

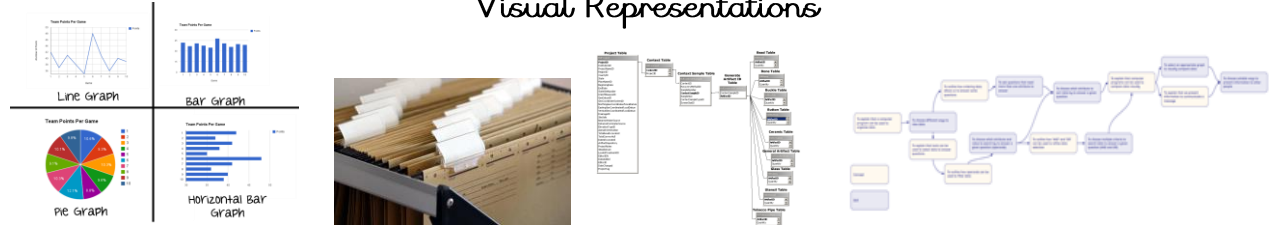
# Data and information - Flat-file databases

Key Question/What will I learn by the end?

## Lesson sequence

- Creating a paper based database.
- Computer databases
- Using a database
- Using search tools
- Comparing data visually
- Databases in real life

## Visual Representations



## Cross-curricular Links

Homework - to use Google Classroom to access the home learning.

Maths - data handling

## Concept Links/Prior Knowledge

- Visual presenting techniques
- Formula
- YR1- Know that the order of instructions in an algorithm is important.
  - Know how to debug an error in a simple algorithm or program.
- YR4- Know how to use algorithms for coding and programming
  - Know how to develop databases and sort the data according to different criteria.

## Sticky Learning

### New Knowledge

Know that there are other ways to search for information (ex: search engines) and retrieve information from these  
 Know what a spreadsheet is and how to create one using Excel  
 Know that spreadsheets require formulas that ends in a result which can be transferred to a graph  
 Know that complex algorithms can have multiple errors that need debugging  
 To know how to read a complex program  
 To know how a particular algorithm works  
 To know how to detect (using logical reasoning) a bug and debug that problem in a program

### New Skills

Use key words and phrases when searching information on a search engine  
 Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content  
 Begin to input data and formulas into a spreadsheet  
 Detect and correct errors in complex algorithms

## Vocabulary

Formula; data; Debugging; Sequencing; Storing; saving and retrieving; work; Giving precise instructions; Algorithms; Logic; Debug; Programmes

**Stored (data)** - Data kept digitally, so that it can be accessed by a computer.

**Variable**- A named piece of data (often a number or text) stored in a computer's memory, which can be accessed and changed by a computer program.

**Attribute**- A word or phrase that can be used to describe an object such as its size, colour or price.

**Operands**-the part of computer instruction that specifies data that is to be manipulated.

## Computer Safety

- To know how to recognise malicious behaviour
- Know how to respond to malicious behaviour on the internet by reporting to an adult, website, IS provider, police, childline, CEOP
- To know which websites are safe to do searches on
- To know how to use the internet safely and securely by keeping their personal details confidential and reporting any suspicious online activity
- To know that anything I share online will stay there to be seen and used by others
- To report unsafe sites or content to an adult.