AUDIENCE ENGAGEMENT

ROYAL SOCIETY SUMMER EXHIBITION

Karen, Beth, Kate, Micol

SCIENCE MUSEUM

COMMUNICATION

SCIENCE MUSEUM

OUTLINE OF THE COURSE

- Understanding your audience
- What to communicate?
- Activity ideas
- How to hook & engage your visitors
- Presentation and interaction top tips
- Visitor interactions - facilitation
- Scenarios and role playing visitor interactions

SCIENCE MUSEUM

WHAT VISITORS SAY…

SCIENCE MUSEUM

WHO ARE YOUR AUDIENCE?

SCIENCE MUSEUM

TEACHERS

SCIENCE MUSEUM

YOUNGER CHILDREN

Think of a few questions or a demonstration that you could use to engage children under 8 years old

SCIENCE MUSEUM

WHAT MOTIVATES OUR VISITORS?

- Challenges and competition
- Surprise and novelty
- Choice and control
- Physical exertion
- Sensory experience
- Social interactivity
- Positive reinforcement
- A great end result/reward

SCIENCE MUSEUM

SCIENCE CAPITAL RESEARCH

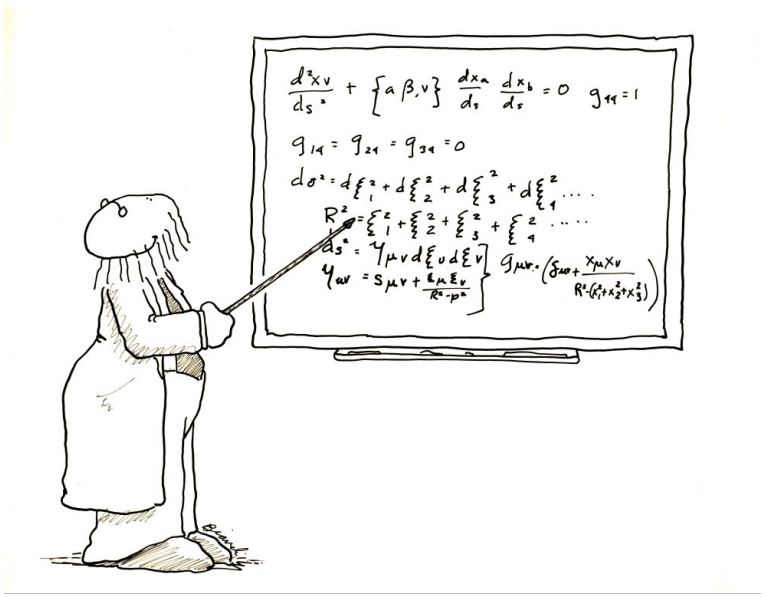
- **What you know** about science/ STEM
- **What you do** – different science related activities
- **Who you know** who use and talk about science
- **How you think** about science

SCIENCE MUSEUM

SCIENCE ENGAGEMENT REFLECTION POINTS

Language (verbal and visual) Help everyone feel included and that science belongs to them. Don't distance it or make it feel like the 'possession' of others (the presenter or scientist). Explain any 'jargon'. ***…do I see science as something I am part of?***	**Science content knowledge** New information should feel like a natural extension of what people already know. Value and build on people's existing STEM knowledge and experiences. ***….do I understand this science?***	**Skills** Tell people what science skills they are using in the activities/ experiences and help them to recognize they have these skills. ***…what skills do I already have and use?***
Use everyday examples Show examples of where and how science has useful applications in our everyday lives and can solve real life issues, to make the experience more relevant and meaningful. ***…what does it look like when I bump into science?***	**People** Widen perceptions of who does science. Show **diverse** examples of the people who use science in their work to help visitors recognise people they know who do science. ***…are there people I relate to represented here?***	**Confidence and ownership** Make everyone feel welcome and confident to contribute in activities/ experiences. ***….is this a place for me, can I get involved?***
Promote 'science' talk Provide questions to get people thinking and talking about their experiences with science and help them make connections to their own lives. Invite people to share their own stories/experiences and value them. ***…what might we talk about?***	**Extend the experience** Help people to continue making science connections in other places in the museum, and in their everyday lives (home, school etc.) ***…how can I continue this experience or find out more?***	**Positive reinforcement** Reward science knowledge, behaviour and skills. Tell people they are being scientific, thinking like an engineer etc. Leave them with the feeling that 'I can do that'. ***…am I a sciencey person, is science something that people believe that I can do well?***

WHAT TO COMMUNICATE?



