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

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

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Attitudes

Comfortable making mistakes
Perseverance
Imagination
Collaboration

Skills

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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