This is the kind of work which makes me wish I was an illustrator instead of an engineer. That said there are link to a web site where new subjects are added so they try to keep you up to date.

Michael Hitchcock says

What a super fun technical romp through a whole swath of our world!

There was a loose organization into categories, but the book was definitely friendly to casual flipping through. I, however, read it straight through and really enjoyed all the stuff I learned. I actually got goose bumps in the moment I fully comprehended the elegance and genius of the centrifugal clutch. The whole book had moments like that for me and I'm certain that no matter how you come at it, there'll be one or two little items that blow your mind.

I found that the computer and the internet sections were sometimes glossing over necessary details, but I don't know if that was an actual weakness of the book or if it was just because I understand electronics less well. Maybe the description of how helicopters work, which blew my mind and which I found to be very clear would leave someone else wanting more.

I can say the two-stroke engine was not possible to understand with the given description and illustration- I had to consult an outside source. The reason I mention this is because it was a problem with several of the illustrations. Sometimes they could have been more specific, to scale, or heavily labelled. Sometimes the parts named in the text did not exactly match up with the labels of the diagrams. Sometimes the connections between parts of the illustrations were not clear- like the flow of colder and hotter air in the refrigeration and air conditioning sections.

I mention these weaknesses not to discourage you from the book, but rather to encourage you to consult outside sources from time to time when reading this book. This book is actually kind of a must read, as there is no other book quite like it on the market. This book really generally lays out all the major technological concepts that make up our world. Looking around my room now, I see a bunch of technologies- computer, sound, electricity, light, pens, cds, a phone and etc. most of which were explained in this book (or which can

be understood using some other example in this book)

In fact, if this had included weaving, metal-casting, glass making, and paper making, it would be almost a complete technological sketch of our civilization.

That sketch concept is something I'd like to expand upon a little. This book was not a book of blueprints and instructions, nor was it meant to be. It was supposed to be at a level of complexity somewhere between knowing an object exists and knowing exactly how to make it. It was a really wonderful line they chose- general principles just broad and shallow enough for the layperson, but deep and specific enough that you could have a good idea of how it works and what kinds of things you still don't know about how the system works.

Like in the section about computers, I understood what a byte and a bit were, and I understood the way a computer allots its resources, but I don't know exactly how to tell a computer how to use these bytes and bits to do stuff. But I do understand that's a hole in my knowledge. I understand how systems use modulation of radio waves to send data, but I do not actually know how those modulations are decoded. Etc. Etc.

But I don't feel bad about these holes in my knowledge. I feel humbled and awed by all the awesome shit that exists and that some people out there understand enough to hold it all in their heads and make it. I feel gratitude towards the inventors who came before me and I feel like I understand the general shape of technology better. No one person knows everything about how all this junk runs, but any person could learn the general principles behind any of it. And every person probably should- after all this is a democracy and a lot of tough decisions we face are predicate on understanding what the hell we're talking about.

The entire book was written in a conversational tone with a "Hey isn't this stuff neat!" bias. It's not beyond anybody, but it's full of stuff not everybody knows. What a great niche.

Erik Rafnson says

If you are like me, and don't like to read and have a very inquisitive mind this is a great book to try. chapter books don't really interest me, You have to follow a story and remember what happened previously, and wasting hours just reading doesn't sound good to me. so instead of reading chapter books I read informational books about things that I like. They usually have to do with cars but can be on just about anything. like this book it has a wide variety of topics and you can pick and choose which ones you want to read, which works for me. I can read what I want. I really enjoy books like this because I am interested in these fields and want to learn more. great book learnt so much from it. The book itself is organised really well it divided into topics like In the air, power up, on the road, science 101, of microprocessors mice and modems, unweaving the web, picture perfect, now hear this, around the house, It's all about you!, and just for fun. and you can guess what is in each topic. so there is quite a spread of topics and I like this there is just enough in each topic to make it feel just long enough. In each topic there is between between 10 and 20 specific objects being dissected and their mechanics scrutinized.

Alex Larragoity says

Excelente resumen sobre el funcionamiento de muchos temas de la vida diaria.

El libro tiene como objetivo dar una explicación sobre cómo funcionan las cosas (como dice el nombre del mismo), de una manera resumida, suficiente para entender cómo es qué trabaja, sin llegar a términos complicados o explicaciones innecesarias que requieran un alto nivel de conocimiento científico.

Cada tema es de 1 a 4 páginas, y los temas a tratar son muy variados, desde cómo funcionan los teléfonos celulares, el GPS, los MP3 player, las bocinas, el radio, la televisión, los helicópteros, el internet.... hasta temas que afectan al cuerpo humano como las dietas, la cafeína, los tatuajes, la comida, las aspirinas, etc.

Algunas de las explicaciones están tan simplificadas, que se tienen que releer un poco para entenderlas. Es muy difícil para el autor llegar al punto exacto de explicación mínima, sobre todo porque este punto varía mucho según el conocimiento de cada lector, y si me topé con algunos temas que me resultaron un poco difíciles de comprender.

De cualquier manera, es una lectura recomendada al 100% para todas las personas que quieren conocer más sobre temas de la vida diaria, y que se quieran asombrar con cómo ideas tan sencillas pueden hacer objetos que nos cambian la vida completamente (como el refrigerador, aún no puedo creer lo sencillo que es y como ayuda a que la comida no se eche a perder tan pronto).

En mi primera oportunidad, compro la segunda parte de este excelente libro.
