



CATALYST

Dilkes Academy

Garron Lane, South Ockendon, Essex RM15 5JQ
Telephone: 01708 852128 E-mail: admin.da@catrust.org.uk

Computing

Year 1

In Year 1 computing, the pupils work to develop their computer-based skills, including typing and logging on efficiently at a basic level. This feeds into their first online safety unit about keeping passwords and personal information private. Following this, they begin to use new programs to group and sort, create pictograms and animated storybooks, and start to explore coding and how computers work in more detail. The children then discuss technology and the practical implications of everyday technologies relating this to their own lives.

Year 2

This year the children will start to think about how we can be safe while using technology. They will develop their understanding of coding further, as well as beginning to become digital music makers. As well as this, they will explore new programs to display their ideas and research, including how to search effectively and safely on search engines.

Year 3

Computing in Year 3 will consist of building the children's knowledge of online safety and adding further, more complex algorithms and concepts to coding, while also introducing programs such as branching databases, graphing spreadsheets and Office 365. The children will continue to look at these things with the thought of how they relate to their own lives being key throughout.

Year 4

In Year 4 computing, the children will continue to develop and hone their skills in coding and spreadsheets, focusing on using their computational thinking skills to become more independent in debugging and tinkering. As well as this, they will be introduced to AI where they reflect on future evolution as well as how to be a responsible citizen when using AI tools. In addition, they begin to use Microbits for a particular purpose. Online safety will continue to be further explored in relation to how the internet works.

Year 5

This year the children will create programs using coding, focusing on selection and abstraction to make their coding more streamline. Following this, they will use their knowledge to create databases and presentations in Microsoft Sway for others to use and enjoy. Finally, they will explore physical computing systems using the Crumble microcontrollers.

Year 6

Computing in Year 6 will focus on consolidating the children's knowledge of online safety and coding, and will introduce blogging, networks and binary to the children's technological banks of knowledge. To end the year, the children will use spreadsheets to support their apprentice challenge and document their expenses.

Online Safety

At Dilkes Online Safety is embedded throughout our curriculum with every half term having a particular focus which children develop as they progress throughout their school journey. Themes children will learn about include, self-image and identity, online relationships, online reputation, online bullying, health, wellbeing and lifestyle, privacy and security, managing online information and copyright and ownership. These sessions focus on providing children with the skills to navigate this ever-evolving digital world.

