Transcript in English

Video: The truth about your brain

So, this is your brain, say "hi!". Okay, it's a representation of your brain. Brains don't have hands. They have lobes and other structures which we'll get to. But I wanna talk to you about your brain. You see, your brain is capable of incredible things, but I think a lot of times, we can feel pretty down on our brains, an ol' Thinky Pinky here. We beat upon him, say bad things about our brain's abilities.



Say, we have trouble understanding a subject in school or solving problems or learning a new skill. It's easy to say, "oh, I'm not smart. I'll always be this way." Hey, stop doing that!.

What we think of as intelligence, what we think of as smartness, is not fixed, is not stuck in one place, is not permanent. Your brain can improve. Your brain can grow. Come with me on a journey of discovery!

Here we go, into the brain. Excuse me, coming in, hot. This is a thing called a neuron. Oh hey, welcome to the inside of your brain. A neuron is a brain cell. There's over a 100 billion of these things making up your brain. Put it this way, there are over 13 times more neurons in your skull than there are human beings on Earth. Lot of 'em. They're the cells that help you think. Mind you, a single neuron, and let's call her Nellie, "hi Nellie the neuron," Nellie on her own can't do all the thinking your brain needs to even pick up a glass of water. Fortunately, she's got friends. There's dendrite Dave, there's Alonzo the axon, there's Magna myelin, and look little Sally synapse, so teensy tiny.

Your brain behaves like a muscle. If you're serious about lifting weights, right, and you keep it up on a regular basis for a long period of time, weeks, months, years, you're gonna develop muscles. But you don't grow muscles by doing nothing. It takes effort, it takes struggle, repeated failures in fact. You mess up, and then you learn, and then eventually you manage to jump the log or whatever problem you're trying to solve.

Wait, we've lost focus here, back to neurons. When you struggle, your neurons are struggling too, and that's important because when neurons struggle, they lean on each other. They make connections, they start to form this densely connected network inside your brain allowing little jolts of electricity to pass down them more and more efficiently. That's thinking faster, that's your brain getting smarter. That's your brain muscle gettin' swole kid.

So the next time you say to yourself: "I can't do this, I'm just too dense," remember that brain density is your friend. In fact, the denser you are, the more connections between Nellie and her neuron pals that you got inside your brain, the stronger and more powerful your thinking parts become.

The more you work through your frustrations with the right learning strategies, the more your neurons get more used to working together, the closer you are to being that much smarter. Now get out there and do your best. Don't give up, grow those brains, and remember, you can learn anything.