# Abstract

The investigation was carried out in order to find the amount of energy needed to maintain a small room in a family home at 22oC.

The process involved in carrying out the investigation was divided into the following steps:

1. Room selection - the selection of a suitable room in which to carry out the experiment.
2. Detailing and measuring of room - this involved getting dimensions and a floor plan of the room as well as documenting the material makeup of the walls, floor and ceiling.
3. Equations – equations where then used to measure the heat lost and gained by the room to its surroundings making a few assumptions, i.e. the energy input, to obtain calculations.
4. Graphing- the findings where then graphed to make interpretation of the data easier to understand.

After completing the investigation we found:

1. The room lost …… to the surrounding area, i.e. to the exterior of the building the upstairs etc.
2. That the largest contributor to heat loss was …….
3. That it takes a …….W radiator to maintain a constant temperature of 220C in the room.
4. Otherwise the room needed ……… of extra insulation to maintain a constant inside temperature of 220C.