

Chapter 1 : Brain Rules (Updated and Expanded) by John Medina on Apple Books

Brain Rules by John J. Medina is a multimedia project explaining how the brain works. It includes a book, a feature-length documentary film, and a series of interactive tutorials.

To truly grasp the concepts you have to have a good understanding of how our brains work neuroscience. Every time management expert I know, ranging from David Allen to Tony Schwartz, are all very knowledgeable on the brain and how it affects your personal productivity. That does not mean you have to be an expert on the brain to become better at managing your life and time, but it would definitely help. To get your feet wet with neuroscience, Brain Rules by John Medina audiobook is a great resource to start with and I will show you some of the big ideas of the book to help you understand the importance of the brain in relationship to personal productivity. One concept you really have to understand is that our brains of today are not very much different than the brains of thousands of years ago. There are a lot of hardwired mechanisms in our brain that are still active today. Some are good, some are bad and not relevant but are still there in the brain. This especially goes for time management and personal productivity. Energy Management As a simple example, we are hardwired to walk, on average, 12 miles a day. Nowadays we would be lucky if we walked more than a mile a day. The reality is, we are hardwired to exercise that much on a daily basis and it helps our brain to stay healthy. Tons of studies have shown that regular exercise boosts brain power and helps with: Memory function Reasoning skills Problem solving skills All functions that the brain deals with. As we have written before, regular exercise is important to improve your productivity and neuroscience research backs that up. It will also greatly improve your energy capacity and like we have said before many times on the blog "there is no way that you will get work done when you are constantly tired. Another big factor contributing to your energy level is the amount of sleep you get each night. We have written about it before here but it is worth repeating: Get enough sleep each night and your brain will function much better. In the book, the author also goes into detail why we feel like napping every afternoon. Why does this happen? To really understand why that is, you have to take a look under the hood your brain. In simple terms, the brain cannot focus on more than one thing at a time. Try to focus on the number 3 and the number 5 at the same time. The brain is a sequential processor and that explains why we cannot multitask. The problem with this is that on the outside it looks like that person gets a lot done and is very effective. However, mentally switching back and forth all the time has more negatives than positives. Each time you switch focus, your brain has to go through a couple steps before it can focus on something. When you do this all the time you get a lot of overhead that will eventually cost you more time to complete a task. The next important downside is that multitaskers are more prone to making mistakes. In fact, four times as much than people who single task. The next time you put up a job ad, scrap the fact you are looking for a good multitasker: We needed this to look for food, reproductive opportunities and to avoid major threats. To keep it simple, our retention rate of images is far better than of text and audio. In fact, numerous studies have shown that when are presented with a picture, we are twice as likely to remember it than when we get presented with just text. In short, images simply beat text and audio. That is why mind mapping is a better way of taking notes and memorizing information than just text notes. In fact, the brain is not really wired to read. Reading is actually a very ineffective way of processing information for us and the main reason is that the brain sees words as tiny pictures and subsequently it sees phrases and paragraphs as a collection of a lot of tiny images. This takes considerably more processing power and time for the brain to process because it has to identify certain features in the characters to understand them. You can of course partially make up for it by learning how to speed read but by understanding how this works inside the brain clarifies a lot of things. That is one of the reasons why I never liked audiobooks as my primary learning media because my retention rate was horrible, and after reading Brain Rules I understood why. Nowadays, what I like to do is read a book first, mind map it and at some point later in time listen to the audiobook to review but to also gather new insight and information. This has really helped me understand concepts and ideas in books much better. Recommendation The greatest thing about Brain Rules is that it is a very accessible book on how the brain works. The books covers a lot of other aspects of the brain that are not

DOWNLOAD PDF BRAIN RULES BY JOHN MEDINA BOOK

mentioned in this post like how our memory system works, differences between sexes, what stress really is and many more. For anyone who is curious about neuroscience, this is probably the best book to start with. You can grab a copy here on Amazon. People like Steve Jobs and Oprah have used it to catapult their success, and now you can too.

