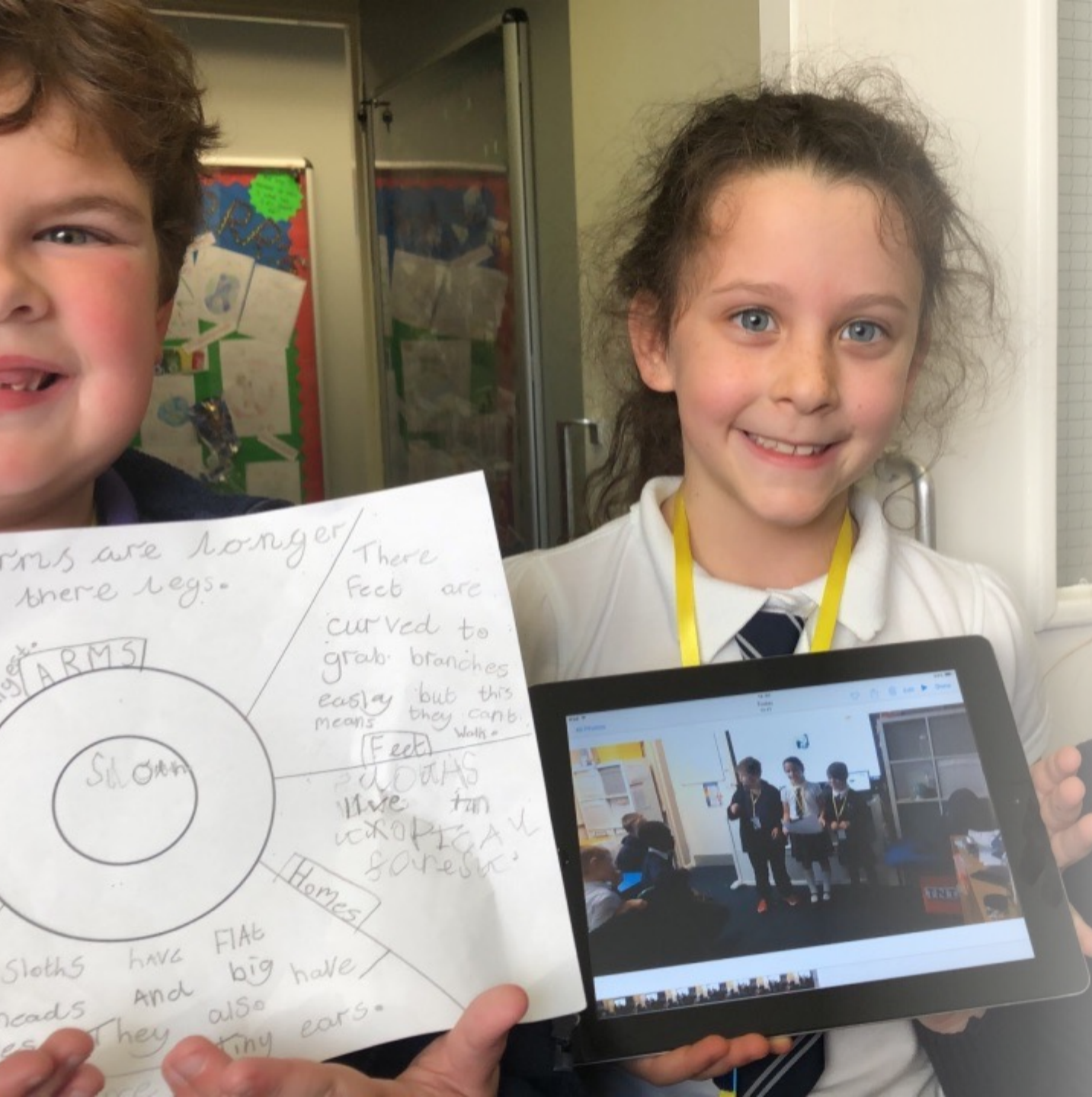


# Characteristics of a Techie!!

- Competence in coding for a variety of practical and inventive purposes, including the application of ideas within other subjects.
- The ability to connect with others safely and respectfully, understanding the need to act within the law and with moral and ethical integrity.
- An understanding of the connected nature of devices.
- The ability to communicate ideas well by using applications and devices throughout the curriculum.
- The ability to collect, organise and manipulate data effectively.



