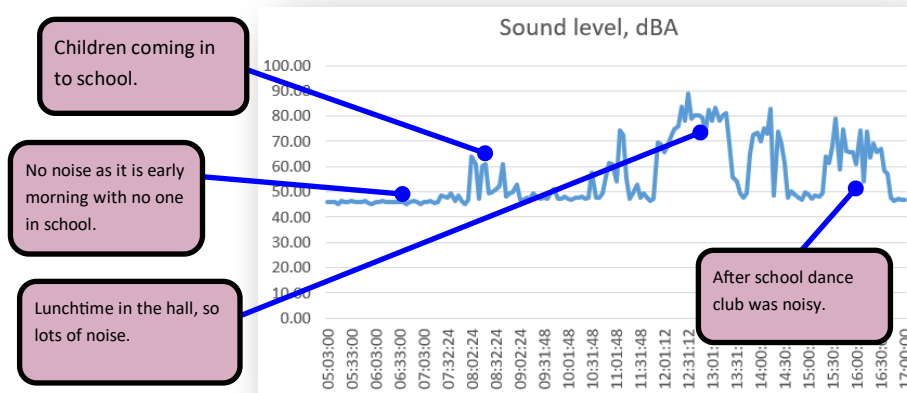# We are Environmentalists

Things you already know:
- Know how to create a basic graph using Excel.
- Know how to select data in a spreadsheet.

Knowledge you will gain:
- You will know what a data logger is and how it collects different types of data including LUX, decibels and Celsius.
- Learn the context of the measurements taken e.g. 70db might be the volume of a loud vacuum cleaner, 50db the volume of normal talking etc.
- Learn how to analyse the data, creating line graphs for continuous data and explaining what various points on the graph are telling you for example see below.
- Know how to change the look and feel of the graphs to make them both appealing and clear using contrasting colours that add rather than detract from the graph.

Sound level, dBA

Children coming in to school.

No noise as it is early morning with no one in school.

Lunchtime in the hall, so lots of noise.

After school dance club was noisy.

Vocabulary

Decibels: Measurement of sound often referred to as db range 0db =silent, 140db=jet engine

Lux: Measurement of light. 0=no light at all, 100,000=direct sunlight

Celsius: 0 $^{\circ}$c=freezing of water, 100 $^{\circ}$c=boiling water

Data logger: A device that has sensors to measure e.g. light, sound, heat and that can also save this data over a period of time.

Data: The numbers collected by the datalogger.

Information: The conclusions or generalisations that can be made by looking at the data.

Analyse: The process of gaining information from the data collected.

Annotate: To add notes to something, in this case we add notes to our graphs/charts.

Specific skills/understanding

Understanding of context-aware menus, where a different set of options appear depending on where they right click. Also where an item is selected a different ribbon/toolbar appears.

Ongoing skill set

Selecting large blocks of data by either column selection or using the shift key to click on the first and last item in a list. Resizing and dragging to move graphs and items within the graph.