



Draughts and Insulation Survey

A Draughts and Insulation Survey is a great way of examining the school to find out where heat loss may be occurring and energy is being wasted.

Equipment needed:

1. Paper and Pen
2. Draughts and Insulation Survey Form (next page)

From your findings, identify areas where improvements can be made, e.g. turning down the thermostat by one degree, ensuring windows and doors are closed to conserve heat, etc.



Students can:

- Record which doors/windows are left open regularly.
- Design simple experiments to identify draughty windows and doors.
- Design a simple questionnaire to investigate why people do/don't shut doors/windows.
- Input data into spreadsheets and charts.
- Record the type of window.
- Record the type of insulation on the hot water tanks and pipes. Insulation in walls, floors, and ceilings is harder to investigate and may be beyond the ability of students.
- Design experiments to investigate the insulation effect of double glazing.



Draughts and Insulation Survey Form

| | Yes/No | Comments | Future Actions |
|---|--------|--|----------------|
| Does everyone in the school ensure windows are closed when weather is cold and heating is on? | | This helps retain heat within rooms. | |
| Are window frames and glazing tight fitting? | | If not, excessive heat loss can occur. | |
| Are windows double glazed? | | Double glazing can be very expensive to install unless windows need replacing anyway. | |
| Are windows opened when it gets too hot in the classroom? | | This is not energy efficient. Can the heating be turned down in the room instead? | |
| Are curtains or blinds closed during cold winter nights? | | This helps retain heat within rooms. | |
| Are external doors draughtproofed? | | This prevents excessive ventilation. | |
| Are draught strips and seals intact? | | Fitting them is inexpensive. | |
| Do all outside doors close automatically? | | This prevents heat loss. | |
| Does everyone shut doors? | | This prevents heat loss. | |
| Are the floors carpeted? | | On solid floors, carpets reduce heat loss to the ground and on wooden floors, reduce draughts. | |