

## Computing

## Data & Information – Data Logging

## Year 4

## Spring 2

### Key Knowledge

To explain that data gathered over time can be used to answer questions	<ul style="list-style-type: none"> <li>I can choose a data set to answer a given question</li> <li>I can identify data that can be gathered over time</li> <li>I can suggest questions that can be answered using a given data set</li> </ul>
To use a digital device to collect data automatically	<ul style="list-style-type: none"> <li>I can explain that sensors are input devices</li> <li>I can identify that data from sensors can be recorded</li> <li>I can use data from a sensor to answer a given question</li> </ul>
To explain that a data logger collects 'data points' from sensors over time	<ul style="list-style-type: none"> <li>I can identify a suitable place to collect data</li> <li>I can identify the intervals used to collect data</li> <li>I can talk about the data that I have captured</li> </ul>
To use data collected over a long duration to find information	<ul style="list-style-type: none"> <li>I can import a data set</li> <li>I can use a computer program to sort data</li> <li>I can use a computer to view data in different ways</li> </ul>
To identify the data needed to answer questions	<ul style="list-style-type: none"> <li>I can plan how to collect data using a data logger</li> <li>I can propose a question that can be answered using logged data</li> <li>I can use a data logger to collect data</li> </ul>
To use collected data to answer questions	<ul style="list-style-type: none"> <li>I can draw conclusions from the data that I have collected</li> <li>I can explain the benefits of using a data logger</li> <li>I can interpret data that has been collected using a data logger</li> </ul>

### Statutory requirements

- Use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

### Key vocabulary

Spelling	Definition
Data Set	An <b>organised collection</b> of data.
Sensor	A device which <b>detects</b> or <b>measures</b> a physical property and records, indicates, or otherwise responds to it.
Input Device	An input device is a <b>physical piece of hardware</b> that connects to a computer and is used to enter information.
Output Device	An output device is any hardware device used to <b>send data</b> from a computer to another device.
Data Logger	A data logger is an instrument that <b>monitors</b> and <b>records</b> changes in conditions over time.

### Possible experiences

- Do your own data logging experiment using an iPad or create your own data log using information online e.g. weather patterns.
- Learn more about Input and Output devices by watching more on BBC Bitesize; [Input and output - BBC Teach](#)
- Research which careers you may need to use data logging in.



Automatic Data Logger