

Slide 2

Why do we talk about science?

Cause it's important Cause it's useful Cause it's cool!

Slide 3

How do we talk about science?

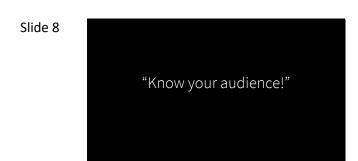
Today we're going to be focusing on how we give a good presentation, but you can apply most of it to any way of communicating.











The best way to find out who your audience is is to talk to them... and to listen to them.





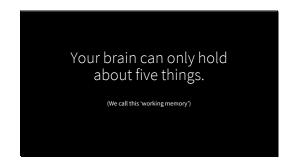
You've probably heard this advice before.

Slide 11

I'm here to tell you why you should follow it.

Slide 12

Part 1: Your brain can't hold much.



Slide 14



Have you ever tried to remember something by just repeating it to yourself over and over again?
Congrats! You've discovered your phonological loop.

This is where our brains store the words we're thinking about right now, by running them round and round and round and round.

(If you've ever had a song stuck in your head going round and round, it's the same sort of thing – it's never the whole song, just the catchiest bit)

Slide 15



So we've got a bit of a test for you.

Slide 16

01189998819991197253

How do we make our new emergency services number easier to remember?

Slide 17

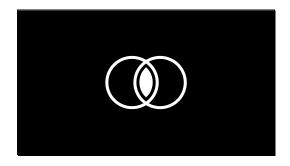
0118 999 88199 911 9725 3

We can help it hold more by chunking – turning several things into one.

Slide 18

0(118) (999) (881)(99)(911) 9725 3 We can help it hold even more by using 'schemas' – using things our audience already knows about.

Slide 19



Of course, that means you need to know which ideas you have in common with your audience – and to do that, you've gotta have some idea where your audience are at.

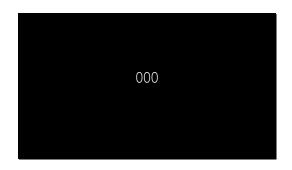
Slide 20



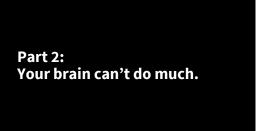
We've been doing this for thousands of years – that's why we have constellations!

[planetarium demo here]

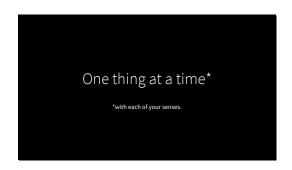
Slide 21



Chunking can help, schemas can help - but the best thing we can do is keep it simple.

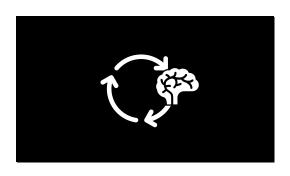


Slide 23



Your visual aids should complement your words, not repeat them.

Slide 24



The Phonological loop is hooked up to our eyes and our ears – that's why it's really hard to listen to music with lyrics and read at the same time

(It's also why it's really hard to talk and listen at the same time – our mouth uses the same bit of memory to plan what we're going to say, so if we're thinking about that we can't also focus on what we're listening.)

So it's really hard to read what's on someone's slides while also listening to them.

Slides are a good reminder of what we're talking about (in case it falls out of our working memory)

And they work really well as a way to show us things that are hard to explain with words, like a diagram

Slide 25

whoosh! zoom! space is big!

But even better than slides is a demonstration – that way you *know* you're showing them something new.

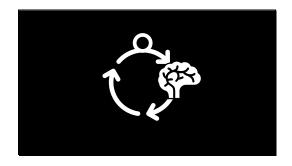
Slide 26



So rather than telling you that space is big, we should really just show you.

[planetarium demo here]

Slide 27



If someone's too quiet, or talks too fast, that can gum up the works – you have to work harder to process each bit of speech, and that means you start to miss things.

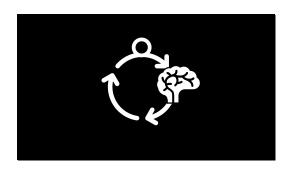
Slide 28



Slow down Remember to breathe Use silence

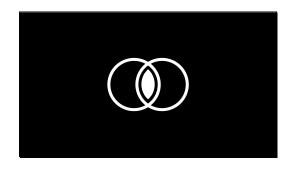
Give yourself and your audience time to think.

Slide 29



In the same way, if you use a word that someone hasn't heard before, that's going to slow them down as well, and they're going to start to miss stuff.

Slide 30



You can avoid this is by using words you have in common with your audience

This is another reason it's really important to know your audience. You've gotta know how to put things in their terms.

Slide 31



Slide 32



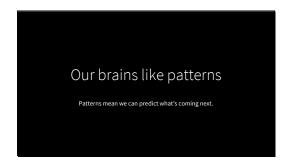
It takes a lot of energy, and a lot of time.

Whenever we think, our brains use a lot of energy and a lot of oxygen – that's why you feel hungry after studying.

Trying to think less helps our brains use less energy, which is a good way to survive.

(It does sometimes lead us down the wrong track, with things like stereotypes – but it can also be useful, as we'll see!)

Slide 33



Patterns help us survive – if you learn that a roar [sound] comes right before a lion, or thunder [sound] comes before rain, you can stay safer and drier.

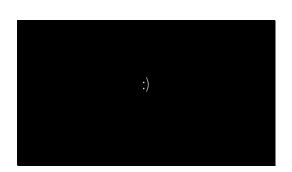
Patterns also help us do things like make music and tell stories.

If you can use a pattern that people recognise – like a story, with a clear beginning and end, it'll be easier for them to understand it.

(That's why it's so satisfying when you figure out the twist of a movie before it happens.)

(And that's why we tell you to have a clear introduction and conclusion, so we can focus on what you're saying instead of trying to figure out where you're going!)

Slide 34



Here's another example of how our brains take shortcuts:

If something looks like a person, we treat it like it's a person.

Slide 35



If something looks and sounds like a friend, we trust it like a friend.

Slide 36



Talk to the audience like you're talking to your friend, and they'll trust you!

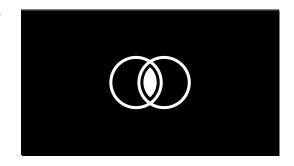
That means a casual, varied tone of voice – not too rehearsed or monotone.

That means an open, relaxed body language – not too stiff or fidgety.

That means making eye contact – not looking at your notes or your feet.

(That sounds really hard, but if you keep your ideas simple, like we've already talked about, they'll fit in your head more easily – and that means you won't need notes)

Slide 37



That also means making sure it's interesting to them!

People know what they care about, and they like to hear about the things that they care about. If you can show them how your topic relates to stuff they care about, make it familiar and interesting to them

Find out what you have in common, find something you *both* find useful and interesting – that's when people are going to start to remember what you're saying, change their minds, or convince them to do something.

Slide 38



So I'm guessing not all of you care about space – but maybe you do care about marine biology. So if I want to teach you about space, and convince you that space is cool and important, maybe we could talk about Europa, and how the whole moon is one massive ocean, and start to think about what kinds of life might live down there.

Slide 39



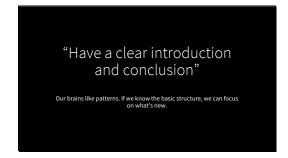


Slide 41



Slide 42





Slide 44



The best way to find out who your audience is is to talk to them... and to listen to them.

Knowing your audience will make all the rest of these tips easier to do.

Slide 45



This is the most important one! If you can keep your presentation to one, simple key message, it'll fit in your head, and fit in your audience's head.

That'll make it easier to present, and easier to remember.

Good luck!