SCIENCE MUSEUM

KEY MESSAGES & LEARNING OUTCOMES

Key messages

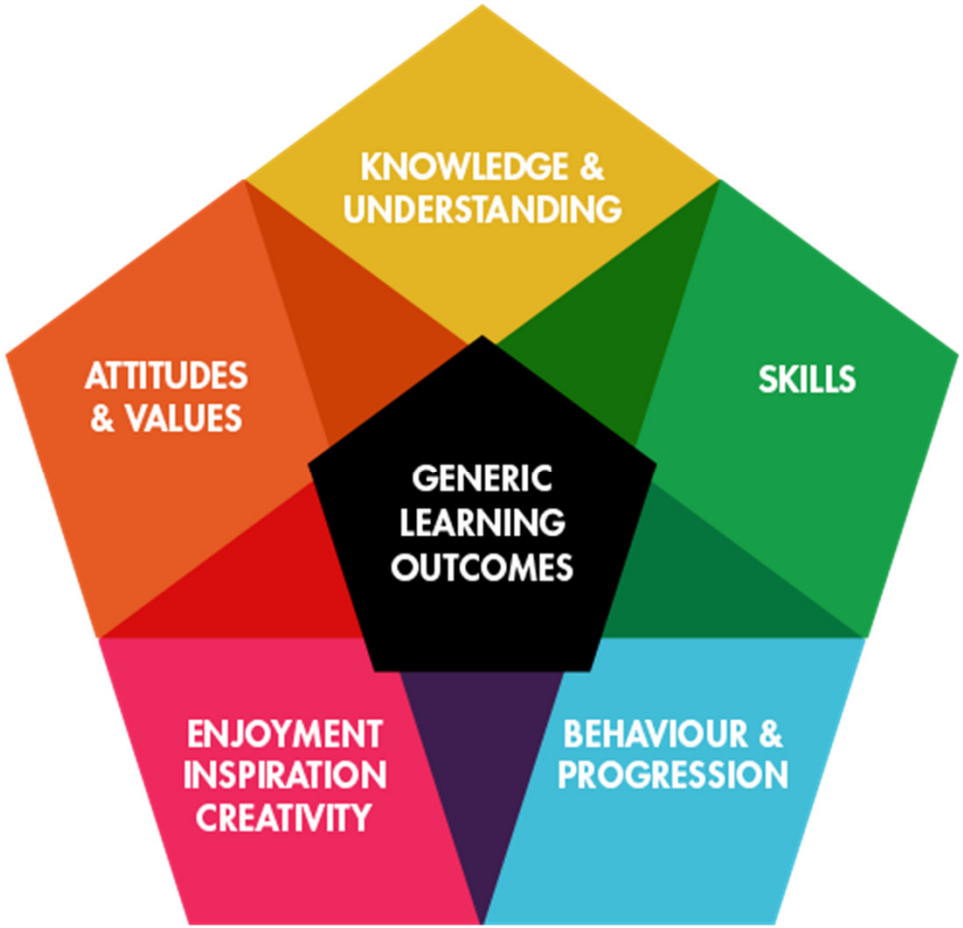
The concept or idea that you want to communicate

Learning outcomes

What you want your visitors to take from the experience with you

SCIENCE MUSEUM

TYPES OF LEARNING



SCIENCE MUSEUM

LEARNING OUTCOMES
FUTURE ENGINEERS

Visitors will…

See the relevance of engineering to both the railways and their lives (knowledge)

Recognise that they use engineering skills like curiosity, creative problem solving and teamwork (skills)

Have a positive perception of people who use engineering and science in their work (attitudes)

SCIENCE MUSEUM

LEARNING OUTCOMES

LIFE: A HEALTHY GAME OF CHANCE AND CHOICE

Visitors will…

Understand that health is a combination of chance, choice and risk (knowledge)

Realise the diverse work of the Medical Research council is relevant to my life (attitudes/values)

