



# Sound



Explain to someone in your household what sound is, how it is made, how it travels and how we hear it.



# Why might we want to stop sound travelling?

Have a think...



# Absorbing Sounds

If you lived near a noisy building site, or a busy nightclub, you would not want to hear the sounds of the machines or music! You would need to find a way to absorb the sounds so your house remained quiet and peaceful. This is called soundproofing. Maybe your neighbour plays the drums, or has their television too loud. You don't want to hear the sounds from their house! You may choose to soundproof your house, or ask them to soundproof their house.

Many people have noisy jobs and need to absorb sound. Tree surgeons wear ear defenders to absorb the sound of the chainsaws they use to chop down trees.



# How could we prevent sound travelling?



We are going to investigate how to make the best sound proofing.

You will need something that makes a sound...



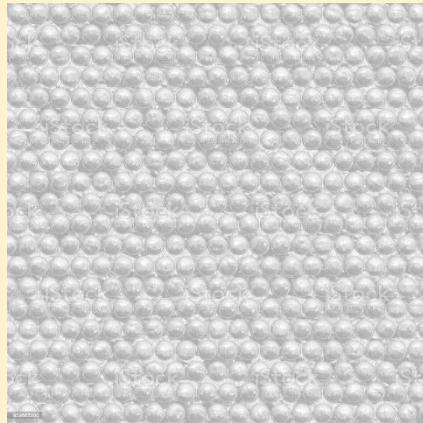
Phone playing music



Ticking clock

Next, you will need different materials  
you can find around the house.

Here are some examples... and anything you can find



Bubble wrap



Woollen jumper



Cotton towel



Cardboard box



Toilet paper

Wrap your clock/music in each item  
and see how far you can move away  
from it before the sound disappears  
altogether.



# Don't forget to make it a fair test!

## How to Plan a Fair Test

Cows

Change one thing

Moo

Measure something

Softly

Keep everything else the Same



Change one thing - the material

Measure something - the distance you have to move from the noise

Keep everything else the Same - the noise

Record your  
experiment on the  
investigation sheet  
(available on the school website)

Date: \_\_\_\_\_

Name: \_\_\_\_\_

WALT: I can investigate the best material to absorb sound.

We want to find out:

To carry out our test we will need:

My predictions:

Results:

Other materials that I think would muffle the sound well:

# Self-assess using smiley faces

