

# Underneath the Ice

NUSTEM Workshop Teacher's Guide



## Overview

Based on the research of our academics at Northumbria University, students in this session will become ice core scientists. These scientists use the gases trapped in ancient ice to discover how the climate has changed in the past and to predict how the climate will change in the future. They will then use poetry as a creative way of sharing their learning.



Curious      organised      passionate

## Supporting the Workshop

NUSTEM workshops are at their best when actively supported by the classroom teacher. Your knowledge of the children allows us to get the best from the activities and resources we've created. You can support us by:

- Actively engaging with the workshop
- Taking a lead role in behaviour management
- Providing support to any children who might find the workshop challenging
- Praising children when they show the three workshop attributes

## The NUSTEM Approach

NUSTEM is an outreach and research group based at Northumbria University. We believe that STEM should be accessible to everyone, for study and for pleasure, from early years, through school, to employment, and beyond. We support children, with the help of their families and teachers, to feel more confident that a career in STEM is for 'people like them'.



Start working with families and children from a young age.



Use attributes of people working in STEM to help children to see what they have in common with them.



Show parents and carers the **different routes into STEM** careers.



**Support teachers** to include careers in their subject lessons. **Showcase local opportunities.**

## Session Logistics

This is a two part workshop. In the first part, children will investigate ice cores and discover what it is like to work in the Antarctic. During the second part of the session, students will discover how poet Katrina Porteus interprets the work done by researchers at the university to create her poetry. The children will then write poetry to express what they have learned, how they feel about visiting Antarctica and the effects of climate change to their audience.

## Extending the Learning

For this workshop you could:

- Perform the poems and share them in an assembly or with parents
- Explore our Underneath the Ice resources on our website at [nustem.uk/underneath-the-ice](http://nustem.uk/underneath-the-ice)