# Year 3 Multimedia Knowledge Map

**Expectations**

- I can create different effects with different technology tools.
- I can combine a mixture of text, graphics and sound to share my ideas and learning.
- I can use appropriate keyboard commands to amend text on my device, including making use of a spellchecker.
- I can evaluate my work and improve its effectiveness.
- I can use an appropriate tool to share my work online.

**Vocabulary** to use

**Animate/animation**
**App**
**Backspace**
**Clipart**
**Copy**
**Delete**
**Document**
**Edit**
**Enter**
**Folder**
**Font**
**Greenscreen**
**Image**
**Insert**
**Narration**
**Keyboard**
**Open**
**Photo(graph)**
**Print**
**Right click**
**Save**
**Select**
**Shift**
**Slides**
**Software**
**Sound**
**Space bar**
**Text**
**Video / Film**

***Vocabulary*** *to develop*

*Layout*
*Style*

**Skills**

- Use individual fingers to input text and use SHIFT key to type characters.
- Amend text by highlighting and using SELECT/DELETE and COPY/PASTE.
- Swap between letters and symbol input on a tablet
- Add shapes and word art to documents and presentations
- Navigate to save and retrieve files
- Use images saved to camera roll within a variety of Apps.
- Use Save and Save As on laptops and PCs.
- Copy and rename files to edit on tablets

**Expected prior learning**

- Save and open documents and images
- Increasing confidence to use keyboard including spacebar, enter and shift
- Knowledge of online tools to share learning
- Knowledge of software and apps to make images

**Cross curriculum context**

- English
- Capture learning in a topic
- Choose to use technology to present historical, geographical, religious, cultural, mathematical, or other learning

**Experiences**

- Create eBook with text, images and hyperlinks and sound
- Manipulate an image for effect
- Create a mood with sound
- Video *(and greenscreen)*
- Edit text within slides and documents
- Create a word cloud

**Concepts and understanding**

- Text, graphics, and sound can be combined to present ideas and learning
- Evaluating work can improve the effectiveness of outcomes

**Develop Computational thinking**

Expectations: Computational thinker model http://bit.ly/compthinkingSomerset

**Attitudes**
Comfortable making mistakes
Perseverance
Imagination
Collaboration

**Skills**
Pattern recognition
Decomposition
Algorithm design
Abstraction and generalisation

# Year 3 Programming Knowledge Map

**Expectations**

- I can break an open-ended problem up into smaller parts.
- I can put programming commands into a sequence to achieve a specific outcome.
- I keep testing my program and can recognise when I need to debug it.
- I can use repeat commands.
- I can describe the algorithm I will need for a simple task.
- I can detect a problem in an algorithm which could result in unsuccessful programming.

**Vocabulary** to use

| | |
|---|---|
| **Algorithm**<br>**Background**<br>**Block**<br>**Collaboration**<br>**Command**<br>**Debug**<br>**Imagine**<br>**Make mistakes**<br>**Movement**<br>**Pattern**<br>**Persevere**<br>**Repeat**<br>**Sequence** | **Sprite**<br>**Stage**<br>**Wait / Pause**<br>***Vocabulary** to develop*<br>*Control*<br>*Costume*<br>*Event*<br>*Forever*<br>*Implement*<br>*Input*<br>*Output*<br>*Rotation* |

**Skills**

- Connect peripheral devices using USB lead
- Use Save and Save As,
- Copy and rename files to edit
- Use repeat commands
- Continual testing of parts as a program is made
- Run parts of a program without a control block
- Add a control block when needed in a program
- Add sound to a program
- Add a background
- Change costume of a sprite
- Make and run a program for more than one sprite
- Use decomposition to identify parts of a problem
- Plan an algorithm for a specific outcome
- Debug a program

**Expected prior learning**

- Predict outcome of a short sequence of commands
- Debug a short sequence
- Use word algorithm for planning before making a short sequence to make something happen

**Cross curriculum context**

- English: participation in collaborative conversations, give well-structured descriptions; use pattern recognition and decomposition within spelling, word reading and structure of writing; algorithms when planning writing; abstraction to identify main ideas
- Maths: understanding of number, properties of shapes, problem solving

**Experiences**

- Guided exploration of Scratch blocks
- Prediction of outcomes of short sequences
- Use of block challenges to assess knowledge
- Think through an algorithm for a dance, RAG, and implement as a program
- Debug own and programs of others
- Investigate, modify, and make an interactive story
- Apply knowledge using other software / apps
- *Apply knowledge to program a physical object*

**Concepts and understanding**

- Use of 'Repeat' will make a program more efficient
- An algorithm can be implemented as a program
- A problem in an algorithm can lead to unsuccessful programming

**Develop Computational thinking**

Expectations: Computational thinker model http://bit.ly/compthinkingSomerset

**Attitudes**

Comfortable making mistakes
Perseverance
Imagination
Collaboration

**Skills**

Pattern recognition
Decomposition
Algorithm design
Abstraction and generalisation

# Year 3 Technology in our Lives Knowledge Map

**Expectations**

- I can save and retrieve work on the Internet, the school network, or my own device.
- I can talk about the parts of a computer.
- I can tell you ways to communicate with others online.
- I can describe the World Wide Web as the part of the Internet that contains websites.
- I can use search tools to find and use an appropriate website.
- I think about whether I can use images that I find online in my own work.

