Time to Shine
Year 1 Computing

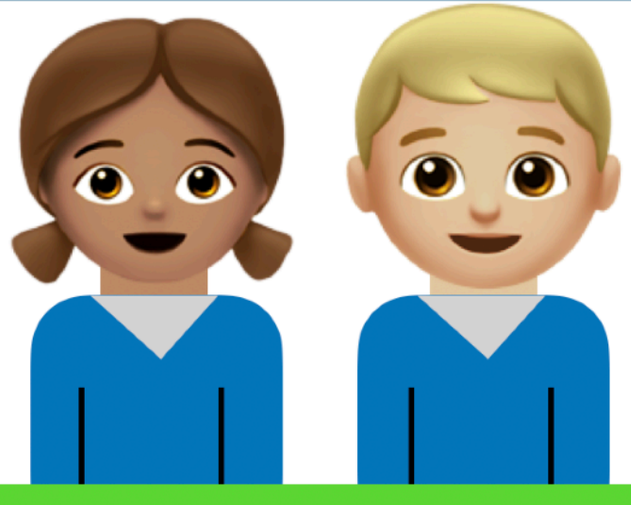
Expectations / Endpoints for **Computing**

Personal attribute - We are working on…

Curiosity: Being curious means you love to ask questions and explore new things. It's like being a detective, always looking for clues to learn more about the world around you, especially when using computers to discover fun activities and games!

Will understand (Vocabulary)…

Computer, Tablet, Algorithm, Program, Debugging, Digital Work, Click, Keyboard, Mouse, Internet, Online Safety, Icon, Cursor, Online Safety, Click, Drag, Digital Device.



Computing Expert in Year 1

Knowledge

- The children understand basic algorithms.
- The impact of digital technology in various settings.
- Recognise online safety measures, including handling upsetting content and personal information security.
- Understand the permanence of online postings and respectful communication on the internet.

Digital Skills / Will be able to…

- The children can create, debug, and predict outcomes of simple programs using digital devices.
- Use technology for creative expression, data organisation, and presentation.
- Use a search engine effectively.
- Capture quality photographs and videos.
- Practice organising the storage of digital work.

Time to Shine
Year 2 Computing

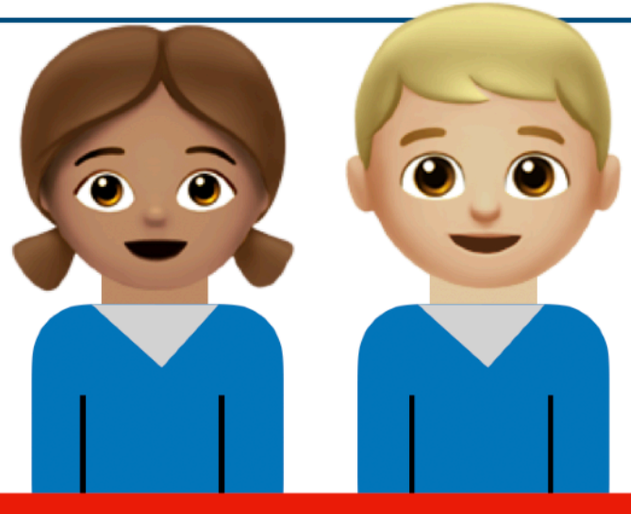
Expectations / Endpoints for **Computing**

Personal attribute - We are working on…

Collaboration: This means working together like a team. Using computers, we can share ideas, help each other solve problems, and make incredible projects together. It's like building a Lego castle with friends, where everyone adds their special bricks!

Will understand (Vocabulary)…

Technology, Command Blocks, Sequence, Loop, Conditionals, Data, Multimedia, Website, Email, File, Folder, Password.



Computing Expert in Year 2

Knowledge

- The children can comprehend the basics of algorithms.
- They can identify errors ('bugs') and apply the concept of debugging.
- They know the implications of posting online, understand online bullying, and recognise the importance of online safety, including protecting personal information and understanding copyright.
- Children know not to trust everything online, can identify potential online scams or misleading information, and understand the rules for using technology responsibly.

Digital Skills / Will be able to…

- The children can plan and execute simple algorithms.
- They can create repeat loops and develop simple game programs using platforms like Scratch Jr.
- They can use technology creatively to produce digital content, such as presentations, videos and animations, and effectively use design and formatting tools.
- They can collect, record, and purposefully use data, along with skills in saving, sharing, and retrieving digital work.
- They understand how technology facilitates communication beyond the school environment and can use online services for safe communication.

