HOW DO PSYCHEDELIC DRUGS WORK ON THE BRAIN?

KEY

INTRODUCING YOURSELF talking about your career, your research	LOOKING BACK summing up recapping reformulating	LOOKING FORWARD anticipating creating expectations	EXEMPLIFYING illustrating
_I'm a postdoc working for David Nutt at Imperial _**I've been working** researching psychedelic drugs for the last five years or so _I **completed my PhD four years ago** _**I've been working on** really just this subject matter **for the last five years** _So most of my work's been with psilocybin	_So again we've got some context here which is helping to communicate really that… _So already we've got some important clues here about… _ So **we know that** the serotonin 2A receptor is important, we know where it is, we know that when a psychedelic binds and stimulates this receptor, it excites that host cell. So these are some basics. So this is all low-level stuff. _ so it's an incredibly rapid onset and the effects are quite profound	_I'll try and give you the basics first _**We'll start with** _**what's striking about psilocybin and its metabolite, psilocin, is…** _ And **it's really quite striking that…** _...so then it's important to know whereabouts in the brain is this receptor. _ So what else about the serotonin 2A receptor? _ What else? Well what happens when…? _**What is this really gonna tell us about consciousness?**	_ to help illustrate that rule _**for instance** _this compares to about 50 milligrams of the drug given orally

EXPLAINING justifying highlighting logical connections	DESCRIBING MATERIALS AND METHODS	**PRESENTING PREVIOUS FINDINGS**	RAPPORT BUILDING connecting / identifying with the audience / using humour
_Given that … it's a natural inference to think that… _ And then **essentially** we make a subtraction…	_ **has administered** quite a large dose of psilocybin _they've administered a large dose of psilocybin to a relatively large sample of research participants _PET imaging work in humans **has found that** _ **we used** functional magnetic resonance imaging to measure blood flow in the brain _**this study involved** fifteen healthy volunteers, they had a mean age of 34, it was an eighteen-minute scan and there was a placebo scan to provide us with a baseline and then the drug scan _they lay in the scanner and there wasn't any behavioural task that they had to carry out _they were supposed to just relax _we gave 2 milligrams of psilocybin	_**they found that…** _ it was found that… _ **It's also been found that…** _ PET imaging work in humans has found that	_**most people think about…** _it conjures up ideas of … _**so you might think of…** _ apologies for my translation _he's an interesting chap, you know _Fortunately it's out of season at the moment, it's not mushroom season so you won't be getting your iPhones out and snapping this picture and going hunting at the end of the talk or tomorrow. _, which compares to about 20 to 40 liberty cap magic mushroom if you want to put it in a recreational context