

# Wonderstruck Presents...

# The Super Sonic Sideshow

## What's it about?

The Supersonic Sideshow investigates the link between vibration and sound, the properties of sound waves and how we visualise sound. Along the way we explore how sounds can be made by different devices including springs, a didgeridoo, a Theremin and a jet engine.

We also look at the effects of sound; sending a shockwave into the audience, making a sonic boom and smashing a wine glass with high intensity sound!

## Who's it for?

KS3 and upwards. We talk quite a bit about things like frequency and wavelength in this show so it's best for older students.



**WONDERSTRUCK**  
SCIENCE ON FIRE



'That was

# LOUD!'

KS3 Student

## Show Requirements

We usually perform our shows in halls or sports halls as we need at least 3 metres floor to ceiling height. The performance space needs to be approximately 5 metres wide and 4 metres deep with a 2 metre safety space between that and the audience. **Any smoke alarms or heat detectors in the hall or adjoining areas into which smoke might drift must be disabled for the duration of the show.**

## The Science

The STEM content of the show is wide ranging but the main topics covered are:

- Wavelength, frequency and amplitude
- Longitudinal and transverse waves
- The speed of sound in different materials
- Sonic booms
- Resonance

We can differentiate content according to age group from KS3 upwards upwards.

## Duration

For schools, we typically run a one hour show with a maximum of three shows in a day.

Great demos!

I've never seen a wineglass smashed with sound in real life before.'

KS3 Science Teacher



**[www.wonderstruck.co.uk](http://www.wonderstruck.co.uk)**

T: 0845 5193 325

E: [enquiries@wonderstruck.co.uk](mailto:enquiries@wonderstruck.co.uk)

 [facebook.com/wonderstruckwow](https://facebook.com/wonderstruckwow)

 [youtube.com/wonderstruckwow](https://youtube.com/wonderstruckwow)

Wonderstruck Ltd. Brandize Hill Farm, Petrockstowe, Devon. EX20 3HW.  
Registered in England 657 7857 | VAT Registration Number 883 3214 22