Chapter 2 : Book Club: Brain Rules by Dr. John Medina

In Brain Rules, Dr. John Medina, a molecular biologist, shares his lifelong interest in how the brain sciences might influence the way we teach our children and the way we work. In each chapter, he describes a brain rule—“what scientists know for sure about how our brains work”—and then offers transformative ideas for our daily lives.

After an Introduction that sets up the premise of the book, there are twelve chapters. The first chapter explores the well-documented connection between exercise and mental performance, and offers insight into what type of exercise has been shown to be most helpful to the brain. Chapter 3 explores the way brains are wired, which turns out to be flexibly and diversely. By flexibly, I mean that brains can be rewired by way of what is called neuroplasticity on the proviso that neurons that fire together wire together. The next chapter deals with attention and explains why humans suck at multi-tasking despite thinking they are the bomb and why an extended ability to concentrate is essential to success. The next two chapters both deal with memory, but with different types of memory—each having its own unique considerations. The first, chapter five, describes the peculiarities of short-term memory, that part of the memory that can hold a finite amount of data points at the forefront of our minds for a limited period. Chapter six deals with long-term memory, the part that holds vast stockpiles of information for extended periods sometimes across a lifetime but with lower fidelity and accuracy than we generally believe. While the rule offered for both forms of memory is simple—“i. The influence of sleep on mental performance is the subject of chapter seven. There is a vast pile of research on this subject, including a number of famous cases of extreme sleep deprivation—“some of which are touched upon herein. Chapter 8 is about how stress can kill mental performance. Of course, not all stress is the same. When one feels in control, short bursts of stress can be just the motivator one needs, but when feeling out of control stress can become crippling. Chapters 9 and 10 are both about the senses. The first, nine, explains how one can obtain synergistic outcomes in a multi-sensory environment, and the second focuses on vision—“arguably our most dominant sense. Our sensory experience is much more a product of the brain and much less a pure representation of the outside world than we tend to believe. Chapter 11 reports on the gender differences that have been discovered with respect to brains. Men have bigger amygdala involved in emotional response and produce serotonin more quickly. The last chapter is about our human proclivity to explore, but it focuses heavily on infancy and childhood, during which the world is novel and the impulse to explore is at its height. Each chapter ends with a summary box that both restates the rule and offers a few bullet points of key takeaway lessons, which may either be more specific guidance or summary of relevant research findings. I only remember one brain drawing. However, the reason for the dearth of graphics may be that there is a link to a 45 minute video that one can access, and the publisher probably thought that was a much more useful way to impart graphic information. It should also be noted that in the Kindle edition that I have, the references are also on-line. I found this book to be useful. One can get books that dive more deeply into all of the topics addressed. But this is a nice mix of popular science and self-help.

Chapter 3 : Brain Rules: 12 Principles for Surviving and Thriving at Work, Home, and School by John Medina

In his bestselling book Brain Rules, molecular biologist John Medina suggests that the typical five-period day in high school might be radically restructured if we were to consider how the brain actually works.

How does the brain work? We have no idea. We are still in the very beginning stages of understanding most of the basics. But from an overall perspective, most of it is spooky. Let me give you some examples of how little we know about how the brain works. We know that you use the left-side of your brain for speech. Under normal circumstances, if you get a stroke on the left side of your brain, your speech can be greatly affected. Depending upon where you got the stroke, it could affect your ability to speak language or your ability to understand language. There is a little six year old who suffered from something Sturge-Weber syndrome, a catastrophic brain disease. Because he had this disorder, the little guy had to have his entire left hemisphere removed. No left hemisphere, no language. That should have completely destroyed his language ability. Within two years, the little guy had regained his language abilities entirely. The right side of his brain seemed to have noticed there was a deficit and simply rewired itself to take over talking. Do we understand this? We do not understand how you learn a language of any kind. You have a complete map of your body in your head. Actually, you have several maps of your body in your head. Some of them tell you where you are, some of them tell you how to move. One even tells you how to see. Consciousness remains a slippery fish as ever. So you ask me how the brain works. I am happy to repeat my answer. Learn more at brainrules.com.