Medical research can help me make informed life choices (attitudes)

(And have fun while meeting real scientists)

SCIENCE MUSEUM

EVALUATING OUTCOMES

- Observations
- Capturing feedback
- Voting

SCIENCE MUSEUM

LEARNING OUTCOMES FOR YOUR INTERACTIONS

- Up to three things you would like <u>your visitors</u> to feel or do as a result of visiting your stand

SCIENCE MUSEUM

HOOK – GET THEIR ATTENTION

How? With something that's…

- Personal/Relevant
- Surprising
- Provocative

SCIENCE MUSEUM

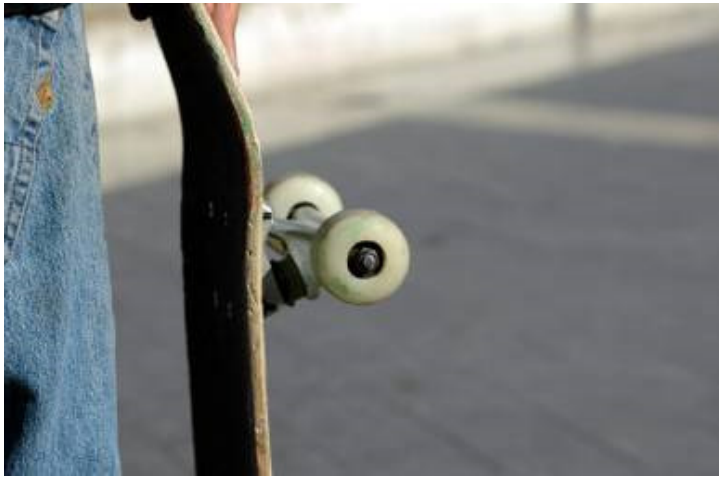
POWERFUL QUESTIONS & STATEMENTS

- Could your lip balm kill you?
- Do men pollute more than women?
- Justin Bieber, human magnet.
- Does it matter if Redcar gets flooded off the map?

