



<p><b>Unit Aims</b> - In this unit, learners will develop their understanding of technology and how it can help us. They will start to become familiar with the different components of a computer by developing their keyboard and mouse skills. Learners will also consider how to use technology responsibly.</p> <p><b>Progression of Learning (Prior Learning)</b> - Children will have some understanding of what a computer is and its different parts. They have also covered uses of technology in the wider world.</p> <p><b>Progression of Learning (Future Learning)</b> - Understanding how to use technology in the world, beyond school.</p>	
Core Computing Knowledge/Skills	Lesson Sequence [Curriculum Time - Minimum 6 hours]
<p><b>What technology is in our classroom?</b></p> <ul style="list-style-type: none"> <li>- To know that technology is something made by people that helps us understanding the reasons why - it does not need to be digital or electronic, although they often are.</li> <li>- To know examples of technology in the classroom e.g. printer, IPad, laptop.</li> </ul>	<p><b>What technology is in our classroom? [Unplugged lesson]</b></p> <p><b>Vital Vocabulary</b> (technology, computer, electronic, digital)</p> <p><b>Part 1: Explanation</b> → Exploring (Ask children what they think technology is and show them examples of different objects to classify).</p> <p><b>Part 2: Structured Discussion</b> → Problem solving and collaborating (Ask children to discuss what the object helps them to do and focus on the potential misconception of technology having to be either digital or electronic).</p> <p><b>Part 3: Journaling</b> → Creating and applying (Complete sorting activity of images using T.C.C. resources Activity 1. Consider using the prompt questions as a 'Talk It'. What is it? What does it do? Where would you use it and how does it help us?). [Evidence in 'Pupil Computing Journal' on Seesaw]</p> <p><b>Part 4: Reflection Time</b> → Sharing and debugging (Show learners further examples of technology and ask them what the examples share in common and whether any are computers, in preparation for next lesson).</p>
<p><b>What are the parts of a computer?</b></p> <ul style="list-style-type: none"> <li>- To know that the main parts of a computer are the mouse, keyboard, screen and desktop.</li> <li>- To know how to switch on and log on to the computer.</li> <li>- To use a mouse to click and drag.</li> </ul>	<p><b>What are the parts of a computer?</b> (Note that the lesson focus should be centred on a computer or laptop).</p> <p><b>Vital Vocabulary</b> (computer, mouse, keyboard, screen).</p> <p><b>Part 1: Explanation</b> → Exploring (Revisit understanding of technology. Show learners a picture of a computer and ask them to identify and explore the main parts).</p> <p><b>Part 2: Structured Discussion</b> → Problem solving and collaborating (Explore the function of each part and compare/contrast laptop vs desktop. Model to learners how to switch on and log onto a computer. Also model to learners how to operate the mouse correctly).</p> <p><b>Part 3: Journaling</b> → Creating and applying (Once logged on, ask learners to open a browser and navigate to <a href="#">nccseid/drag</a>. Explain to learners that they will find a series of jigsaw puzzles and need to click and drag the puzzle pieces to complete the picture. Each time, the level of difficulty will increase). [Potential screenshot of task uploaded to 'Pupil Computing Journal' on Seesaw]</p> <p><b>Part 4: Reflection Time</b> → Sharing and debugging (Discuss the use of a desktop and a laptop and match the correct parts).</p>
<p><b>How can I use a computer mouse?</b></p> <ul style="list-style-type: none"> <li>- To know how to use a mouse to open a program.</li> <li>- To know how to click and drag to make objects on a screen.</li> <li>- To know how to apply mouse control to make shapes on a screen.</li> </ul>	<p><b>How can I use a computer mouse?</b></p> <p><b>Vital Vocabulary</b> (mouse, click, draw, drag, double click).</p> <p><b>Part 1: Explanation</b> → Exploring (Revisit previous knowledge, focussing on desktop computers. Explore how computer mice can be different).</p> <p><b>Part 2: Structured Discussion</b> → Problem solving and collaborating (Encourage discussion around wires, buttons and parts, focussing on how they all perform the same function, however, they may look different. Model and discuss how to log on and open the Paint application, using double clicks. Open Paint, demonstrate how to use the paint brush function by clicking and dragging. Model and discuss use of the pen tool, brush colour, brush thickness and how to click and drag to paint a picture).</p> <p><b>Part 3: Journaling</b> → Creating and applying (Learners to draw their own pictures in Paint, creating and applying skills previously discussed. Encourage challenge by exploring other functions such as colour fill and shapes). [Consider use of cross-curricular links here] [Evidence saved in Pupil Files on Pupil Share].</p> <p><b>Part 4: Reflection Time</b> → Sharing and debugging (Share work and debug with talk partner. Reflect on the time to share questions, encouraging evaluation).</p>
