

In **Year 7 and beyond**, learners will continue to understand how we use technology responsibly; deepen their understanding of data handling in spreadsheets and data science; further their understanding of programming in Scratch and apply their knowledge to Python; and use software to create media for range of different purposes.



7+



Programming A - Variables in games

Learners explore the concept of variables in programming, relating variables to real-world examples.



Creating media – 3D Modelling

Learners use CAD software to make 3D models of real-life objects.



Computing systems and networks – Communication

Learners understand the WWW as a communication tool and learn how search engines work.



Programming B – Sensing

Learners combine programming knowledge from all four year groups and use them on a physical device - the micro:bit



Data and Information – Spreadsheets

Learners will use formulas to calculate data and use charts and graphs to evaluate data.



Creating media - Web page creation

Learners create websites for a chosen purpose, understanding copyright and fair use of media, the aesthetics of the site, and navigation paths

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Computing systems and networks - Sharing information

Learners will understand how information is transferred between systems and devices. .



Creating media - Video editing

Learners will develop the skills of capturing, editing, and manipulating video by creating their own short videos.

Programming - Selection in quizzes

Learners write programs that ask questions using the 'if... then... else...' structure to select different outcomes.



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Creating media - Vector Drawing

Learners will use different drawing tools to help them create vector drawing images.



Data and Information - Flat-file databases

Learners will develop their understanding of databases by organising data in records, ordering data and creating graphs and charts.



Programming B - Repetition in games

Learners will develop their understanding of repetition by comparing control-based and infinite loops in Scratch.

Creating media - Audio editing

Learners will explore recording, editing and owning audio content by making a podcast.



Computing systems and networks - The Internet

Learners understand that the internet is a network of networks which need to be kept secure.



Programming A - Repetition in shapes

Learners will plan, modify, and test commands to create shapes and patterns using Logo language.

Data and Information - Data logging

Learners will use data logging software to collect and analyse data points such as temperature and sound level.



Creating media - Photo editing

Learners will develop their understanding of how digital images can be changed and edited.

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Computing systems and networks - Connecting Computers

Learners understand digital devices by looking at inputs, processes, and outputs.

Creating media – Animation

Learners will use a range of techniques to create a stop-frame animation using tablets.

Programming A - Sequence in music

Learners explores the concept of sequencing in programming by creating a piano in Scratch.



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Creating media - Desktop publishing

Learners will add text and images to create media and consider changes to font, colour and type of text.



Data and Information - Branching databases

Learners will develop their understanding of what a branching database is and how to create one.

Programming B – Events and actions

Learners extend their programming knowledge by exploring the links between events and action.

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In **Year 2**, learners will understand how information technology is used in society and use specialised software to capture and edit photographs and create their own digital music, before using digital pictograms to represent data, and develop their understanding of instructions and commands in programming.

