Enriching lives every day; enabling our school community to learn, achieve and flourish through living 'life in all its fullness'

St Peter's Bratton Church of England Academy

St Chad's Academies Trust

Innovation

Subject: Computing

Year group: 2

Term: Autumn Term

Unit name: Pictograms (Unit 1:3 Purple Mash linked to the NCCE unit)

Vocabulary:- More than, less than, most, least, organise, data, object, tally chart, votes, total, Pictogram, enter, compare, objects, count, more common, least common, attribute and group.

Big idea:

This unit introduces the learners to the term 'data'. Learners will begin to understand what data means and how this can be collected in the form of a tally chart. They will learn the term 'attribute' and use this to help them organise data. They will then progress onto presenting data in the form of pictograms and finally block diagrams. Learners will use the data presented to answer questions

Children use the 2Simple software 2Count, 2DIY and 2Group and save their work on Purple Mash. Work will be set using the 2Do system.

Progression of skills :

The children are already used to using 2Simple software from their Year 1 units.

Tinkering on 2Count to acclimatise themselves with the capabilities of the program. To input data both as a tally and as images. They will organize and present data and be able to answer questions about their pictogram.

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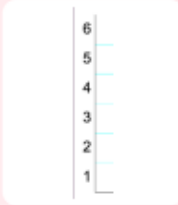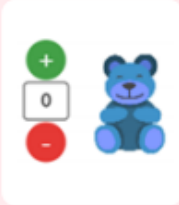**Year 1- Grouping and sorting data**
In **Year 1,** the children have the opportunity to group and sort data and objects practically. They are introduced to data handling as a concept through their mathematics.

Key Images

Open, Close and Share

Add or delete columns

Frequency

Add of delete objects from the Pictogram

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.

National Curriculum links :

- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- use logical reasoning to predict the behaviour of simple programs.
- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions

Key learning assessment statements:

- To learn about data handling tools that can give more information than pictograms.

• To use yes/no questions to separate information.

 • To construct a binary tree to identify items.

• To use 2Question (a binary tree database) to answer questions.

• To use a database to answer more complex search questions.

• To use the Search tool to find information

On unit completion they should be able to discuss with an adult how they can represent data using 2Count and their work should be available to view on their Purple Mash account.

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."

Key Resources

purple mash

2Connect

2Count