

Today I am going to take you back to April 23 1982, back to the first time computers started appearing in people's houses, at least in England. I was 10 years old, and would be 11 in a couple of days' time. Your mummy was only nine years old - the same age as you are now. And at that time, the idea of having a computer in your house was simply ridiculous. Computers were huge things that you might have in a university (like the one I teach in) or a very big business or some government department. Not in someone's house, and not to be used by ordinary people - let alone children your age, or Ines' age. The very idea! Complete nonsense! But a British inventor called CLIVE SINCLAIR thought differently, and he wanted to build personal computers, that people would want to buy and use in their home.

His first computer was the SINCLAIR ZX81, which was launched in March 1981. The keyboard was flat - you just had to press down on a particular key with your finger and hope a sensor underneath the key would feel your finger pressing down. Using the cable, you would plug the computer into a normal TV, and tune the TV to the 'channel' which recognised the signals coming out of the computer to make a black and white picture. If you wanted to play a game on the computer, you would load the game onto the computer with a tape cassette, which you would play on a tape recorder/playing machine, with cables going from the tape machine into the computer so that the computer could 'hear' the sounds played by the tape and turn them into code that would tell the computer how to play the game. And the total amount of memory on the computer was 1 kilobyte - which means there were only 1,000 switches inside the computer that could be flicked on or off to make the computer do different things. By contrast, the computer I am typing this on has 1.8 terabytes of memory. That means compared to the 1,000 points inside the ZX81, it has 1,800,000,000,000 (or 1.8 trillion) switches inside it that can be flicked on or off to make the computer do different things. In other words, the computer I've just bought is 1.8 billion times more powerful than the ZX81.



The ZX81 was good, but it wasn't great. What was great was what came after it - the ZX SPECTRUM. Unlike the ZX81, the display on a TV that was plugged into the ZX Spectrum would be in colour, not black and white. (That's why it was called 'the Spectrum' - because the colours of the rainbow are on a 'spectrum' from red to violet. (You can remember all the colours on the spectrum with this saying: 'Richard Of York Gave Battle In Vain'. Each first letter in the saying stands for the first letter of a colour: Red, Orange, Yellow, Green, Blue, Indigo, Violet. A saying which is a kind of code telling you useful information is known as a MNEMONIC (pronounced 'Nee - Monic').) And you can see that the keys on the keyboard were actually keys that you could push down - and they were made out of a nice rubber that was very satisfying to push down. And unlike the ZX81, which only had 1



kilobyte of memory, the ZX Spectrum had 64 kilobytes of memory - or 64,000 switches inside it that could be flicked on or off to make the computer do different things. Sheer luxury!

The ZX Spectrum was hugely popular among children, who asked their parents to buy them a computer that they could play on. My parents weren't rich enough to afford a ZX Spectrum, so they got me a ZX81 - and I was very envious of people who had a ZX Spectrum, which could do so much more. (Ask your mummy and daddy whether they had a ZX Spectrum growing up.) And these computers changed the world. The children who got used to using them grew up and built better, faster, more intelligent computers of the kind you are used to today. And it was only 38 years ago that the ZX Spectrum was introduced. Just think of how different the computers you use now are compared with machines - that seemed amazing at the time - like the ZX Spectrum. And it has only taken 38 years to go from machines like the ZX Spectrum to computers like the iPad, or the Apple Mac. 38 years from now you will be just a little bit younger than I am now. What will things look like then? We can only wonder, and dream. But whatever they look LIKE, never stop being the amazing and lovely person you are now - that is worth so, so much more than all of the computers in the whole world.

And what happened to Clive Sinclair, the inventor of these wonderful devices? He went on to invent the Sinclair C5 in 1985, a kind of motorised bike you could sit in like a car, that he thought everyone would want to use to get to work and go to the shops. This is what it looked like (Clive Sinclair is the guy driving it):



Everybody thought it was ridiculous and nobody wanted to buy it, and that was it for Clive Sinclair's inventions. You can't win them all. But Clive Sinclair helped to make the world you live in at the moment, and so is worth knowing about.