Time to Shine
Year 3 Computing

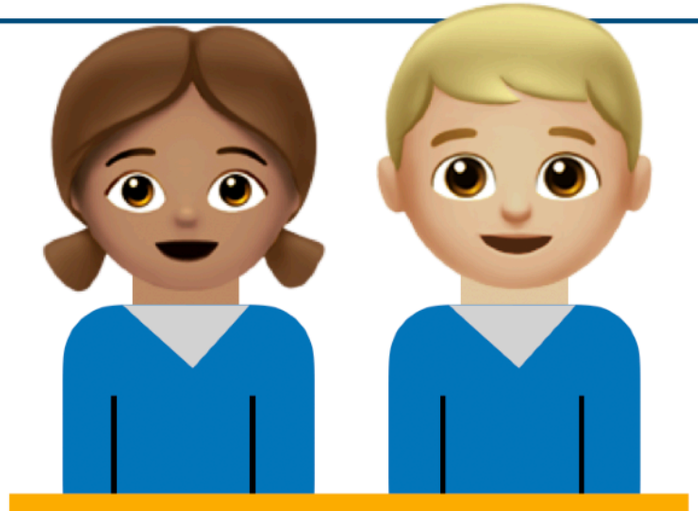
Expectations / Endpoints for **Computing**

Personal attribute - We are working on…

Creativity: Being creative means using your imagination to make something new and exciting. We can create stories, draw pictures, or even make our own games using computers. It's like using a magic wand to bring your ideas to life on the screen!

Will understand (Vocabulary)…

Network, Simulation, Input, Output, Storage, Search Engine, Spreadsheet, Database, Online Bullying, Digital Footprint, Selection, Animation, logical reasoning (guessing).



Computing Expert in Year 3

Knowledge

- The children understand the basic components of computer programs, including sequences, selection, and repetition.
- They can apply decomposition to solve computing problems.
- They have a foundational understanding of how the internet and search engines work, including the ability to make effective and accurate searches using advanced search tools.
- They recognise the importance of copyright, the consequences of ignoring it, what information should be shared online, and where to find help for online safety concerns, including bullying and content that may upset them.
- They understand the impact of technology on health, well-being, and lifestyle and know measures to protect personal online identity.

Digital Skills / Will be able to…

- The children can plan, create, and debug programs using sequence, selection and repetition.
- They can use logical reasoning to predict and correct errors in algorithms and programs.
- They can create digital content such as videos, animations, and 3D models and are skilled in collecting, analysing, evaluating, and presenting data and information.
- They can demonstrate an ability to improve the quality and presentation of digital work by discussing different types of digital content and file types.
- They are capable of troubleshooting issues with devices and understanding the steps to keep data secure.

Time to Shine
Year 4 Computing

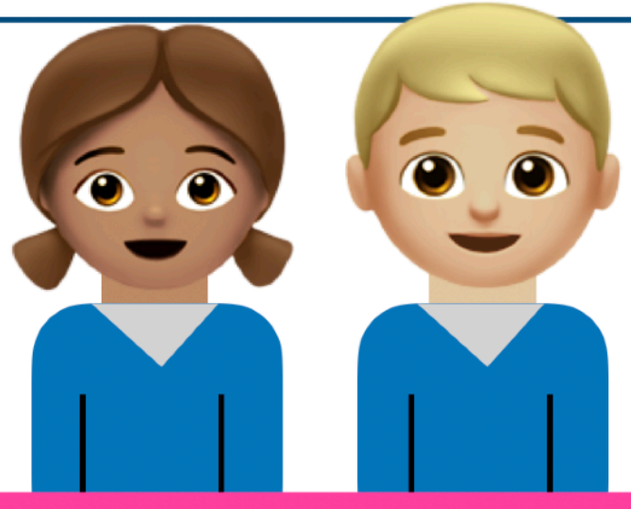
Expectations / Endpoints for **Computing**

Personal attribute - We are working on…

Problem-Solving: It is like being a puzzle master. When something doesn't work right on the computer, you try different ideas until you fix it. It's all about thinking, "Hmm, what can I try next?" to overcome challenges and keep moving forward.

Will understand (Vocabulary)…

Variable, Function, Cloud Computing, Encryption, URL, Copyright, Social Media, Digital Etiquette, Loop, Research, Multimedia, Password, Cyber Security.



Computing Expert in Year 4

Knowledge

- The children can design algorithms and decompose open-ended problems.
- They have a foundational understanding of different Internet communication methods.
- They can identify input and outputs.
- They can recognise the importance of respectful online interactions, understand online identities, and know online bullying and strategies for safe online experiences.
- They can critically evaluate information to identify Fake News and understand the implications of online reputation.
- They understand the impact of technology on health and well-being and know how to protect personal data and privacy online.
- They understand copyright laws and the consequences of infringement.

Digital Skills / Will be able to…

- The children can design, write, and test programs with specific features and improve existing programs.
- They are skilled in creating digital content such as videos, animations, and 3D models and can collaborate online for content creation.
- They can enhance the quality and presentation of work through advanced editing and formatting.
- They are proficient in using search engines wisely and understand that not all online information is accurate.
- They can explain the purpose and use of common file types.

