Highgate Primary
Year 3 Computing Curriculum

Understanding Technology/Digital Literacy	Programming	Digital Citizenship and e-safety
Pupils understand that computers (in various forms) generally accept inputs and produce outputs and can give examples of this. Pupils recognise - and can describe - some of the services offered by the Internet, especially those used for communication and collaboration. With increasing levels of autonomy, pupils are becoming confident and creative users of technology. Within both specific computing lessons and cross curricular contexts, pupils are able to: • follow and expand on agreed lines of enquiry, using key words and phrases to effectively access digital content such as text, still images, video and audio • identify, collect and manipulate different types of data (e.g. numerical, research facts etc.) which they present as information, showing a greater awareness of purpose and audience. present and communicate their learning to others in a variety of ways using text, still images, video and audio. They combine digital tools to achieve specific goals and think carefully about the impact on their audience.	Pupils create programs to accomplish specific goals using an increasing range of digital devices and applications. They can decompose programs to test them and understand how making even small changes to an algorithm can have a significant impact on the outcome. They begin using simple repetition (e.g. 'repeat x times' and 'repeat forever') and understand how this can be used to improve efficiency in their programs.	Pupils are able to identify a range of content, contact and conduct benefits and risks, describe how to manage them safely and respectfully and know where to go for help and support when they have concerns. They can explain what is meant by 'identity', how this might be represented differently in different situations and why others might mis-represent their identity. They develop their understanding of 'trust' and the importance of being careful about what is shared online and of giving and gaining consent. Pupils can describe positive and negative effects of online activity / behaviours and begin to understand how to make safer and healthier decisions, including considering the appropriateness of games and online content for different ages. Pupils can describe positive ways for someone to interact with others online and understand how this will positively impact on how others perceive them.

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Digital Literacy
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Digital Citizenship
Additional e-Safety

Autumn 1 **Palaeontology to Archaeology**	Autumn 2 **Chocolate**	Spring 1 **Treasures of Ancient Egypt**	Spring 2 **Race to the South Pole**	Summer 1 **From Source to Sea**	Summer 2 **Meadowsong**
Which museum is best? • Use trip advisor / Google to research, explore and rate museum websites from around the world Stonehenge • Children use Minecraft to create a virtual Monolith • Children can transfer plan to 3D printer to create a physical representation of the monoliths Avoid the dinosaurs! • Children challenge each other to navigate an obstacle course of toy dinosaurs by assessing and pre-writing a set of instructions. • Instructions then given to floor robots. Device free moments • Children discuss benefits of screen time and benefits of screen free time KS2 E-Safety assembly • Interland: Reality River	Mouse skills • Develop mouse accuracy https://mouseaccuracy.com Chocolate Bar Advert • Children use Scratch Jr to create an advert for a chocolate bar using sprites and sound. • Children review, improve and debug animations. Putting a STOP to Online Meanness • Interland : Kind Kingdom E-Safety Jenga (LKS2)	Explore the Pyramids • Use Google Earth/ Geo-mapping tools/ Wikipedia to go on a virtual Tour of the Pyramids. • Use screenshots to create a digital scrapbook We are digital citizens • Jargon buster / see it from both sides KS2 E-Safety assembly	Explore the sea bed • Children create a complex sea bed environment. Floor robots used to navigate and visit specific places. • Algorithms written, tested, debugged, evaluated and improved That's Private! • Interland: Tower of treasure Redesign the rules • Children look at HPS safety guidelines and illustrate a poster	What's your opinion? • Children use survey monkey to design and publish a survey based on water conservation. • Results presented using tables / charts in word Introduction to Scratch • Fundamentals and basic blocks – exploratory We are digital citizens - Digital trails • BBC Own It: Where Are Your Photos Going? KS2 E-Safety assembly	Microscopic worlds • Children use class digital microscopes to capture images of flowering plants. • Images stitched together and presented as a slideshow with music. • Films published on school website Introduction to Scratch 2 • Using 'if' and 'when' blocks to grow a flower • Makey Makey and pots with water – when water level is correct, program informs. Who is in your online community? • Band Runner: Share