SCIENCE MUSEUM

MEANINGFUL = MAKING A LINK

- To everyday life
- To things they already know



SCIENCE MUSEUM

A QUESTION THAT IS…

- **Personal/Relevant**

Linked to students' lives, community or current events

- **Surprising**

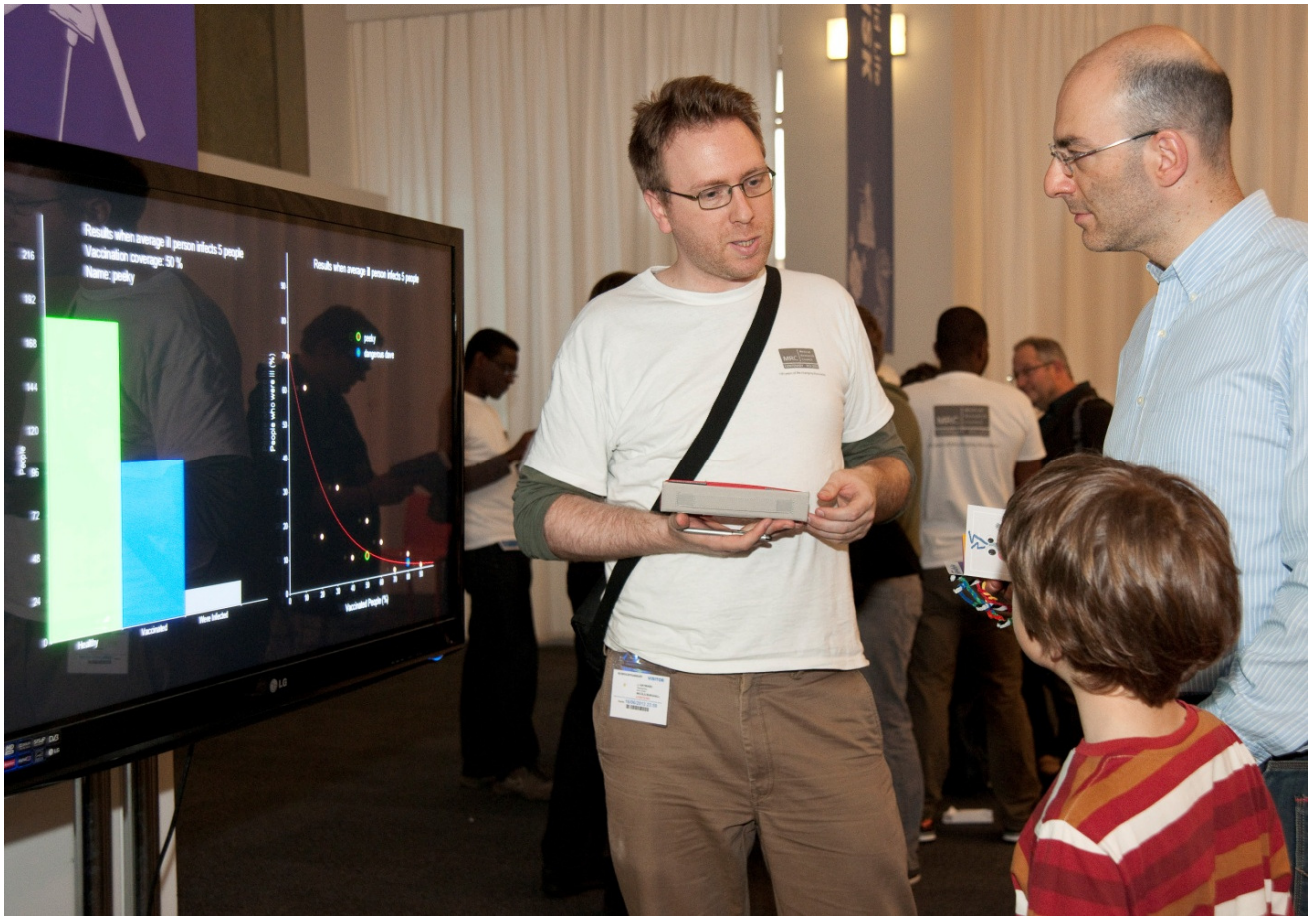
Unexpected or humorous

- **Provocative**

Opinion-generating, thought-provoking or curiosity-sparking

SCIENCE MUSEUM

OPENERS AND CLOSERS



SCIENCE MUSEUM

DON’T FORGET…

- **Opener: chance to introduce yourself**

Hi, I’m Amy and I’m a brain scientist…

- **Closer: connect to their lives again**

Thanks for taking part. Next time you’re walking try and spot…

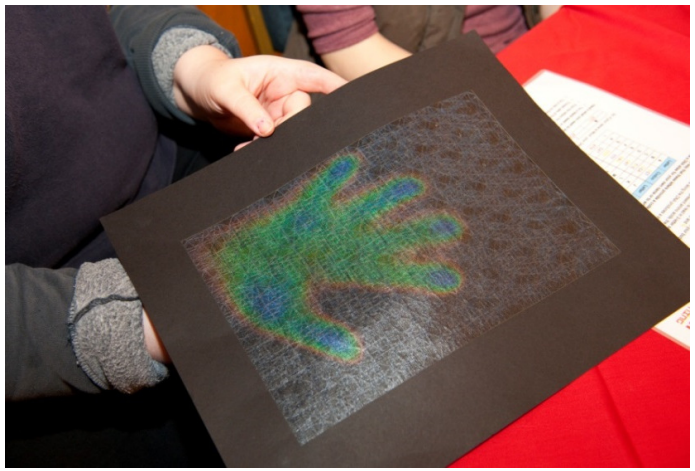
Next time you solve a problem, remember that you’re using your science skills.

