Year 1 Multimedia Knowledge Map

Expectations	Vocabulary to use	Vocabulary to develop	Skills
• I can be creative with different technology tools. • I can use technology to create and present my ideas. • I can use the keyboard or a word bank on my device to enter text. • I can save information in a special place and retrieve it again.	**App** **Backspace** **Camera** **Delete** **Keyboard** **Photo(graph)** **Print** **Right click** **Sound** **Space bar** **Video**	*Animate* *Insert* *Open* *Save* *Shift*	• Use keyboard to enter text, find the letters of your name or basic spellings. (Encourage use of left and right hands.) • Use SHIFT/uppercase key for a capital letter. • Use SPACE BAR between words. • Open a document or other file • Open appropriate App • Add a picture to a document • Save work • Take a photo and open camera roll on a tablet • Create an image using pen tools • Use camera and video to capture learning

Expected prior learning	Cross curriculum context	Experiences
• Move objects on a screen • Make marks on a screen • Use photos, sound recording and video to show my learning • Make sounds with buttons in an app or with software	• English • Capture learning in a topic • Choose to use technology to present historical, geographical, religious, cultural, mathematical, or other learning	• Paint software or App • Take photographs • Enter text • Video *(and greenscreen)* • *Animate an object* • Record a sound • *Combine sounds to make music*

Concepts and understanding	Develop Computational thinking	
• Recognise text, sound, moving and still images • Work can be saved and opened again to make changes	**Attitudes** Comfortable making mistakes Perseverance Imagination Collaboration	Expectations: Computational thinker model http://bit.ly/compthinkingSomerset and Computational thinker younger learners' model http://bit.ly/compthinkingFS_KS1 **Skills** Pattern recognition Decomposition Algorithm design Abstraction and generalisation

Year 1 Technology in our Lives Knowledge Map

Expectations	Vocabulary to use	Vocabulary to develop	Skills
• I can give instructions to my friend and follow their instructions to move around. • I can describe what happens when I press buttons on a robot. • I can press the buttons in the correct order to make my robot do what I want. • I can describe what actions I will need to do to make something happen and begin to use the word algorithm. • I can begin to predict what will happen for a short sequence of instructions. • I can begin to use software/apps to create movement and patterns on a screen. • I can use the word debug when I correct mistakes when I program.	**Backward** **Button** **Clear** **Distance** **Floor robot** **Forward** **Go** **Mistake** **Move** **Pause** **Stop**	*Algorithm* *Command* *Debug* *Execute* *Instructions* *Predict* *Program* *Quarter turn / right-angle* *Run* *Turn left* *Turn right* *Sequence* *Wait*	• Listen to instruction • Follow forward, backward and turn instructions • Articulate forward, backward and turn instructions • Develop coordination and motor skills to operate a mouse or roller pad on a laptop or PC. • Use home button on a tablet • Open an app or software • Predict what will happen when buttons are pressed on floor robots or icons tapped on a screen • Say the word algorithm • Talk through a short sequence of actions to make something happen • Identify where something goes wrong in a short sequence

Expected prior learning	Cross curriculum context	Experiences
• Open ended play with floor robots or remote-control toys • Following verbal instructions • Move objects on a screen	• English: participation in collaborative conversations, give well-structured descriptions; use pattern recognition and decomposition within phonics; sequencing of events; algorithms when forming letters and digits • Maths: counting, movement, properties of shapes, problem solving	• Giving and receiving instructions BeeBot or other floor robot and screen programming activities • Guided exploration • Predict what a sequence will make happen • Plan a simple sequence • Debug sequences

Concepts and understanding

• A program is a sequence of commands
• Recognise buttons and icons will make something happen
• Debug when something doesn't happen as you want it to

Develop Computational thinking

Expectations: Computational thinker model http://bit.ly/compthinkingSomerset and Computational thinker younger learners' model http://bit.ly/compthinkingFS_KS1

Attitudes
Comfortable making mistakes
Perseverance
Imagination
Collaboration

Skills
Pattern recognition
Decomposition
Algorithm design
Abstraction and generalisation

Year 1 Technology in our Lives Knowledge Map

eLIM Support Services for Education — sse

Expectations	Vocabulary to use	Vocabulary to develop	Skills
• I can recognise the ways we use technology in our classroom. • I can recognise ways that technology is used in my home and community. • I can use links to websites to find information. • I can begin to identify some of the benefits of using technology.	**Search Technology / Computing device**	*Communicate* *QR Code* *Computing devices* *World Wide Web / Internet*	• Follow a hyperlinked image to a website using a laptop or PC OR QR code OR Home screen link on tablet • Tell a trusted adult if something unexpected happens when exploring an information site • Collect ideas • Take photos • Sort photos • Articulate answers • Give explanations • Participate in discussion

Expected prior learning	Cross curriculum context	Experiences
• Guided exploration of information sites • Conversations with experts online • Shared experiences of communicating with others within and outside their school	• English: ask relevant questions, explain understanding of information, develop and order ideas, use spoken language, sequence sentences to share learning • Explore information for a topic • Investigate information for historical, geographical, religious, cultural, mathematical or other learning	• Find technology around the school • Sort technology • Investigate technology at home • Talk about experiences of using technology • Explore a website identified by trusted adult • *Use Google Earth to explore locality* • *Shared video communication with another class*

Concepts and understanding

- Today's technology devices help us in different ways
- Today's technology can help us with our learning
- Trusted adults will identify safe and useful websites for us to explore

Develop Computational thinking

Expectations: Computational thinker model http://bit.ly/compthinkingSomerset and Computational thinker younger learners' model http://bit.ly/compthinkingFS_KS1

Attitudes
Comfortable making mistakes
Perseverance
Imagination
Collaboration

Skills
Pattern recognition
Decomposition
Algorithm design
Abstraction and generalisation

Year 1 Data Handling Knowledge Map

Expectations	Vocabulary to use	Vocabulary to develop	Skills
• I can talk about the different ways in which information can be shown. • I can use technology to collect information, including photos, video and sound. • I can sort different kinds of information and present it to others. • I can add information to a pictograph and talk to you about what I have found out.	**Collect** **Found out** **Pictograph** **Questions** **Record** **Sort**	*Data* *Venn diagram*	• Develop coordination and motor skills in operation a mouse or roller pad on a laptop or PC. • Open a document or other file on a laptop or PC. • Open appropriate App or software • Take a photo and open camera roll on a tablet. • Record data using app or software • Create, save, and retrieve an annotated image

Expected prior learning	Cross curriculum context	Experiences
• Talk about different kinds of information such as pictures, video, text, and sound • Take photos and video to capture learning • Record sound • Use digital microscope or app to examine objects collected • Use app or software to count information	• English: ask relevant questions, explain understanding of information, develop and order ideas, use spoken language to share learning • Explore information for a topic • Investigate and represent information for scientific, geographical, mathematical, or other learning	• Use software or app to investigate a question and record data • Sort appropriate images eg using Venn diagram • Take photos and sort items from current topic • Talk about sorting information • *Collect data about weather* • Create pictograph

Concepts and understanding	Develop Computational thinking	
• Information (data) can exist as pictures, video, text, and sound • Information can be sorted in different ways • A pictograph can represent information		Expectations: Computational thinker model http://bit.ly/compthinkingSomerset and Computational thinker younger learners' model http://bit.ly/compthinkingFS_KS1
	Attitudes Comfortable making mistakes Perseverance Imagination Collaboration	**Skills** Pattern recognition Decomposition Algorithm design Abstraction and generalisation