
Radiation and absorption

Investigating the amount of infrared radiation radiated from different surfaces.

In this practical you will:

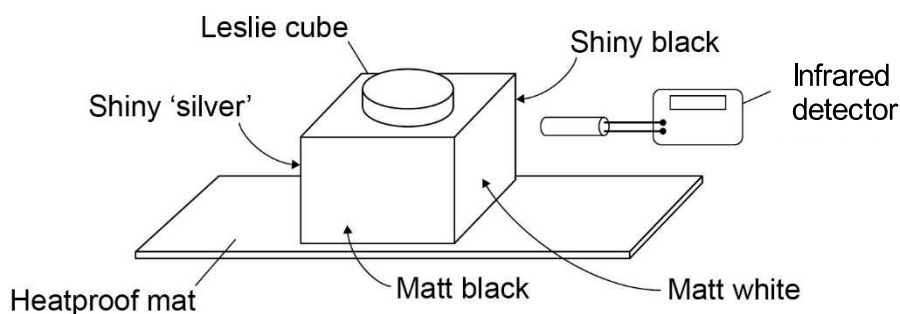
use a Leslie cube and infrared detector to compare the amount of infrared radiated from different surfaces: shiny black, matt black, shiny silver and matt white.

Apparatus

- a Leslie cube
- a kettle
- an infrared detector
- a heat-proof mat.

Method

1. Put the Leslie cube onto the heat-proof mat.
2. Fill the cube with very hot water and put the lid on the cube. Your apparatus should look like this:



3. Use the detector to measure the amount of infrared radiated from each surface.
Make sure that the detector is the same distance from each surface.

Task

Plot an appropriate chart to show the amount of infrared radiated by each type of surface and write a conclusion.