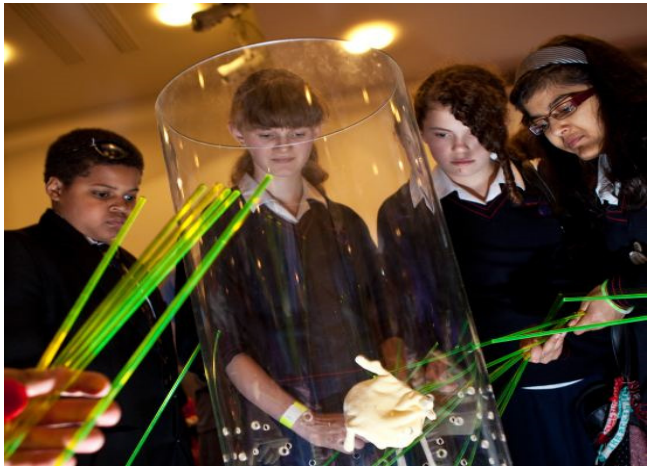
SCIENCE MUSEUM

LEARNING STYLES

SCIENCE MUSEUM

IDEAS FOR HANDS-ON ACTIVITIES





SCIENCE MUSEUM

CONTENT IDEAS

- Latest technology
- The real thing
- Handling objects
- Things they recognise (from their past)
- Dramatic/beautiful
- Finding out how it works

SCIENCE MUSEUM

FACILITATION

SCIENCE MUSEUM

WHAT IS FACILITATION?

- A two way conversation
- A process that encourages people to come to their own understanding of a topic (e.g. by discovering something themselves)

SCIENCE MUSEUM

OBJECT FACILITATION

SCIENCE MUSEUM

SOME TIPS

- Use questions that get people talking:
  - who, what, why, how, when
  - describe using your senses
- Build on people's experiences and use their prior knowledge
- Summarise recent parts of the discussion
- Confirm/give key pieces of information
- It's not always about guessing a mystery – it's about helping people focus in and think more deeply

SCIENCE MUSEUM

STICKY MOMENTS

SCIENCE
MUSEUM

SURVIVAL GUIDE, TRAINING AND Q&A

SCIENCE MUSEUM

WHAT MAKES A GOOD INTERACTION?

- Start simple – more detail if they ask
- Keep it short
- Make it personal & relevant – use the word ‘you’
- Ask questions and let them contribute
- Allow time to think
- Give encouragement and positive reinforcement

SCIENCE MUSEUM

JARGON

SCIENCE MUSEUM

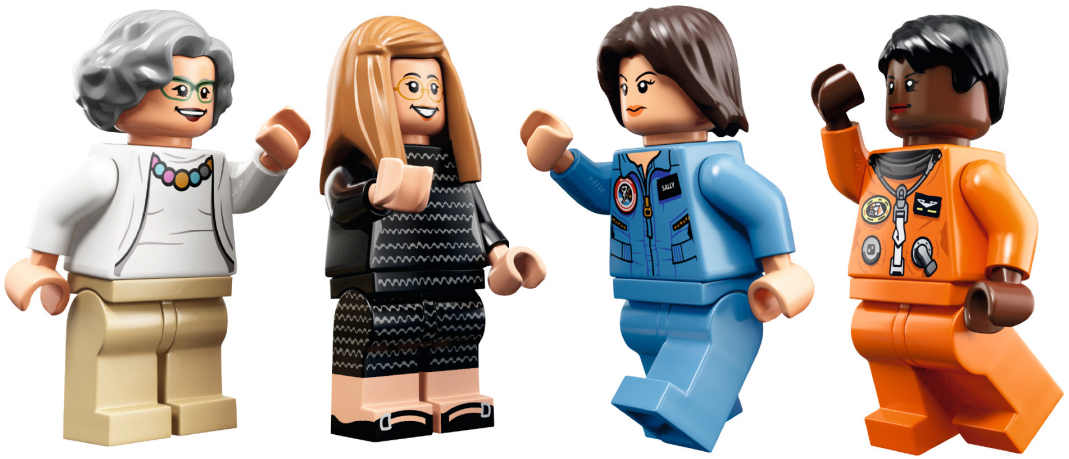
BRINGING IT ALL TOGETHER

SCIENCE MUSEUM

AUDIENCE SCENARIOS

2-3 minute interaction

- Opener/Hook
- Introduce yourself
- Dialogue
  - ✓ Learning outcomes
  - ✓ Ask questions
- Close it down



SCIENCE MUSEUM

TO THINK ABOUT

- Who is your target audience?
- What do they know?
- Why should they care?
- Science engagement reflection tool (language, relevant examples etc.)

SCIENCE MUSEUM

karen.davies
beth.hawkins
katherine.davis
micol.molinari

@sciencemuseum.ac.uk

SCIENCE
MUSEUM