

The writing's on the walls...

In this activity you are going to explore the claims of a new insulation material called *Inno-Therm*.

InnoTHERM®
Recycled Cotton/Denim Insulation
www.inno-therm.com

Use key scientific words when describing your work



'Thermal conductor' 'Thermal insulator'
'Conduction' 'Temperature' 'Radiation'

What the makers claim about *Inno-Therm*...

'Easy to install/non-itch, low carbon, recycled acoustic & thermal natural fibre insulation. Non-toxic and will not cause allergic reactions.'



What does the term 'insulation material' mean?

In a group, study the process diagram on the worksheet. Discuss what you think is happening at each stage.



Testing the claim that Inno-Therm works as a thermal insulator

Your challenge is to design an experiment, to test if *Inno-Therm* works as an insulator. You will need to do the experiment and record data. Then use your data to make a graph that shows if it works as a thermal insulator. You can use these things along with the *Inno-Therm* material to help with your experiment.



Model house



Scissors & tape



Timer



Kettle



Thermometer or thermal probe



Small beakers

CAREFULLY BUILD THE MODEL HOUSE

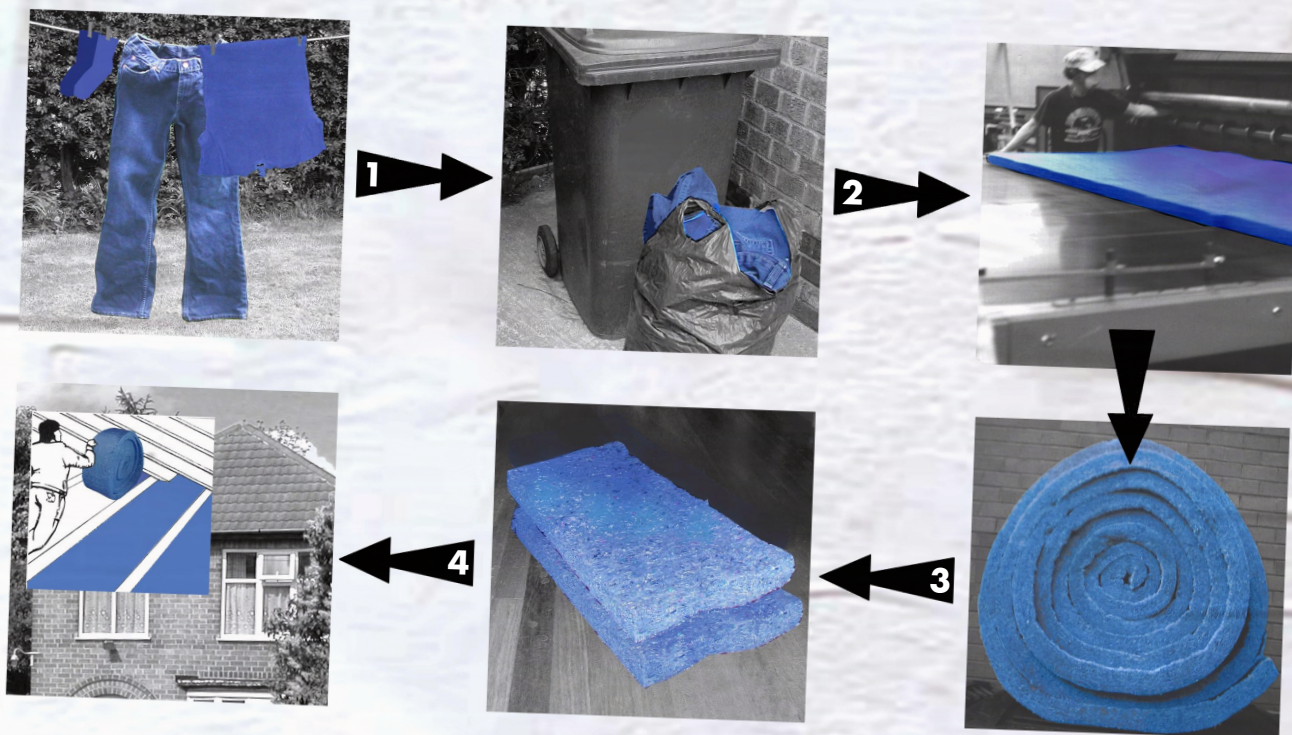
Use the information written on the house walls to help you with your tasks!



Worksheet

This is the process of making the Inno-Therm material.
Discuss what is happening at each of these stages.

'It's made from old jeans? Awesome!'



STAGE

WHAT IS HAPPENING?

1 →

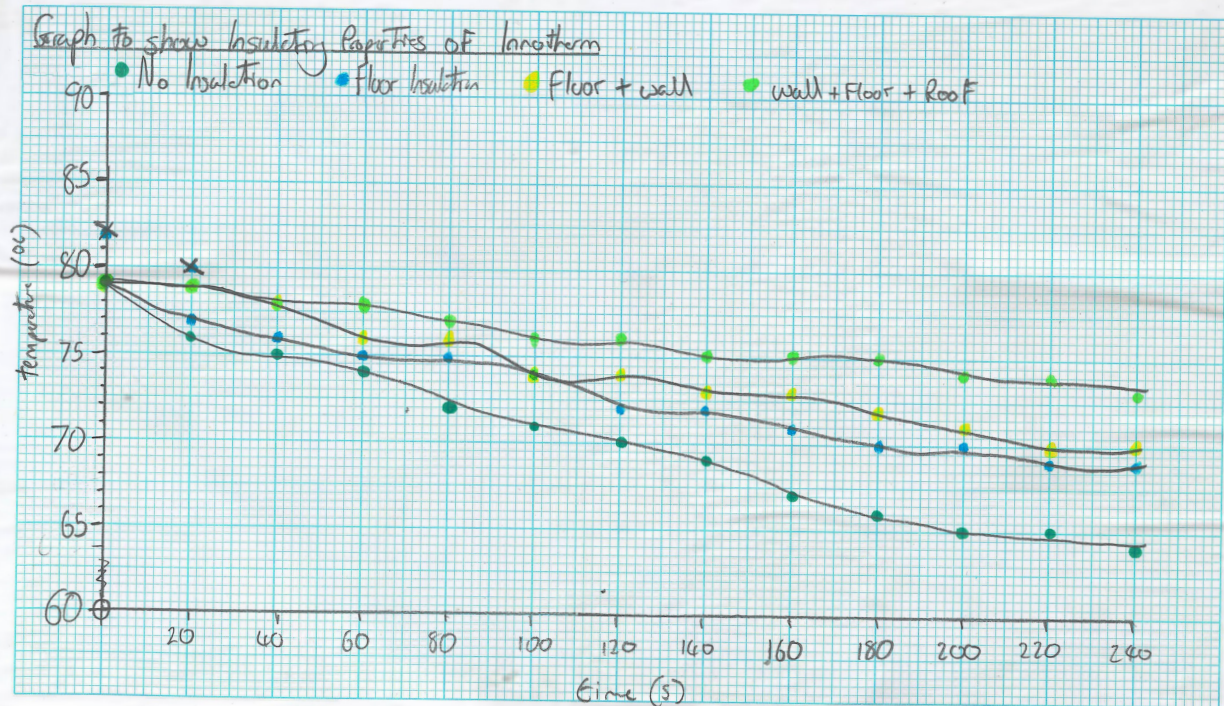
2 →

3 →

4 →

What you found out

Here are the results from another group of students for their insulation experiment. How do they compare with your own?



DESCRIBE WHAT THEIR RESULTS SHOW

EXPLAIN HOW INNO-THERM WORKS

...in terms of conduction, convection & radiation.

