How Music Works: The Science And Psychology Of Beautiful Sounds, From Beethoven To The Beatles And Beyond
Synopsis

What makes a musical note different from any other sound? How can you tell if you have perfect pitch? Why do 10 violins sound only twice as loud as one? Do your Bob Dylan albums sound better on CD or vinyl? John Powell, a scientist and musician, answers these questions and many more in HOW MUSIC WORKS, an intriguing and original guide to acoustics. In a clear, accessible, and engaging voice, Powell fascinates the reader with his delightful descriptions of the science and psychology lurking beneath the surface of music. With lively discussions of the secrets behind harmony, timbre, keys, chords, loudness, musical composition, and more, HOW MUSIC WORKS will be treasured by music lovers everywhere. The book also includes a CD of examples and exercises from the book.

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Customer Reviews

I have always had an aptitude for and interest in science. I am a medical student and am interested in the human brain and how we as humans see the world and interact with our environment. One thing that I love perhaps as much as science is music. I find it possibly the single best cure for emotional disturbance, especially stress of any kind and have often wondered why this is? I have noticed that music can have a profound affect on mood and state of mind. Sometimes it brings about nostalgia attached to a memory that I doubt I would remember without the auditory cue. Sometimes it makes me so happy that I walk down the street with my headphones in my ears grinning at passers by, and sometimes it simply brings tears to my eyes. It is certainly a very emotive tool and science in its own right. When I discovered the book `How Music Works’ by John
Powell I thought to myself `this might be worth a read!' I certainly was not wrong. This book does what it says on the tin really. The author uses a scientific approach to explain exactly how music works, without isolating the lay person. He uses examples and analogies we can all relate to, to explain concepts in a logical and understandable manner without compromising on detail and depth of explanation, which in my humble opinion is quite a skill. The style of writing is witty and light hearted so this book makes for an entertaining as well as interesting and informative read. Several times I found myself subject to a few funny looks on the tube as I laughed out loud whilst reading the book on my daily commute. I also found my self thinking ´ok so now I get it!

Disclaimer: I have no musical talent, either real or imagined. I have read books on music theory, and I always found them lacking. WHY do we have an octave (octave=eight) that contains twelve tones? WHY are there whole steps between all notes except for B & C and E & F? WHY do we pick out, seemingly arbitrarily, seven of the twelve tones in an octave and call them a scale? ´How Music Works' answers those questions, even though I never expected it to. For the first time, music theory begins to make sense! It is not enough for me to know something IS, I want to know WHY. Now I do. If that were the sole contents of the book, it would be worth what I paid for it at the local bookstore. But ´How Music Works' contains much, much more. ´How Music Works' provides a scientific definition of what music is, in very understandable terms. The author describes how a string produces sound, and how we generally are listening to furniture with most stringed instruments. He explains why different instruments produce different voices at the same tone and how various instruments physically produce their sounds. This is why I purchased the book. If this were the sole content of the book, it would be worth the retail price I paid for it. But ´How Music Works' contains much, much more. ´How Music Works' also delves into the tricky phenomenon of how we humans perceive sound, both from the standpoint of the sound itself, and of our hearing system. Here is also where the science of Western music is so elegantly described in easy to understand terms. Ever wonder WHY if a major scale and a natural minor scale (e.g. C Major and A minor) contain exactly the same notes, WHY they sound so different? The answer is in ´How Music Works.

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