# Computing Progression of Knowledge and Skills Rodmersham 2023

	EYFS	Milestone 1	Milestone 2	Milestone 3
Computer Science	<p>Technology in the early years includes;</p> <ul style="list-style-type: none"> <li>• Taking a photograph with a camera tablet.</li> <li>• Searching for information on the Internet.</li> <li>• Playing games on the interactive whiteboard.</li> <li>• Exploring an old typewriter or other mechanical toys</li> <li>• Using a bee bot.</li> <li>• Watching a video clip.</li> <li>• Listening to music.</li> </ul> <p>Allowing children, the opportunity to explore technology in a child lead, centred way.</p>	<ul style="list-style-type: none"> <li>• Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective</li> <li>• Children can work out what is wrong with a simple algorithm when the steps are out of order.</li> <li>• Children can read one line at a time on a program and make attempts to envisage the bigger picture of the overall effect of the program.</li> <li>• Children identify the parts of a program that respond to specific events and initiate specific actions</li> <li>• Children can explain what an algorithm is and that it is a set of instructions to complete a task.</li> <li>• Children showing awareness of the need to be precise with their algorithms.</li> <li>• Children create a simple program that achieves a specific purpose.</li> <li>• Children can identify and correct some errors in the algorithm.</li> <li>• Children, identify the parts of a program that respond to specific events and initiate specific actions.</li> </ul>	<ul style="list-style-type: none"> <li>• Children contain a simple real life situation into an algorithm for a program by deconstructing it into manageable parts.</li> <li>• Children can identify an error within the program that prevents it following the desired algorithm and then fix it.</li> <li>• Children demonstrate the ability to design a coder program that follows a simple sequence they can experiment to achieve repetition effects in their programs.</li> <li>• Range of ways that the Internet can be used to provide different methods of communication</li> <li>• Children may attempt to turn more complex real life situations into algorithms for a program by deconstructing it into manageable parts.</li> <li>• Children are able to test and debug their programs.</li> <li>• Children can translate algorithms that include sequence, selection and repetition into code with increasing ease.</li> <li>• They designed show that they are thinking how to accomplish the set task in code</li> <li>• When children code, they are beginning to think about their code structure in terms of the ability to debug and interpret the code later.</li> <li>• Children understand the value of computer networks, but are also aware of the main dangers.</li> <li>• They recognise what personal information is and how it can be kept safe.</li> </ul>	<ul style="list-style-type: none"> <li>• Children may attempt more complex real life situations into algorithms for a program by deconstructing it into manageable parts. Children can test and debug their programs as they go and can use logical methods to identify the cause of any bug.</li> <li>• Translate algorithms that include sequence, selection and repetition into code with the increasing ease.</li> <li>• They can combine sequence select and repeat with coding structures to achieve the algorithm design.</li> <li>• When coding the children are thinking about their code structure, in terms of the ability to debug and interpret the code later, for example, using tabs to organise code and the naming of variables.</li> <li>• Children understand the value of computer networks, but are also aware of the main dangers.</li> <li>• They recognise what personal information is and can explain how to keep this safe.</li> <li>• Children can select the most appropriate form of on-line communication.</li> <li>• Children are able to turn a more complex programming task into an algorithm by identifying the important aspects of the task, and then decomposing them in a logical way, using their knowledge of possible coding structures and applying skills from previous programs.</li> <li>• Children translate algorithms that include sequence selection and repetition into code, and their own design show that they are thinking of how to accomplish the set task in code, utilising such structures, including nesting structures within each other.</li> <li>• Children are able to interpreter program in parts and can make logical attempts to put the separate parts of a complex algorithm together to explain the program as a whole</li> </ul>

- Children are able to sort, collate, edit and store simple digital content.
- Children can name, save and retrieve their work.
- Children can demonstrate an ability to organise data using a simple database.
- Children can retrieve specific data for conducting simple research is.
- Children are able to edit more complex digital data.
- 

- Children Carry out simple searches to retrieve digital content
- Children know, and understand that to do this they are connecting to the Internet.
- Children can collect, analyse, and evaluate and present data and information using the selection of software.
- They can create purposeful content to attach to emails.
- Children search with greater complexity for digital content when using a search engine.
- They are able to explain how credible a webpage, and its information is.

- Children search with great complexity for digital content when using a search engine.
- They are able to explain in some detail how credible webpages are and the information it contains.
- Children are able to make appropriate improvements in digital solutions based on feedback received and can confidently comment on the success of the solution for example, create their own program to meet a design brief.
- Children are able to collaboratively create content and solutions using digital features within software such as collaborative mode.
- They are able to use several ways of sharing digital content.
- Children readily apply filters when searching for digital content. They are able to explain in detail how to know if a webpage is credible.
- They compare a range of digital content sources are not able to write them in terms of content, quality and accuracy.
- Children use critical thinking skills in everyday use of online communication.
- Children make clear connections to the audience when designing creating digital content.
- The children design and create their own blogs to become a content creator on the Internet.

- Children understand what is meant by technology and can identify a variety of examples both in and out of school.
- Children understand the importance of keeping information, such as their usernames and passwords, private and actively demonstrate this in lessons.
- Effectively retrieve relevant, purposeful digital content using a search engine.
- They can apply their learning of effective search in the beyond the classroom.
- Children know the implications of inappropriate online searches.
- Children begin to understand how things are shared electronically

- Children demonstrate the importance of having a secure password and not sharing this with anyone else.
- Children can explain the negative implications of failure to keep passwords safe and secure.
- I understand the importance of staying safe and the importance of their conduct.
- Children have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of a few different technologies and online services

- Children have a secure knowledge of common online safety rules and apply this by demonstrating the safe and respectful use of a few different technology and online services.
- Children relate appropriate online behaviour to the right to personal privacy and mental well-being of themselves and others.
- Children demonstrate the safe and respectful use of a range of technologies and online services.
- They identify more discrete inappropriate behaviours to developing critical thinking.
- They recognise the value in persevering their privacy when online for their own, and I have a People safety.