

Year 4 Summer 2 – Data Handling



Big Question

Can I be a weather forecaster?

Key Vocabulary for the unit:

Algorithm: A sequence of instructions which, when followed, solve a problem.

Automated machine: Works without the need for human interaction, after being programmed to carry out a specific job.

Calculate: To use mathematics to discover, prove or solve something.

Climate: The weather conditions you would normally expect in a location.

Device: Equipment created for a certain purpose or job.

Forecast: To predict what might happen or occur as the result of something in the future (for example, weather forecasts).

Log data: A record of information that has been collected by a person or a computer, while monitoring something.

Predict: To make an educated guess, as to what might happen or occur as the result of something in the future.

Record: To log information in the present (for example data during a science experiment), to look back on it in the future.

Sensor: A tool or device that is designed to monitor, detect and respond to changes for a specific purpose, such as a smoke alarm, which will ring if smoke is detected in the air.

Source: Where something comes from, for example milk is a source of calcium.

Spreadsheet: A file where you can input, sort and analyse data across a series of cells.

Temperature: How hot or cold something is.

Weather: The current condition of the atmosphere around the world, such as the temperature, rain, wind, clouds and sunshine

Powerful knowledge/skills for this unit:

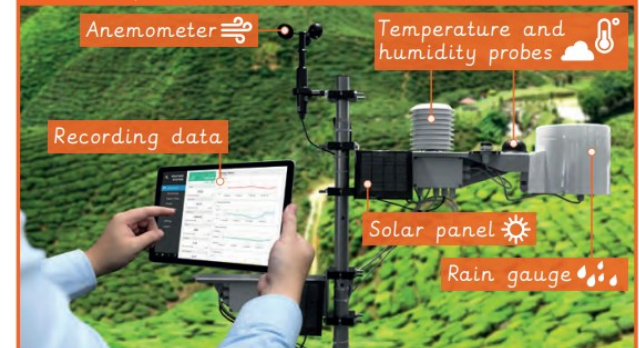
- ◆ To know that computers can use different forms of input to sense the world around them so that they can record and respond to data ('sensor data').
- ◆ To know that a weather machine is an automated machine that respond to sensor data.
- ◆ To understand that weather forecasters use specific language, expression and pre-prepared scripts to help create weather forecast films

What I should already know from Year 3:

- ◆ To know that a database is a collection of data stored in a logical, structured and orderly manner.
- ◆ To know that computer databases can be useful for sorting and filtering data.
- ◆ To know that different visual representations of data can be made on a computer.

Useful diagrams for the unit:

A weather station uses a system of sensors to monitor the atmosphere:



Weather satellites collect and send data back down to Earth, after monitoring the atmosphere from space.



