

U IS FOR UV / V IS FOR VACUUM / W IS FOR WAVE / X IS FOR X-RAY

What do you reckon: have I cheated by doing four of the letters of the alphabet in basically the same song? Personally I count them as four different songs, even though they sound similar and always follow on from one another. Since for the letter 'M' I did one song that is actually four songs, I thought it would be fair if for these letters I did four songs that are actually one song.

There is no specific genre that I was aiming for when I wrote this song (or these songs). Instead, I use a loop pedal to add a new instrument beginning with each letter I get to. These instruments are: ukulele, vacuum cleaner, wobble board and xylophone (you may not think of a vacuum cleaner as an instrument, but it is now!).

The electromagnetic spectrum is my absolute most favouritest thing in science ever. Whenever anything happens to atoms – like they collide with each other, or they undergo radioactive decay, or an electron jumps down in energy levels – a little packet of energy is released. We call this packet a photon. And photons have a weird property called “wave-particle duality”, which means that if you look at them in some ways, they’re a particle (a thing), and if you look at them in other ways, they’re a wave (a wobble). Photons will always travel through space at exactly the same speed – a very fast speed we call the “speed of light” – but the amount by which their waves wobble will depend on how the photon was created. And we have different names for photons when their wavelengths wobble by different amounts, even though they’re always basically the same thing.

For example, if the photons wobble less than a hundred million times per metre but more than two million five hundred thousand times per metre, we call them ultra-violet light, or UV for short. If they wobble more times than this, but less than a hundred billion times per metre, we call them X-Rays. And if they wobble slightly less times per metre than UV, we can see them. And then we call them “visible light”. And if they wobble much less often, less than a thousand times per metre, we call them radio waves, and then, if we have the right equipment, we can hear them.