Time to Shine
Year 5 Computing

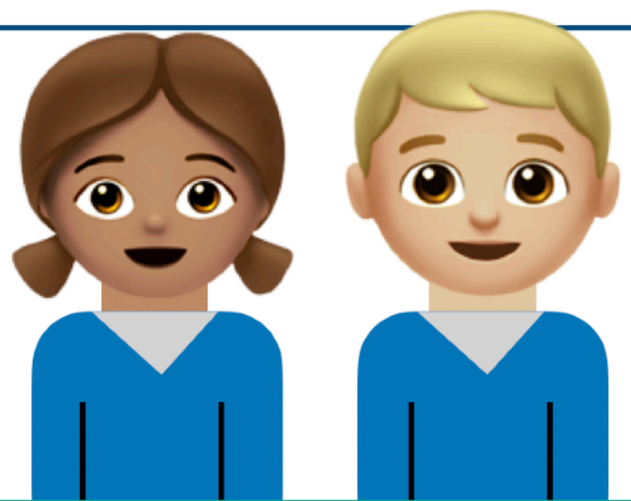
Expectations / Endpoints for **Computing**

Personal attribute - We are working on…

Logical Thinking: This means organising your thoughts clearly, like sorting your toys into different boxes. When we use computers, especially when coding, we need to put our instructions correctly so the computer knows what to do; it's like following a recipe to bake a delicious cake!

Will understand (Vocabulary)…

Binary Code, HTML, Simulation, Network, Database, Bandwidth, Copyright, Digital Footprint, QR Code, Computational Thinking, Podcasting, Phishing, Augmented Reality (AR).



Computing Expert in Year 5

Knowledge

- The children understand how to decompose problems and design algorithms for programming purposes.
- They have a foundational understanding of networks, internet traffic, and binary-to-decimal translation.
- They know copyright issues, online bullying, and the importance of positively contributing to online communities.
- They can recognise the potential risks of sharing content online and the importance of strong passwords and privacy measures.
- They understand the impact of technology on health, well-being, and lifestyle.

Digital Skills / Will be able to…

- The children can design and write programs linked to physical systems and sensors using variables, conditional statements, procedures, and repeat commands.
- They are capable of debugging programs using logical reasoning.
- They are skilled in creating basic web pages with HTML, recording and producing podcasts/audio clips, using advanced technologies such as AR, and creating vlogs with an understanding of online sharing risks.
- They are proficient in using spreadsheets for data collection and recording.
- They can effectively use search engines with critical evaluation of online information accuracy.
- They can use school email to collaborate to develop and improve work and safely understand the procedures for researching individuals online.
- They know how to create strong passwords and take measures to protect online identity.

Time to Shine
Year 6 Computing

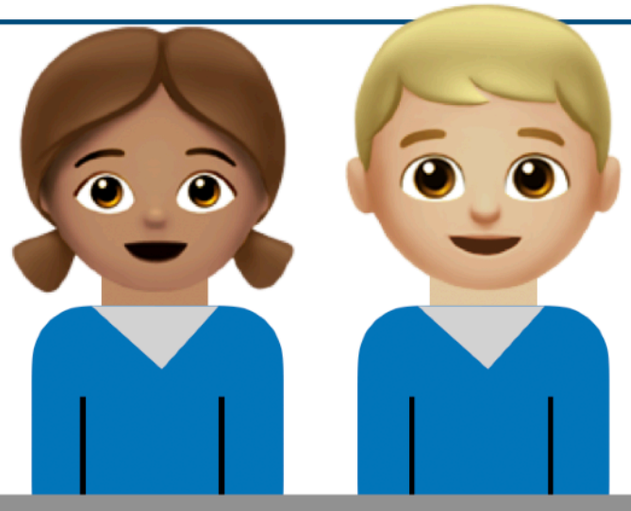
Expectations / Endpoints for **Computing**

Personal attribute - We are working on…

Critical Thinking: This is like being a judge on a talent show. When you find information online, you must decide what's true and what's not and why something is important. It helps you make smart choices and understand the world better, especially when learning new things with computers.

Will understand (Vocabulary)…

Machine Learning, Artificial Intelligence (AI), Variable, Simulation, Virtual Reality (VR), Network, Database, Search Engines, Copyright, Digital Footprint, Social Media, Computational Thinking.



Computing Expert in Year 6

Knowledge

- The children thoroughly understand how computer networks work, including the internet, and can discuss the mechanisms behind search result selection and ranking.
- They know the influence of online content and the importance of copyright.
- They know how to support peers in making safe online choices, understand the media's impact on gender perceptions, and recognise the importance of maintaining positive online relationships and reputation.
- They can explain how to protect devices from online harm and understand the need to keep data private and secure.
- They know the steps to capture evidence of and report online bullying.

Digital Skills / Will be able to…

- The children can design, plan, create, test, debug, and modify complex programs, including using text-based programming languages.
- They can use logical reasoning to detect and correct errors in algorithms and programs.
- They can create and combine various media to produce digital content, improve work quality through editing and formatting, and create digital storyboards for planning mixed media projects.
- They can use search engines critically, collaborate to create digital content, and design and present digital projects consistently and effectively.