

Thermal Insulators and Conductors





A material that is a good **thermal insulator** means that heat does not travel through it very well.



A material that is a good **thermal conductor** means that heat travels through it very well.



There are many objects that are made of materials that are good thermal insulators.



The hot water tank jacket keeps the water warm.



The tea cosy keeps the tea warm.



Gloves keep the hands warm.



The flask keeps the hot drink warm.

Duvets keep people warm at night.

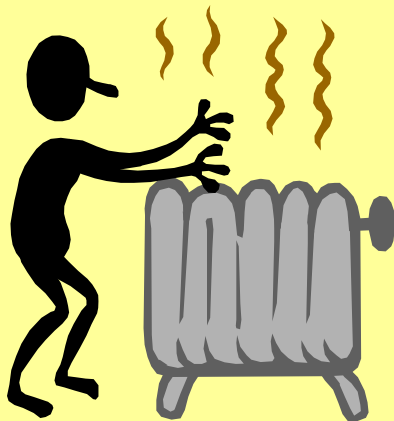
Jumpers help to keep people warm.

What materials do you think these objects are made of?

Examples of Thermal Conductors



The saucepan needs to be a thermal conductor so the food can cook.



The radiator needs to let the heat of the water pass through.



Tina decided to see if she could make hot tea cool down more slowly. She tried wrapping mugs of tea in different materials, and time how long they took to reach room temperature. Here are her results.

What do the results tell you?