**Vocabulary** to use

**Communicate**
**Computing devices**
**email**
**Internet**
**QR Code**
**Search engine**
**Search result**
**World Wide Web**

***Vocabulary** to develop*

*Copyright*
*Filter*
*Reliability*
*Webpage*
*Website*

**Skills**

- Navigate public drive to save and retrieve files
- Charge and store devices appropriately
- Use an appropriate search engine eg Swiggle
- Ask relevant questions and identify key words
- Use + and – and ‘’ to filter results of a search
- Evaluate information online
- Talk about reliability of information
- Identify images that can be used in my work
- *Scan a QR code*
- *Create a QR code*
- Use an appropriate tool to communicate online
- Explain understanding of Internet and World Wide Web

**Expected prior learning**

- Supported to use appropriate search engine eg Swiggle
- Follow links/QR codes to websites
- Today’s technology helps us in different ways, including our learning
- Consider reliability of an image or simple text
- Consider similarities and differences between online and physical world

**Cross curriculum context**

- English: ask relevant questions, explain understanding of information, develop and order ideas, use spoken language, identify main ideas, write for different purposes
- Explore information for a topic
- Investigate information for historical, geographical, religious, cultural, mathematical or other learning

**Experiences**

- Find information on local computer
- Explanation of Internet and World Wide Web
- Identify an appropriate search engine
- Use an appropriate search engine to find information relevant to current topic
- Filter searches to efficiently find information
- *Create a QR code*
- *Communicate safely with others online*
- *Investigate reliability of information*

**Concepts and understanding**

- World wide web is one part of the Internet that includes websites
- Not all information online is reliable (or in books)
- Different search engines provide different results

**Develop Computational thinking**

Expectations: Computational thinker model http://bit.ly/compthinkingSomerset

**Attitudes**
Comfortable making mistakes
Perseverance
Imagination
Collaboration

**Skills**
Pattern recognition
Decomposition
Algorithm design
Abstraction and generalisation

# Year 3 Data Handling Knowledge Map

**Expectations**

- I can talk about the different ways data can be organised.
- I can search a ready-made database to answer questions.
- I can collect data help me answer a question.
- I can add to a database.
- I can make a branching database.
- I can use a data logger to monitor changes and can talk about the information collected.

**Vocabulary** to use

**Branching database**
**Chart**
**Collect**
**Database**
**Data logger**
**Decision tree**
**Graph**
**Investigate**
**Questions**
**Record**
**Results**
**Tally**
**Sort**
**Venn diagram**

***Vocabulary** to develop*

*Data*
*Information*
*Interpret*

**Skills**

- Connect peripheral devices using USB lead
- Use images saved to camera roll within a variety of Apps.
- Use Save and Save As on laptops and PCs.
- Use a datalogger or data logging app
- Take photographs
- Use appropriate apps and/or software to collect and record data
- Present data for others to understand
- Make decisions about data to be collected

**Expected prior learning**

- Use a decision tree / branching database
- Talk about data collected by other people
- See data / information presented in different ways
- Create a block graph
- Generate questions for an investigation

**Cross curriculum context**

- English: ask relevant questions, explain understanding of information, develop and order ideas, use spoken language to share learning
- Maths: Use appropriate software and apps to present and interpret data. Interpret data collected with data loggers..
- Investigate and represent information for scientific, geographical, mathematical or other learning

**Experiences**

- Explore different ways to represent data
- Explore a ready-made database
- Use a datalogger to investigate shadows around the school
- Collect, organise, and present data about the game's children play on electronic devices
- *Play Top Trumps and talk about the data used*
- *Use a branching database and database to sort information about animals*
- *Draw and interpret a graph about animals*
- *Investigate light in different parts of the school*

**Concepts and understanding**

- Data-loggers, or data logging apps, sense and record changes
- Data can be represented in different ways
- Different investigations may need data collected in different ways

**Develop Computational thinking**

Expectations: Computational thinker model http://bit.ly/compthinkingSomerset

**Attitudes**
Comfortable making mistakes
Perseverance
Imagination
Collaboration

**Skills**
Pattern recognition
Decomposition
Algorithm design
Abstraction and generalisation