



Innovation

Subject: Computing

Year group: 3

Term: Autumn Term

Unit name: Branching Databases (Use Purple Mash Unit 3.6)

Big idea: Learners will develop their understanding of what a branching database is and how to create one. They will gain an understanding of what attributes are and how to use them to sort groups of objects by using yes/no questions. The learners will create physical and on-screen branching databases. Finally, they will evaluate the effectiveness of branching databases and will decide what types of data should be presented as a branching database.

Progression of skills :

The children are already used to using 2Simple software from their KS1 units. In **Year 3**, children build on their learning from the pictogram unit and start to organise data according to yes/no criteria. Children will use **2 Question**.

Children can choose a suitable topic for a branching database. • Children can select and save appropriate images. • Children can create a branching database. • Children know how to use and debug their own and others branching databases.

Prior learning:

Year 1- Grouping and sorting data

In **Year 1**, the children have the opportunity to group and sort data and objects practically. They are introduced to data handling as a concept through their mathematics.

Year 2- Pictograms

In **Year 2**, the children have had the opportunity to sort and group data using 2data and the Purple Mash Pictogram unit. They will be aware of categories and presenting their own data.

Vocabulary:- Attribute, value, questions, table, objects, Branching database, database, value, questions, objects, equal, even, separate, j2data, pictogram, compare, information, decision tree

Key Learning assessment statements:

To sort objects using just 'yes' or 'no'

To complete a branching database using 2question .

To create a branching database of the children's choice.

National Curriculum links :

- 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.
- design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

Future learning:

Year 3 Branching Data Bases.

In **Year 3**, children build on their learning from this unit and start to organise data according to yes/no criteria. Children will use **2 Question**.

Year 6 Spreadsheets.

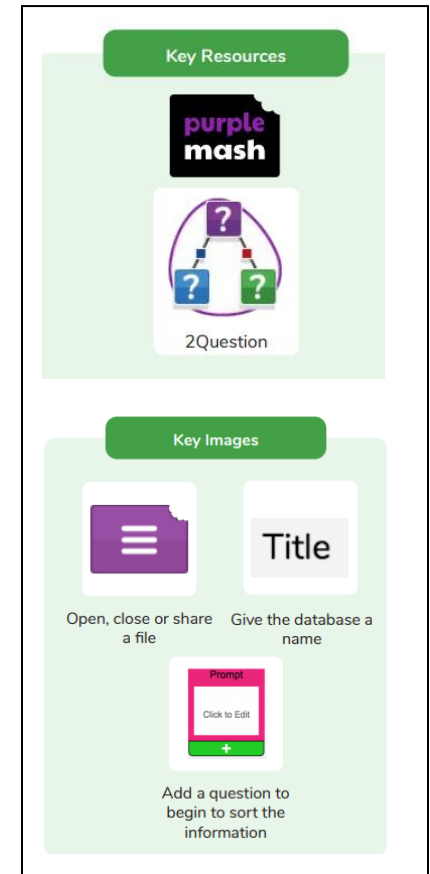
In **Year 6**, children progress from organising data on 2 Simple software to manipulating and inputting data using **Microsoft or Google Suite spreadsheet software**. This includes looking at simple formulas and cell value. They use this software in readiness for secondary school.

Implementation:

Children will use the 2Question software on Purple Mash. There activities will be set as 2Dos and they will save their work on the platform. Questions posed can be linked to cross curricular topics such as Stone Age- Iron Age in History.

Key information:

- A branching database is sometimes referred to as a 'binary tree' or a 'key'.
- Branching databases classify groups of objects.
- If you have created your branching database correctly, someone else should be able to use it to identify an object that they have in front of them, e.g., to find out the name of an insect, a fruit or vegetable by using a series of simple questions and yes/no answers.



The screenshot shows the Purple Mash interface. At the top, there is a green button labeled 'Key Resources'. Below it, the 'purple mash' logo is displayed. Underneath the logo is a diagram of a branching database with three nodes, each containing a question mark, and the text '2Question' below it. Below this is another green button labeled 'Key Images'. Underneath, there are two icons: a purple folder icon with a white menu icon, and a white box with the text 'Title'. Below these icons are two instructions: 'Open, close or share a file' and 'Give the database a name'. Below these instructions is a red box with the text 'Prompt' and 'Click to Edit', and a green plus sign icon. Below this is the instruction 'Add a question to begin to sort the information'.

Spiritual Development

Computing allows children to reflect on the awe and wonder of the achievements and possibilities of ICT in a modern world. They think about the limitless opportunities that could be achieved thus promoting their sense of self and motivation. Exodus 15:11: And amazement seized them all, and they glorified God and were filled with awe, saying, "We have seen extraordinary things today."