



**Computing**

**Year 4**

**Term 4**

**Using Data: Data Logging**

**Key Question: How can data be collected over time?**

**National Curriculum Objectives:**

- 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

**Vocabulary**

Data, table, layout, input device, sensor, data logger, logging, logged, collection, data point, interval, analyse, data set, import, export, review, conclusion

**Prior Learning:**

- The children have learnt about input and output devices in Year 3 Term 1 and Year 4 Term 1 units of work.
- The children have previously used branching tree databases (Y3) and pictograms (Y2) to manage data. This unit builds on the concept of posing and answering questions which was introduced in these previous units.

**End Point:**

The children will plan their own data logging activity. They will choose what they want to investigate, set up the data logger to record and analyse the data collected.  
End of unit quiz

**Safe and Responsible Use:**

use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

**Digital Literacy Skills:**

- Load previously stored files/data
- Recognise icons
- Navigate new software
- Use various types of hardware and software.

**Knowledge:**

I know:

- That data can be logged over time
- that data gathered over time can be used to answer questions
- that sensors are input devices
- that a data logger captures 'data points' from sensors over time
- that there are different ways to view data
- the benefits of using a data logger

**Skills:**

I can:

- identify data that can be gathered over time
- suggest questions that can be answered using a table of data
- use a digital device to collect data automatically
- choose where and how often to automatically collect data samples
- sort data to find information
- use a set of logged data to find information and answer questions.
- use a computer program to sort data by one attribute
- export information in different formats

**Cross Curricular Links:**

Science -

- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.
- They should learn how to use new equipment, such as data loggers, appropriately. They should collect data from their own observations and measurements, using notes, simple tables and standard units, and help to make decisions about how to record and analyse this data.

**Oracy:**

**Key Questions:**

1. What should you do when someone uses mean or scary language on the Internet?
2. What data can be collected?
3. How can data be collected?
4. How do data loggers work?
5. How is data collected from a data logger analysed?
6. How do I set up my own data logging activity?
7. How do I review the data I have collected?