Difficult science trivia questions and answers

Image: Shutterstock Our world is built on the foundation of science. Without science, none of our technologies would exist. of course, few high school students are expected to know the intricacies of how the i7 chip works, but these most complex scientific achievements are built on centuries of much lower dry fruit. Science was born in ancient Greece, had its adolescence in the late Middle Ages and Renaissance, and came into its own with the Industrial Revolution and the twentieth century. By 1900, science was still in what we might consider a period of blindness, confusion and grossly cirrhing the truth. However, most of the basics were there, waiting for scientists of the future to piece things together and give us what we have now. Did you pay attention to the science lesson? By the time you graduated from high school, you were more likely to know more about science than about the upper minds of the 1700s. How many of this are stuck? Are you still ahead of Sir Isaac Newton, or have you let his deep representations go into one ear and come out of the other? Can you remember why the world works the way it does? Do you know your basic scientific facts? Put your knowledge to the test with this quiz! The speed of sound depends entirely on the temperature and pressure of the environment. For example, in space, where there are some particles and there are sounds that we don't hear, the speed of sound is approximately 300 km/s. In case you were wondering about 299,792,458 m/s, it's the speed of light that doesn't change, regardless of temperature or what the air pressure is. 1 joule is 1W per second. The average house needs 126,360,000 jowlies per day (1 kilowatt-hour (kWh) is 3,600,000 jowl and the average American house needs 35.0001 kWhs per day) The average solar flare produces 1,000,000,000,000,000,000 jowl, or one sextillion jowl. This means that the average solar flare would power 7.9138968E12 medium-sized homes a day if you could somehow capture all that energy. If you clicked One was dropped on Hiroshima and the other on Nagasaki, you're technically not wrong about it, but the real difference is between merging and compressing. The A-bomb uses nuclear fission, meaning the core of a volatile nuclear material with exceptionally strong ties ruptures at the atomic level, freeing up huge amounts of energy as atomic bonds turn into fire and fury. The H-bomb (H means hybrid) uses a very small fission device to trigger a thermonuclean reaction, which is much stronger, in deiteria and/or tritium. If you have a wristwatch that glows in the dark without being exposed to light, you're carrying some kind of tritium right now. LITTLE THINGS can you match at least 10 of these scientific words to the correct definition? 6 Minute Quiz 6 min TRIVIA HARD How well do you know the basic facts about our solar system? 7 minute quiz 7 min TRIVIA You can answer these easily pea science questions? 6 minute quiz 6 min trivia hard easy science quiz! 6 Quiz 6 min trivia you can ace this Science quiz in 7 minutes? 6 minute quiz 6 min TRIVIA You can answer these basic questions about landing on the moon? 6 minute quiz 6 min TRIVIA Basic astronomy quiz 6 minutes quiz 6 min TRIVIA can you answer these basic questions about the moon? 6 minute quiz 6 min PERSONALITY Answer these scientific questions and we'll guess if you want to be cryogenically frozen 5 minute quiz 5 min TRIVIA influential people science quiz 6 Minute Quiz 6 min How much do you know about dinosaurs? What is octane rating? And how do you use a proper noun? Lucky you, HowStuffWorks Play here to help. Our award-winning website offers reliable, easy-to-understand explanations of how the world works. From fun quizzes that bring joy to your day, to compelling photography and exciting lists, HowStuffWorks Play offers something for everyone. Sometimes we explain how things work, at other times, we ask you, but we always learn in the name of fun! Because learning is fun, so stick with us! Play quiz for free! We send trivia questions and personality tests every week to your inbox. By clicking the Sign up button, you agree to our privacy policy and confirm that you are 13 years of age or older. Copyright © 2020 InfoSpace Holdings, LLC, System1 Follow the latest daily buzz with the BuzzFeed Daily newsletter! In in-depth interviews, we asked Collins about the implications of his research and ideas for the economy, stock market and the very nature of executive leadership. Kind to the big companies that you wrote about all achieved excellent stock market results over a 15-year period. But today the stock market has declined. Does that mean we won't see good today for big companies? First, I want to correct a big misconception. The stock market is not down. What does the stock market look like relative to 1985? The stock market is not down. What does it look like relative to 1990? The stock market is not down. The market was irrationally out of the punch - we didn't have a stock market; We had a speculative casino. The tech bubble wasn't the new economy - there's a new economy that's been going on for years on a deeper level. But the brutal fact is that companies that were at the top of the tech bubble had no results. You can't make zero profits and claim you have results. In the case of companies that had great results before the bubble burst, they are in a period of decline now, but so what? The bottom line is in a company like Cisco, we don't yet know the answer. It may be that these companies are just in a very difficult 6- to 12-month period. Let me use the analogy. Let's say you have a great basketball dynasty like the UCLA Bruins under John Wooden. This is a team that is going to win 10 NCAA championships in 12 years. This is a team that has gone from good to great. But in 1970 they three games. Does that mean we're going to write them off and say they're not a great team? We have to look at a longer period of time. Same