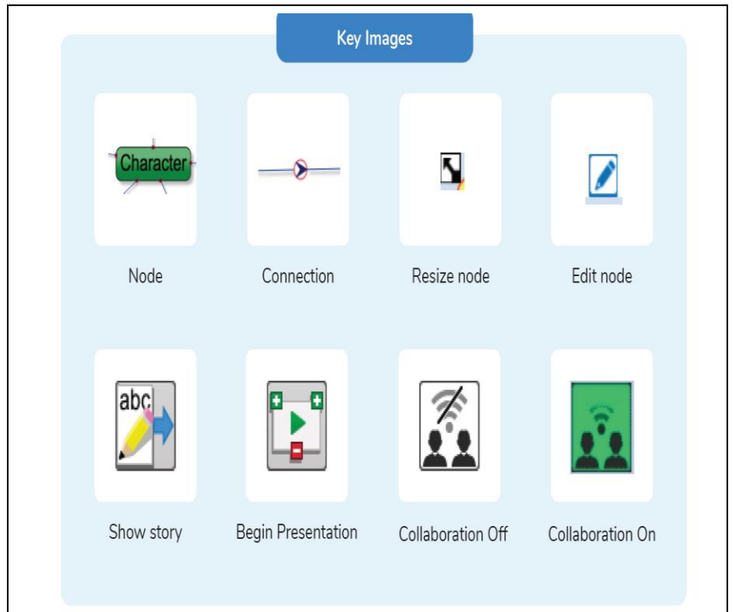
COMPUTING – YEAR 5/6 KNOWLEDGE ORGANISER

What I should already know:

-Design and write programs to achieve specific goals, including solving problems.
-Use logical reasoning.
-Understand computer networks.
-Collect and present data appropriately.
-Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.



What I will learn by the end of the units:

-To understand the need for visual representation when generating and discussing complex ideas.

-To understand the uses of a 'concept map'.

-To understand and use the correct vocabulary when creating a concept map.

-To create a concept map.

-To understand how a concept map can be used to retell stories and information.

-To create a collaborative concept map and present this to an audience.

What I will know by the end of the Key Stage:

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

Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.

Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.

Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

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.

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

My Skills and Knowledge that I will use from other subjects

Maths: Use my knowledge of reasoning, collecting and presenting data.

Literacy: I can use my reading and comprehension skills to further my knowledge of concept maps.

Science: Use my knowledge of observations and collecting data.

COMPUTING – YEAR 5/6 KNOWLEDGE ORGANISER

Key Vocabulary

Concept An idea in the form of a question.

Concept Map A tool for organising and representing knowledge. They form a web of ideas which are all interconnected.

Connection Represent a relationship or link between two nodes or ideas.

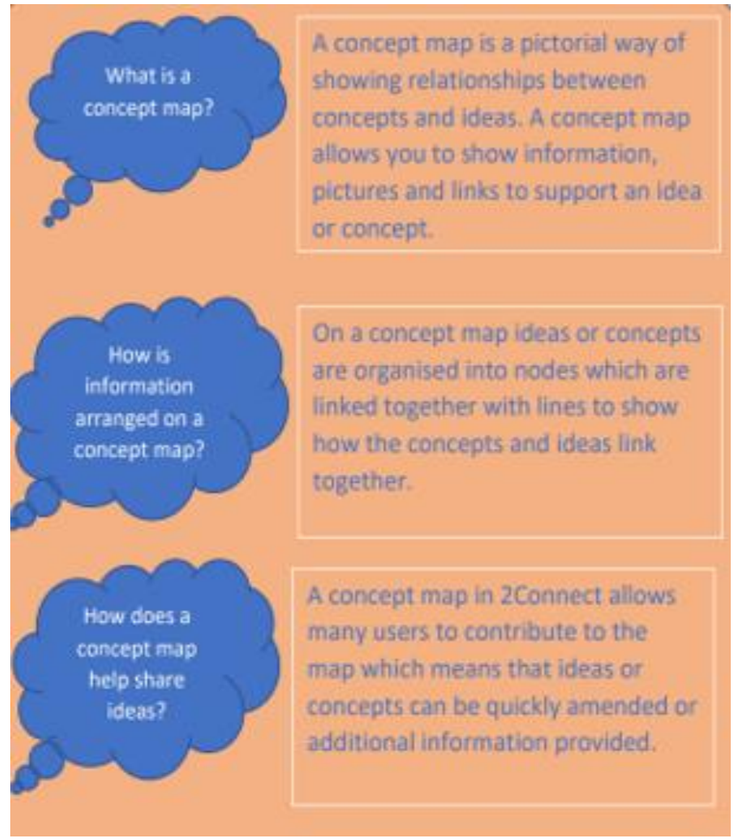
Collaborate Participating in an activity with more than one person working together.

Node A way to represent concepts or ideas. Can contain text and\or an image.

Presentation Mode A mode on 2Connect where nodes and connections are revealed gradually to be accompanied by a verbal presentation.

Story Mode A way to use a 2Connect concept map to create a piece of text.

KEY KNOWLEDGE:



Key Skills I will use and learn and use

I will explain how concept maps work.
I will analyse, evaluate and collect data.
I will respond and express my own ideas.
I will discuss and understand the principles and concepts of computer science.

Opportunities for teaching diversity, equality and expanding cultural capital:

A visit to a local museum of computing.
A visit to a local museum of computing.
Significant people – Computing pioneers embedded in subject journey.
E-safety champions
Internet Safety Day
Computing club

Key Computing Concepts

- Coding
- Information technology
- Data handling
- **Vocabulary**

Recall and Remember: Add information to your knowledge mind map regularly to help you to reflect on, and remember what you have learnt throughout the unit. At the end of the unit, work in a small group to create a fun quiz on purple mash for your friends to complete!