Key Knowledge

Overview

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Data Logging

-Data is raw numbers and figures. Information is what we can understand from analysing data.

-There are lots of different ways that we can collect, log and interpret data, including by using data loggers.

-Data loggers and logging software can be used to automatically capture data. We can then draw conclusions in answer to our research questions.

Data Recording

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-One way for us to record data is by writing it down. Some data loggers can also record data themselves, which we can download later. Computers can also help us to record data, e.g. by connecting our data loggers to computers and opening data logging software.

-An advantage of this is that computers can record data automatically, meaning that someone does not need to sit waiting for a long period of time. Data loggers can be set to measure at different intervals (points in time).

-Data logger software can also be used to show different charts and graphs. This can save the user a lot of time!

Key Vocabulary

Spelling	Definition/Sentence
data	Data is raw numbers or figures
data logger	A device used to collect data
sensor	A device that responds to a physical stimulus (such as heat, light, sound, pressure, magnetism, or a particular motion)

Data Collection

Asking Questions: Data gathered over time can be used to answer important questions. For example, the class register can be used to answer questions about children's attendance. Before collecting data, we need to carefully consider which questions we are trying to answer.

-Sensors: Our senses (sight, hearing, smell, taste, touch) detect things in our environment. Computers have input device sensors which help them to sense things.

Some examples are:

-Microphones (sound)

-Camera (light)

-Touchscreen (touch)

- Data Loggers: Data loggers have sensors built into them. They can be used to detect and record data.

Data loggers often contain:

-A heat sensor (to record the temperature)

-A light sensor (to record brightness)

-A sound sensor (to record the noise).