companies that are trapped in a bubble. It was too short a period of time. It will take longer to tell which companies that are in trouble now are just going through a moment period and will have the resilience to come back. But for many businessmen, the current slowdown is a sign of the demise of the new economy. This is one of the most dedicated times in history. Two or three years ago, what was the main complaint we heard? It's so hard to get good people! Whining, whining, whining! Today we have the greatest opportunity we will have in decades to claw the boat - not the bus, but the boatload - the big people. And big companies always start with who, not what. We can finally get to the right side of Packard's law. Packard's law is similar to the law of physics for large companies. It says no company can become or remain large if it allows its revenue growth rate to exceed its growth in getting the right people in a sustainable way. It is one of those unconditional truths that transp preceded technology and economics. Now, instead of trying to accumulate capital, we can accumulate people. If I were in the company today, I would have one priority over everyone else: acquire as many better people as I could. I would turn off everything else if I could afford it - buildings, new projects, R&D - to fill my bus. Because everything will come back. My flywheel will start turning around. And the single biggest limitation on the growth and success of my organization is not markets, not technology, not opportunities, is not the stock market. If you want to be a big company, the single biggest limitation on your ability to grow is the ability to get on and hang on to the right enough people. It's also a great time to get yourself to look back. When you were breaking packard law, you probably let a lot of the wrong people on the bus. It's a good time to get them. In fact, it's a little easier to do now. We can blame him for the circumstances. What else would you do to get capital for this revaluation period? It's also a great time to ask yourself some really hard questions. In a time of irrational prosperity, where the market will give you money, whether you've delivered or not, many companies haven't answered any of the questions in three circles (What can we be the best in the world on? which economic denominator best drives our economic engine? and which our core people are deeply passionate about?). They didn't have a clue that they could do better than any other company in the world that was resilient, they didn't have a profit denominator, and the only thing they had a passion for was flipping the company. Now we can no longer live in this fantasy land. We have to take a close look at everything we do and put them all on three Test laps. Any things that fail the test, we have to stop doing - today. I see a lot of companies that have found themselves with a lot of capital. Thus, they in all kinds of acquisitions or new businesses or new destinations, simply because they could. But they don't necessarily fit into three circles. Today, the task for them is to prune. Those who clarify their three circles will come out of this just fine. Those who do not deserve to die. CEOs today find themselves little time to prove their worth. What advice would you give the CEO in the hot seat? If I were a CEO in the hot seat, taking over a company I'd like to move from good to great, that's what I would do. I would do it well before the big stock chart and I would put it in front of my directors. I would say: We are on the left side of this curve. We want to be on the right side of the curve. Right? If that's what we all want, we know what it takes to get it. You can't keep luring from CEO to CEO. If you do, you'll end up in the Doom Loop - and then we end up as one of the comparative companies, not one of the big companies. I don't think all the directors are stupid. Most are smart, but they work out of ignorance, not a lack of good intent. We need to hit them on the head with empirical results. Our job is to beat the market in a sustainable way over time. We have to think about the share price over a five-year period. And we need to start doing whatever it takes to get this flywheel turning. Finally, if I'm a CEO, I want the board to give me the following assurance: However long or short my tenure as CEO may be, whoever you choose, however my successor should pick up this flywheel in midturn and keep pushing in a consistent direction. I can only get a flywheel turn at 16 RPM. But my successor has to take it to 100 RPM. His successor must take him to 500 RPM, and his successor to 1,000 RPM. It's not about me as CEO - it's about commitment to a consistent program. We're not going to do the Doom Loop.CEOs who took their companies from good to big were mostly anonymous - a far cry from the celebrities we read about. Is this an accident? Or is it cause and effect? I believe it's more a matter of cause and effect than an accident. There is something directly related between the lack of celebrity and the presence of good to great results. Why? First, when you have a celebrity, the company turns into one genius out of 1,000 assistants. It creates a feeling that the whole thing is really in the CEO. And this leads to all sorts of problems — if a person leaves or if a person turns out not to be a genius after all. On a deeper level, we found that for leaders to do something big, their ambitions should be for the greatness of the job and the company, not for themselves. That doesn't mean they don't have an ego. That doesn't mean they don't have any self-service. This that at the point of decision after the decision point - at critical faced when Choice A will be in favour of their ego and choice B will be committed to the company and its work - time and These leaders choose the choice of B. Celebrity executives, at the same decision points, are more likely to prefer themselves and ego over company and work. Like anonymous