Chapter 4 : Brain Rules - Wikipedia

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John Medina, who I interviewed in , is a neuroscientist at the University of Washington. He offers great insights and shares his passion for the brain with a wonderful sense of humour. One of the things that I love most about Dr. Here is our interview, just in case you missed it. Medina discusses many common myths about the brain. He answers questions about how we learn, the difference between forgetfulness and true memory diseases and whether men and women have different brains. He reveals 12 rules describing what scientists know for sure about how our brains work. It is an absolutely fascinating book, written in an understandable and entertaining way. I chose this book for the Sixty and Me Book Club because it includes a lot of useful information about how to keep the aging brain stimulated and healthy. In our interview , Dr. Medina highlighted the 3 rules that are critical to keeping an aging brain healthy. These are the need for exercise, the importance of avoiding stress and the value of improving memory with mental stimulation. These topics are covered in the book in more detail. He also discusses how memory loss and forgetfulness are a natural part of aging, but that they can be slowed down with physical and mental exercise. Medina says all in in 5 words: To kick things off, here are a Brain Rules book club questions. Please add your thoughts in the comments: Medina suggests older women should exercise several times a week. Do you follow this guideline? Have you experienced the power of music for bringing back memories? Do you play any games that you feel stimulate your brain? Medina says that good sleep and napping is good for a healthy brain. What do you think for you is the most important brain rule? Medina says the brain is not designed to multitask. I hope that you enjoy this book! Please share your thoughts below. Medina about his book Brain Rules.

Chapter 5 : Books by John Medina (Author of Brain Rules)

In Brain Rules, Dr. John Medina, a molecular biologist, shares his lifelong interest in how the brain sciences might influence the way we teach our children and the way we work. In each chapter, he describes a brain rule--what scientists know for sure about how our brains work--and then offers transformative ideas for our daily lives.

This is the kind of thing that helps me change my behavior - when I know how it works under the hood. The book is broken into a series of "brain rules" on different subjects. The best quote here was "Physical activity is cognitive candy. Sleep First, great to have validation that there really are early birds and night owls. The science about the history of naps and the fact that the mid-afternoon slump is a real thing was also very interesting. The studies about sleep loss being as cognitively limiting as alcohol were also illuminating. Another study showed sleeping on a problem really does work. But the most interesting thing about the sleep chapter was the section on dreaming and what it might mean. In particular, dreams may at least in large part be a method of neural network training to enforce learning. If you have too much adrenaline in your system constantly it leads to scarred blood vessels and then eventually a stroke. But a little stress is good - our brains will remember things that we are stressed about better eg avoid predators on the savannah. But too much chronic stress can overwhelm the brain and hurts learning and can even make you depressed. Chronic stress is often the culprit in grief, or high anxiety households. The worst kind of stress is the feeling that you have no control over the problem-- you are helpless. We can easily recall all the strong emotional moments of our lives as if they happened yesterday. This means that people will relate better to products that bring up positive emotions for them. It also means that an emotional hook to lead into an idea or product will always work as it triggers the emotion in the person. We only have about 10 minutes of attention on something before we start to tune out. Specifically, you need to: Memory There are different types of memory: And the majority of this forgetting occurs within the first few hours after class. Also, thinking about what tree the person will mentally group the information and how to increase entry points or create strong ones. This means if you learn something sad you will remember it better if you get sad again. This makes sense, as our brains must group similar patterns it remembers together. To get practical, you can create science, art, language stations to help people remember better. This is because we remember patterns, not facts or single instances. Basically the more an idea can be repeated - especially in timed intervals - the more chance it has of being encoded from short term to long term memory. Sensory Integration We remember data from each of our senses, and we learn best if we stimulate multiple senses concurrently. You remember better if you see AND hear something, or even if given words and pictures. Smells or sounds or tastes can trigger additional associations or emotions and help us create positive or negative associations to things we see or do. Smells have the power to bring back memories that are associated with them. Vision Vision trumps and overrides all other senses. I loved the story about the wine experts who were fooled by white wine with red dye in it because their eyes said it was red wine. Fascinating to read about the science of how the brain takes in the signals from the eyes, combines both signals, and applies pattern matching to fill in details. This means the brain has creative freedom to insert whatever it wants into our vision. Music Music makes us more empathic - we can better recognize the emotions in speech, which helps in social abilities. Listening to music reduced cortisol and stress. Gender Boys and girls have different brain structures. When under stress, men remember the gist of things better, and women remember details and emotions. These quotes describe it well: They use their sophisticated verbal talents to cement their relationships. Boys never do this. They rarely face each other directly, preferring either parallel or oblique angles. They make little eye contact, their gaze always casting about the room. They do not use verbal information to cement their relationships. Doing things physically together is the glue that cements their relationships. Why would the world of business be exempted from that advantage? Having an executive team or work group capable of simultaneously understanding both the emotional forests and the trees of a stressful project, such as a merger, might be a marriage made in business heaven. It could even affect the bottom line. We take pleasure in that exploration. Discovery based learning is best. Medical school offers the best on the job learning - other types of education should do better to model it. Learn and be curious.