<p><b>How can I use a computer keyboard?</b></p> <ul style="list-style-type: none"> <li>- To know that writing on a computer is called typing.</li> <li>- To know how to save work to a file.</li> <li>- To know how to type my name on a computer.</li> </ul>	<p><b>How can I use a computer keyboard?</b></p> <p><b>Vital Vocabulary</b> (input device, computer, keyboard, mouse).</p> <p><b>Part 1: Explanation</b> → Exploring (Explore the function of how to use a mouse correctly and emphasise that the mouse is an 'input device'. Explore how keyboards can be different).</p> <p><b>Part 2: Structured Discussion</b> → Problem solving and collaborating (Encourage discussion around wires, buttons and parts, focussing on how they all perform the same function, however, they may look different. Model and discuss how to log on and open the Paint application, using double clicks. Open Paint and select the text function. Show learners how to insert a text box, by clicking and dragging and how to single click inside the text box before typing).</p> <p><b>Part 3: Journaling</b> → Creating and applying (Provide children with the opportunity to type their name. Allow children to reflect on the position of keys, how to use caps lock and how to use the space bar. <b>Please note that once a text box has been added on Paint, it cannot be edited, therefore a new text box is needed to show progress.</b> Once the child's name is typed, allow them to draw a picture using the paintbrush tool, to allow for retrieval of previous learning). [Evidence saved in Pupil Files on Pupil Share].</p> <p><b>Part 4: Reflection Time</b> → Sharing and debugging (Are learners able to identify which functions they have used today?)</p>
<p><b>How can I develop my keyboard skills?</b></p> <ul style="list-style-type: none"> <li>- To know how to open my work from a file.</li> <li>- To know how to use the arrow keys to move the cursor.</li> <li>- To know how to delete letters, using the backspace key.</li> </ul>	<p><b>How can I develop my keyboard skills?</b></p> <p><b>Vital Vocabulary</b> (shift, space bar, capital letter, full stop).</p> <p><b>Part 1: Explanation</b> → Exploring (Explore the function of the mouse and the keyboard. Play 'corners game' in the classroom, encouraging the children to move to either 'keyboard' or 'mouse' to match the following statements to the correct device: input instructions by clicking, typing letters, drawing a picture, use this device to write a sentence, use this device to open an application).</p> <p><b>Part 2: Structured Discussion</b> → Problem solving and collaborating (Building on last lesson, open a new document in the Paint application. Model and encourage more advanced use of the keyboard, including capital letters, full stops and spacing. Collaborate on how to achieve this, prior to modelling).</p> <p><b>Part 3: Journaling</b> → Creating and applying (Scaffold → Pre-written sentences for them to edit and adapt. <b>Challenge</b> → Can they type a question and an answer? Alongside this, allow children to reflect on how to move the cursor and delete any incorrect letters. <b>Please note that once a text box has been added on Paint, it cannot be edited, therefore a new text box is needed to show progress.</b>) [Evidence saved in Pupil Files on Pupil Share].</p> <p><b>Part 4: Reflection Time</b> → Sharing and debugging (Display a picture of different computer parts. Children to write on whiteboards or explain to a talk partner what the input device is used for. Share and reflect on their understanding and how it could be developed further).</p>
<p><b>How can I use a computer responsibly?</b></p> <ul style="list-style-type: none"> <li>- To know rules to keep us safe and healthy when we are using technology.</li> <li>- To know examples of rules.</li> <li>- To know how we benefit from these rules.</li> </ul>	<p><b>How can I use a computer responsibly? [Additional Online Safety Coverage - Unplugged Lesson]</b></p> <p><b>Vital Vocabulary</b> (safe, responsible, computer, technology).</p> <p><b>Part 1: Explanation</b> → Exploring (Show pictures of computer technology which the children are likely to use in school and retrieve previous knowledge).</p> <p><b>Part 2: Structured Discussion</b> → Problem solving and collaborating (Discuss the four rules provided and ask the children to allocate rules for each input device).</p> <p><b>Part 3: Journaling</b> → Creating and applying (In small groups, children to create a paper-based poster to display the rules). [Evidence in 'Pupil Computing Journal' on Seesaw]</p> <p><b>Part 4: Reflection Time</b> → Sharing and debugging (Pose the question, 'What have you learnt in this topic?' and encourage the children to discuss how to apply this knowledge in its wider use, both at home and in school).</p>
<p><b>Exit Task and Snapshot Completion</b></p>	<p>At the end of the unit, provide opportunities for group discussions, exploring the different input devices, explaining their features and their functions. Listen out for the children's application of the vital vocabulary and observe how they communicate their understanding to each other.</p>