CEOs, most of the companies that have made the transformation from good to big are unrelested. What does that tell us? The truth is that most people don't work in the most glamorous things in the world. They do a real job - meaning that most of the time they do a heck of a lot of irritability with only a few points of excitement. Some put baked bread. Some build retail stores. The real work of the economy is done by people who make cars that sell real estate, who run grocery stores and banks. So one of the big findings of this study is that you can be in a big company and do it in steel, in pharmacies, in grocery stores. It's just not the case that if you're not in Silicon Valley, you're not cool. It doesn't matter where you are. So no one has the right to whin about their company, their industry, or the kind of business they are in - ever again. Have the 11 companies that made transformation benefit from their anonymity? One of the great advantages that these companies had, no one cared! Kroger began his transition; Nucor began its transition; No one expected much. They could underestimate and overrun. In fact, if I took over the company and tried to make it go from good to great, I would tell my vice president of communications that his job was to make the whole world think we were constantly on the verge of doom. In the course of our research, we actually printed out transcripts of CEO presentations to analysts by good companies and comparative companies. We read all these. And it's impressive. Good people always talk about the problems they face, the programs they build, what concerns them. You go to comparative companies, they're constantly faltering, they're selling the future - but they never deliver results. If I'm not a CEO, how do good-to-great lessons apply to me? Good-to-great concepts apply to any situation – as long as you can choose the people around you. This is the most important thing. But fundamentally, we really do - we have great discretion over the people in our lives, the people we choose to let into our bus, whether in our department at work or in our personal lives. But the main message is: Create your own flywheel. You can do it. You can start building momentum in what you have responsibility for. You can build a great department. You can build a large church community. You can take each of the good ones to great ideas and apply them to your own work or your own life. What will your research teach you about changes in business as a whole? Is this essentially a message to go back to basics? Very rarely significant changes ever lead to results in a sustainable way. This one really really conclusions of the book. We started with 1,435 companies. And 11 companies did it. Let's look at this fact for a moment. The fact is that this does not happen very often. Why not? Because we don't know what we're doing! And because we don't know what we're doing, we're launching into all sorts of things that don't produce results. We end up like a bunch of primitives dancing around a campfire chanting on the moon. What I feel strongly about is that we need some science to understand what it really takes to change things. Is he back to basics? No, it's looking forward to understanding. Why is it back to basics to say that CEOs should be ambitious for their companies, not for themselves? Why did he go back to basics to do who and people question first and what and where is the question second? So when it's back to basics for the company to start with a question like, Why have we sucked for 100 years, and what are the cruel facts that we have to confront? Why can I go back to basics to say that stop lists are more important than to-do lists? And since when did he go back to basics to say that technology is just an accelerator, not the creator of something? I don't think these concepts have come back to basics. Because if they are, we should be able to go back in time and find that people have used these ideas. People did not find this — that is why there are only 11 of 1435. So, no, he didn't go back to basics. This is looking forward to understanding. What is your assessment of the new economy? We've seen a lot of change and we've seen a lot of backlash against change. How do you make sense of everything? The huge changes that are happening around us make it the most exciting time in history to be alive. It's really fun. All these changes — changes in technology, globalization — are brutal facts that must be integrated into any decisions we make. People at Walgreens did not ignore the internet because they were focused only on the basics. They faced the brutal fact of the internet and then asked: How does this fit into our three circles, and how can we use it to twist our flywheel faster? You never ignore change - you hit them head on like cruel facts, or you come to them with a great sense of brilliance and excitement. This change, this new technology opens you up a way to prevail, to be even better as a company. All charity companies have made changes and used them to their advantage, often with great eyes. When there were new pianos, Mozart did not hang up his music. He didn't say: There are these new pianos! Harapsichord out of the way, so I'm being washed like a composer! He thought, This is so cool! I can do it loudly with piano forte! It's really neat! He kept the discipline of writing great music and, at the same time, embraced with great perspective and excitement the invention of the piano. With all the changes around us, we have to be just like Mozart. We maintain great discipline about our music, but at the same time, we accept things that can allow to make even more music. Alan M. Webber (awebber@fastcompany.com is the editor-in-chief of Fast Company. Jim Collins (jimcollins@aol.com) wrote the essay Built to Flip in the March 2000 issue of Fast Company. His new book, Good for the Great: Why Some Companies Are Making the Leap... And others won't, will be available in October. October.