



Adventures in Science and Sound for Key Stage 2

Centrally Heated Knickers is a vibrant and exciting theatre show full of poetry, live music, physical theatre and fun. It asks lots of life's important questions – where am I? how does this work? – and introduces a range of science themes.

Key themes:

- Sound – sound waves, vibrations, how do instruments make sound
- Ears and hearing – how do we hear sounds? How do ears work?

Secondary themes:

- Electricity – conductors and non-conductors
- Thermodynamics – why are my knickers getting hot!
- Reusing – instruments, puppets and props made from 'rubbish'
- Changing Materials – “the butter melted / the cheese went mouldy”, “my hot chippy breath / makes clouds in the air / and rain on the windows”
- Exploring and experimenting – Michael Rosen uses lots of trial and error to make sense of his surroundings and understand how things work

These themes are introduced through poetry, music and performance and can be explored in greater depth during post-show workshops or back in the classroom/home using the resources from our website www.CentrallyHeatedKnickers.co.uk.

Key Stage Two Science Curriculum Links:

SC4 Physical Processes

3 Light and Sound

VIBRATION AND SOUND

e. that sounds are made when objects [for example, strings on musical instruments] vibrate but that vibrations are not always directly visible

f. how to change the pitch and loudness of sounds produced by some vibrating objects [for example, a drum skin, a plucked string]

g. that vibrations from sound sources require a medium [for example, metal, wood, glass, air] through which to travel to the ear.

SC1: Ideas and evidence in Science

1a Pupils to understand that science is about thinking creatively to try to explain how living and non-living things work and to establish links between causes and effects

SC1: 2 Investigative Skills

SC3: Materials & Their Properties

1b some materials are better thermal insulators than others

1c some materials are better electrical conductors than others

2 changing materials

SC4 Physical Processes

1 Electricity

Simple circuits

a. to construct circuits, incorporating a battery or power supply and a range of switches, to make electrical devices work [for example, buzzers, motors]