



Year: 4

Subject: Computing

Title:

Data Loggers

What key knowledge do I need to have before this unit?

- This unit progresses learners' knowledge and understanding of data and how it can be collected over time to answer questions.
- It builds on the concept of answering questions with data which is first introduced in the KS1 data and information units.

Key outcomes:

What I need to know by the end of this unit of work:

1. To explain that data gathered over time can be used to answer questions
2. To use a digital device to collect data automatically
3. To explain that a data logger collects 'data points' from sensors over time
4. To recognise how a computer can help us analyse data
5. To identify the data needed to answer questions
6. To use data from sensors to answer questions

Key knowledge:

Data loggers have built-in sensors for light, temperature, and sound, as well as the option to connect external sensors.

Keyboards, mice, and microphones are all input devices.

Sensors can be connected to a computer to capture data about temperature, light, sound, humidity, pressure, etc.

Data loggers capture data at given time intervals. The interval is a regular time period between each data capture and can vary according to the experiment. For example, if data is being logged for a week, the interval might be every hour.

Key Vocabulary and definitions

- **Data logger** - a digital device that can collect data over time and store it
- **Input devices** - allow data to be entered into a computer
- **Sensor** - a type of input designed to allow computers to capture data from the physical environment
- **Microphone** – a sound sensor that can be used to record audio into a computer