For Inspiration...

Can you think of any good science communicators? (e.g. a teacher, lecturer, writer, TV/radio presenter…)

What makes anyone you know a good/bad communicator?

General Points...

🌟 Try and get the level right - break things down simply and in an accessible way, perhaps using analogies, but without being patronising. Don’t worry if this takes a few tries to get right, you’ll soon get the hang of it!

🌟 Don’t use too much jargon - introducing one or two key terms might be fine but don’t assume they know many technical words.

🌟 Be enthusiastic and make science fun - we want this to rub off on them!

🌟 Speak clearly and in an interesting way - don’t just read off notes and vary your voice to avoid a monotone.

Basics of the CHaOS Format...

✧ At an event, each demonstrator is assigned their own experiment (sometimes two) for the day - on summer tour you can often pick yourself!

✧ Each experiment comes in a box with (usually) everything you need.

✧ You’ll be given a Risk Assessment ("RA") with important safety details, which you must read - you’re required to sign to say you’ve followed it before starting.

✧ But an RA is so much more! The sheets (also available online) also have a guide to the experiment with some wisdom collected over the years about the science behind the experiment and how to demonstrate it. This is not a script or list of objectives so feel free to deviate from it and discuss things in your own way.

✧ The audience is ~ 6 students at a time in schools, or 1-2 family-sized groups at public events. Each demo lasts ~10 minutes (depending on exact event type).

✧ If you are unsure about your experiment please ask a committee member - they’ll be very happy to give you some advice or assistance!
Benefits of the CHaOS Format...

- The small group sizes allow everyone the chance to get hands-on.
- It also creates a friendlier environment for them to ask and answer questions.
- You can tailor each demonstration to the audience.

Adapting to the Audience...

- **Age** is likely to be the single most important factor - try to remember when you encountered different concepts in school.
- However, individuals may be ahead/behind in **scientific knowledge/ability** compared to your expectation - this may depend on e.g. their interest levels or any (dis)advantages. Be patient and ask lots of questions to gauge their level.
- "**Science Capital**" is the notion of a "bag" of experiences or contexts that help someone engage with science (**ASPIRES project**), for example: museums they have visited, documentaries they have watched, family professions etc. Identify these hooks ("Have you ever broken a bone?"), show you value any contributions they raise, and link them into what you are teaching them about to cement ideas.
- Similarly, try linking what you are talking about to any **interests** they have. Do they play an instrument that you can explain how it makes sound? Do they like a sport with a common injury that you can show them on the skeleton? This helps show how science is important to their lives.
- People have **learning styles**: be flexible if they prefer listening/doing/watching.
- If their attention is waning move on to a more exciting bit, or wrap things up entirely so they can explore another demonstration.

Find Your Own Style...

- Some people are story-tellers: they build a linear narrative that builds up from basic ideas first, but may need to keep the audience’s attention for longer.
- Other people prefer a more random approach: there are lots of items you could talk about - see what takes the audience’s interest.
- Some styles are better suited to different experiments - see what works for you.