Year 1 Computing - Autumn 1  
Computer Systems and Networks - Technology Around Us.

Our Journey Drivers:

	Joyful Readers
	Opportunities to Build Upon Knowledge and Skills
	Understanding of British and Christian Values
	Resilience and Perseverance
	Nurture Curiosity
	Encourage Articulate Learners
	Your Wellbeing and Health

Unit Specific National Curriculum Coverage:

- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
- Recognise common uses of information technology beyond school.
- 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.

Lesson Part:	Transferable Concept(s):
1. Exploration 	→ Exploring
2. Structured Discussion 	→ Problem solving and collaborating
3. Journaling 	→ Creating and applying
4. Reflection Time (Computational Thinking) 	→ Sharing and debugging

Cross-Curricular Links:

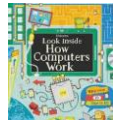
- English (SPaG)** - Use of capital letters and full stops.  
**Phonics** - Application for typing activities.

Education for a Connected World Links (Online Safety):

- Health, well-being and lifestyle:**
- I can identify rules that help keep us safe and healthy in and beyond the home when using technology.
  - I can give some simple examples.

Across the academic year, these transferable concepts are **revisited** within the context of a 'spiral curriculum' to develop **computational thinking and creativity**.

Wider Reading Opportunities:



Copyright and ownership:

- I know that the work I create belongs to me.
- I can name my work so that others know it belongs to me.

Teaching Resources:

Outline of lesson resources from 'Teach Computing Curriculum' [T.C.C] (provided by the National Centre for Computing Education).  
Paint desktop application.

J	Reading spine books with reading embedded throughout all lessons.
O	Knowledge and skills are progressively sequenced; refer to unit planning overleaf and wider progression document(s).
U	Christian Values: Friendship, respect, creativity, perseverance. British Values: Mutual respect, Rule of Law, Individual Liberty. SMSC embedded throughout.
R	Our bespoke approach to teaching and learning uses open-ended tasks, aimed to encourage resilience, perseverance and computational thinking.
N	Using a range of information technology, to encourage real-world computational thinking and creativity.
E	Opportunities to use and apply carefully selected vital vocabulary within structured discussions (part 2 of the lesson sequence). Oracy Link [Speak It] - 'Talk It' through structured discussion activities.
Y	National Online Safety units are taught each half-term through our St James Spirit Curriculum. This is supported by regular retrieval and reinforcement within our Computing Curriculum offer, linked to the Education for a Connected World Framework (see above).

Vital Vocabulary:

- technology
- computer
- electronic
- digital
- mouse
- keyboard
- screen
- click
- double click
- draw
- drag
- input device
- shift
- space bar
- safe

