Year 4 – Data Logging

Data is collected for a reason.
Data is collected by scientists, governments, businesses, schools and many other organisations.
Data is collected to answer questions.
Questions might start with **when** or **how long...**

This table shows us **data gathered over time**. This helps us to spot patterns and make connections.

title → Weather

Day	Summary	Temperature (°C)	Rainfall (mm)
Sunday	Sunny	21	0
Monday	Partly cloudy	17	0
Tuesday	Overcast	16	2
Wednesday	Overcast	15	1
Thursday	Partly cloudy	16	0
Friday	Sunny	20	0
Saturday	Sunny	22	0

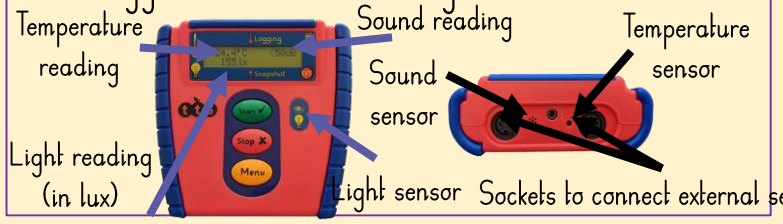
column → Day
row → Sunday
data headings → Day, Summary, Temperature (°C), Rainfall (mm)
inputted data → Sunny, 21, 0

Computers can have **input devices** that are **sensors**. A **microphone** can be a **sensor** when it's connected to a computer. Some **devices** have an inbuilt **microphone** that cannot be seen as easily.

This is a data logger.

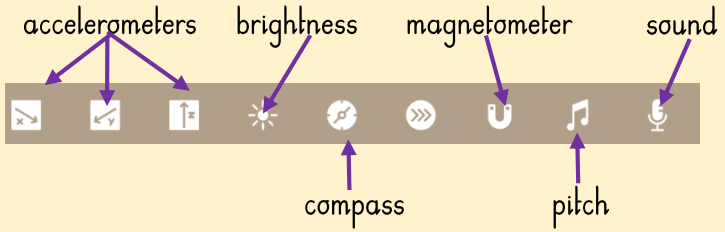
- It has sensors
- It can record data
- It can be connected to a computer.

There is a range of sensors that can be used for data logging.
Data loggers can be left to record data on their own.
The data can be downloaded later.
Data loggers record data at regular intervals.



ARDUINO SCIENCE JOURNAL

The **Arduino Science Journal** is an app that acts as a data logger.
It can collect data in lots of areas:

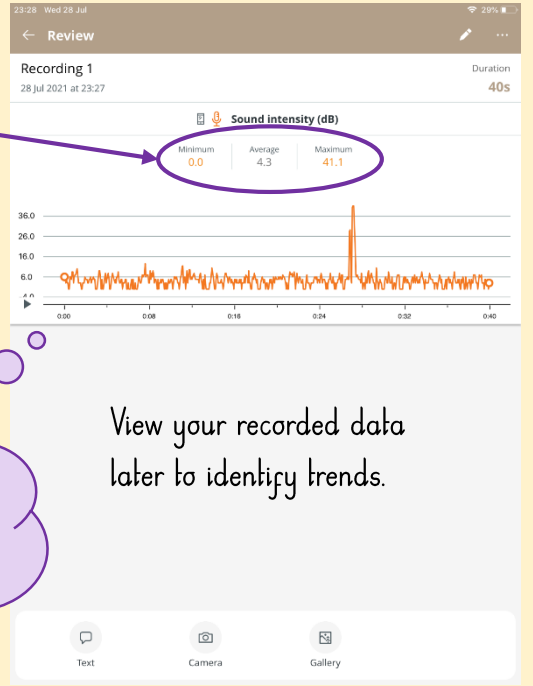


When planning your data collection, you must consider:

- Where does the data logger need to be placed?
- How does the data logger need to be set up?
- How long will you collect your data for?

Is it switched on?
Is it recording?
Is there anything in the way of the sensors?

Key highlights of your recorded data



View your recorded data later to identify trends.