Chapter 6 : Brain Rules, by John Medina - 3 Things You Can Use - Average Optimized

In Brain Rules, Dr. John Medina, a molecular biologist, shares his lifelong interest in how the brain sciences might influence the way we teach our children and the way we work. In each chapter, he describes a brain rule what scientists know for sure about how our brains work and then offers.

Brain Rules by Dr. John Medina â€™” Book Review Date: Oct 23, Categories: Books and Resources As we discuss the concepts of what it takes to understand behavioral analysis, oftentimes we have to discuss what happens in our brain as our sensory systems receive information. We also spend a good amount of time describing the most important of the senses to a trained observer which is sight. To aid in our understanding of these complex systems, we spend a good amount of time researching books and articles, which describes these processes. One standout book, which has become a valuable resource for us, is Brain Rules by Dr. Rare do you find a book that is relevant, factual, and fun to read, but that is exactly what you get with Brain Rules. Medina, a developmental molecular biologist, only uses science that has been published in peer reviewed journals and has been successfully replicated. This is excellent, because it prevents us from using Bad Science. In Brain Rules, Dr. Medina outlines 12 interesting ways to understand how our brain works. Each one of rules has a direct application to our understanding of the behavioral analysis. I will briefly give an overview of each of Dr. Rule 1 Exercise â€™” In this chapter, Dr. Medina discusses how as human beings we were designed to be active. Exercise is an essential part of our long-term health, well-being, and intellect! To be a professional, exercise must be an integral part of a training program. Rule 2 Survival â€™” This chapter describes how our brains have evolved from simple to complex functions from breathing, and respiration to critical thinking and reasoning. For the combat profiler, our main focus is the actions of the limbic system and our reactions towards our survival. Rule 3 Wiring â€™” This chapter describes how our brains are wired together. We get a deeper understanding of the neural highway that connects the different parts of our brain. This knowledge of the brain helps us understand how we can affect learning with the knowledge that every brain is wired differently. Rule 4 Attention â€™” Dr. Medina describes how our attention works. How multitasking is a myth and what methods we can employ to keep and maintain our attention. This rule has been vital in our teaching methods as we attempt to use stories, and jokes to captivate our audiences. He also helps to explain how focusing on one object at a time is how our attention works. With this understanding, we can affect our employment methods and use two or more individuals, or utilizing a guardian angel as a combat multiplier can be an advantage to the combat profiler. Rule 5 Short Term Memory â€™” This rule describes how our short-term memory needs repetition to remember. We also use the concept of the emotion-memory link to solidify memories when given the opportunity. In our training, it is also important to simulate the environment in which we can retrieve the information. We discuss building correct File Folders, or storages of correct memories, utilizing as many sense as possible. So when in a combat environment, we can recollect the file folders necessary for immediate action. Rule 6 Long Term Memory â€™” This chapter reinforces the use of repetition to transfer memories from short-term to long-term. This is vital to the professional warrior because it requires him to periodically reinforce the material, which is taught. During our courses we hand out easy to digest information cards, which summarize the main points of each profiling domain. This gives our students the opportunity to refresh the concepts we discussed. Often when we teach, we will ask students if they have any questions, we usually get the most questions on the topic to following day. This is because they had time to think about what they had learned. Rule 8 Stress â€™” This chapter talks about what goes on in our brains, and bodies as we experience stress. The release of adrenaline and cortisol, in small doses aid in our immediate survival, but chronic stress can be harmful. Managing stress can be obtained by the knowledgeable, well trained, professional warrior. Rule 9 Sensory Integration â€™” This chapter discusses how our sensory systems work together. How our brains receive information from sight AND sound to produce a better understanding of our environment. Utilizing MORE senses will aid in our learning and solidify memories. Rule 10 Vision â€™” Dr. Medina discusses how as humans our most dominant sense is vision. However, we do not see with our eyes, but with our brains. We apply this concept when we teach students by using more pictures and videos to

