CREATE Federation
Taddington, Peak Dale and Dove Holes Primary School

Computing Assessment Rationale

Integrating Digital Literacy with Attitudes to Learning (A2L)

Curriculum Philosophy: The "Computational Thinking" Approach

Our Computing curriculum aims to develop children's fascination and curiosity by equipping them with the skills to think computationally and understand the wider digital world. Assessment is focused on four key strands: **Computer Science, Information Technology, Digital Literacy,** and **Online Safety**. We prioritize the SMART acronym (Safe, Meeting, Accepting, Reliable, Tell) to ensure children make positive choices online.

Detailed **Learning Overviews** and **Knowledge Organisers** are utilized across each year group, ensuring children acquire the technical vocabulary (such as *algorithm, selection,* and *variable*) required to navigate technology effectively. Parents can view the full curriculum map to see how digital media and programming skills build progressively.

The A2L "Litmus Test"

We utilize the **Attitude to Learning (A2L)** criteria (Levels 1-10) as a "litmus test" for computing achievement. High A2L scores indicate a child is resilient when debugging code and proactive in their digital citizenship. Conversely, an **A2L Barrier** identifies a risk that a child may struggle with the logical reasoning needed for programming or the critical awareness required for online safety.

Integrated Computing Progress & A2L Barrier Map

Phase-Specific Support at Home

Phase 1: Pre-school & Reception (Foundations of Technology)

- **Behaviour:** Model healthy "Screen Time" by setting clear boundaries and digital-free zones.
- **Active Voice:** Use "I wonder what happens if I press..." prompts while exploring toys or tablets.
- **Ownership:** Let them be the "Photo Manager"—deciding which photos to keep or delete.
- **Fixed Mindset:** If a game is too hard, ask: "What did we learn from that attempt? What can we try next?"

Phase 2: Year 1 & Year 2 (The Junior Programmer)

- **Behaviour:** Practice "Precision" when giving directions (e.g., "Go forward two steps, turn right").

Level / Year	Assessment Endpoints	Active Voice Barrier	Behaviour Barrier	Ownership Barrier	Mindset / Safety Net
L1-4 (EYFS)	Use Beebots and mechanical toys. Understand screen time limits. Refine fine motor skills for tool use.	Unable to talk about why they are using a specific app or tool.	Impulsivity with hardware (tablets/whiteboards) leads to misuse.	Failure to follow "unplugged" logic steps in play-based tasks.	Quitting when a digital task becomes challenging. Waiting for adult help.
L5-6 (Y1-Y2)	Program robot movements. Introduction to algorithms and quizzes. Creating digital paintings and photography.	Failing to use technical terms like "algorithm" or "attribute."	Rushing navigation leads to missing key safety prompts.	Disorganised digital files; inability to find previously saved work.	Avoiding debugging tasks; fear of making a mistake in the code.
L7-8 (Y3-Y4)	Desktop publishing. Branching databases. Repetition in games. Audio/Photo editing and data logging.	Inability to explain the logic behind a repeat loop or database branch.	Group distractions disrupt the focus needed for complex sequencing.	Fragments of work across different devices or user accounts.	Ignoring error messages in software stops the learning process.
L9-10 (Y5-Y6)	Selection in physical computing. Vector drawing. Webpage creation. 3D modelling and spreadsheets.	Passive participation stops the critical analysis of online reliability.	Lack of precision in complex coding (e.g. variables and sensing).	Failing to manage project deadlines for digital media creation.	Avoiding difficult logic concepts like variables or sensing inputs.

- **Active Voice:** Use the "SMART Spy": Find examples of technology in the house that use an algorithm.
- **Ownership:** Help them create a folder system on a home device to keep their digital creations safe.
- **Safety Net:** Set a 5-minute challenge to find a specific fact on a kid-friendly search engine.

Phase 3: Year 3 & Year 4 (The Digital Creator)

- **Behaviour:** Discuss "Reliability" when looking at information online. How do we know it is true?
- **Active Voice:** Debate at dinner: "Which is more useful: a search engine or a book? Why?"
- **Ownership:** Quiz them on technical words from their Computing Organiser (e.g., *sequence, data, events*).
- **Fixed Mindset:** Celebrate "Debugging"—treating code errors as a puzzle to be solved together.

Phase 4: Year 5 & Year 6 (The Ethical Citizen)

- **Behaviour:** Model "Digital Etiquette" when communicating online or in shared gaming spaces.
- **Active Voice:** Ask them to explain a complex concept like "Selection" or "Variables" using a real-world example.
- **Ownership:** Have them manage their own passwords and check their privacy settings periodically.
- **Safety Net:** Encourage "Self-Governing" research for 1-minute talks on digital wellbeing or AI.

Note: Identification of an A2L barrier suggests potential gaps in computational thinking or online safety awareness. Learning overviews cover the specific strands of Programming, Media, Data, and Systems.