





Waves

(sound waves)



 210 Year 8 students

Objectives

-  Increase student's science capital through engagement with employers
-  Students apply learning from waves topic to healthcare and animal conservation professions
-  Students learn how auditory range of humans and animals differ
-  Students understand that sound needs a medium to travel, is longitudinal and can be detected by microphone diaphragm and the ear drum

Learning activity

Waves topic learning in school lessons

Students develop knowledge of waves including sound waves in their science lessons

Face to Face Employer Insight Sessions

Over the course of a morning off timetable, students engage in sessions with key employees from healthcare and animal conservation and in practical activities exploring the applications of sound waves in contrasting sectors. Employers highlight the importance of science and how learning from physics lessons links to their roles.




Q&A Opportunities

Students asked employers questions to find out more about their work with sound waves in their job roles and how physics can support progression into a range of careers in different sectors

Long term relationships

Sustainable relationships developed between school and businesses create follow up opportunities for students to visit and work with companies more closely e.g. work experience placements and visits.

Outcomes

-  93% of students enjoyed the encounter with the NHS and GE Healthcare and Northumberland Wildlife Trust
-  82% of students felt the sessions helped them to understand the importance of science in the world of work
-  79% of students felt the sessions helped them to learn about new roles in STEM

Feedback

- "Engaging through the curriculum enables my work to be relevant and timely to what young people are studying. Whether water sampling in geography or echolocation in physics, nature and wildlife can play a role in every school subject. It is so important that young people see the real-world applications of what they study in the classroom."

Northumberland Wildlife Trust
- "It was great for the students to get some real-world experience of the science they study in school. Getting to use the ultrasound scanner and bat detectors was brilliant and really enthused the students."

St Benet Biscop Catholic Academy
- "The sessions with the NHS and GE Healthcare and Northumberland Wildlife Trust have helped me to understand the importance of science in the world of work and everyday life."

Student