stimulate a better learning environment. Rule 11 Gender â€” This chapter discusses our male and female brains are wired different. The information provided can aid the combat profiler when eliciting information from males and females. Rule 12 Exploration â€” This chapter discusses how we develop our brains by exploring the world around us. This gives us an understanding of mirror neurons, which we learn by watching someone else. It is important, when discussing certain topics to SHOW correct action. When we demonstrate a technique, or introduce an optic to our students we utilize a format called E. Please go to www. Want to see other books that we have read and recommend? Take a look at our complete reading list for our other suggestions.

Chapter 7 : Summary of Brain Rules by John Medina (Audiobook) by FlashBooks Book Summaries | calen

John Medina has 16 books on Goodreads with ratings. John Medina's most popular book is Brain Rules: 12 Principles for Surviving and Thriving at Wor.

Lack of sleep not only affects our cognition, but it functions to: Sleep debt increases in a linear pattern. But you can also sleep enough to get it back to normal. So ditch the nightly TV tonight and get some sleep instead! Naps are good for you. Music One of the more interesting chapters in the book, Medina introduces music and answers questions relating to how music can make us smarter and possibly increase productivity. The actual subtitle of the chapter is: Rule 10 Study or Listen to Boost Cognition First he cites some research of studying music, as in learning an instrument. Research shows that formal music training boosts: Spatial temporal skills Picking out sounds in a noisy environment Working Memory And it also helps to improve social skills, in the following ways: Increasing Social Cognition Detecting Emotional cues in speech Improving empathy and other prosocial behaviors. Music therapy can help patients work through certain brain ailments, like stroke. This has implications to the health and happiness factors that music can provide to persons of all ages. So get out there, learn an instrument and immerse yourself in a world of music. One caveat though, as Medina points out in a previous chapter on attention, because multitasking is a fallacy. Do you want to improve yourself in nearly every way possible? Get in the habit of doing some aerobic exercise and become a super you. Want to stay leaps and bounds ahead of the competition in this sleep-deprived world? Earplugs, sleep mask, and nighty night. I read his book, Brain Rules for Baby a month or two before Maddi was born, and I loved the chance to listen to him again. He is a very funny writer who can still manage to tie in all of the science and helpful information. I liked this book. Though I would say that I read it to learn about the brain and how to keep it healthy and optimally functioning “ and he certainly delivers on that “ but at the end of each chapter he gives suggestions to schools and offices for how to take advantage of the principles that he was just discussing. But anyway, if you are interested in this book go get it. It includes, as partially mentioned in the intro, chapters on:

Chapter 8 : Brain Rules by John Medina on Apple Books

To get your feet wet with neuroscience, Brain Rules by John Medina is a great resource to start with and I will show you some of the big ideas of the book to help you understand the importance of the brain in relationship to personal productivity.

Chapter 9 : Brain Rules: Brain development for parents, teachers and business leaders | Brain Rules |

Brain Rules shares how the brain sciences might influence the way we teach our children and the way we work. In each chapter, the author describes a Brain Rule “what scientists know for sure about how our brains work” and then offers transformative ideas for our daily lives.